

2020

Prenatal Care for Undocumented Women in the United States

Cristina Mendoza

Dominican University of California

<https://doi.org/10.33015/dominican.edu/2020.NURS.ST.05>

Survey: Let us know how this paper benefits you.

Recommended Citation

Mendoza, Cristina, "Prenatal Care for Undocumented Women in the United States" (2020).
Nursing | Senior Theses. 13.

DOI: <https://doi.org/10.33015/dominican.edu/2020.NURS.ST.05>

This Senior Thesis is brought to you for free and open access by the Department of Nursing at Dominican Scholar. It has been accepted for inclusion in Nursing | Senior Theses by an authorized administrator of Dominican Scholar. For more information, please contact michael.pujals@dominican.edu.

Prenatal Care for Undocumented Women in the United States

Cristina Mendoza M.

Department of Nursing

Dominican University of California

Research Advisor: Patricia Harris

May 17, 2020

Abstract

Background: While prenatal care is an essential preventive service, access is not equal. Undocumented immigrants in the United States face many barriers that prevent them from accessing primary health care needs, including adequate prenatal care. Throughout the United States, standard Medicaid provides coverage for all pregnancy-related care, encompassing the antenatal period, childbirth, and postpartum. However, undocumented women do not qualify to receive these services. Many studies showed that lack of prenatal care for undocumented pregnant women jeopardizes their health and their neonates' health by increasing their risk of complications related to pregnancy and birth.

Objective: To bring awareness of the barriers affecting undocumented women to obtain prenatal care and the need for health care professionals advocacy.

Literature Review: Seven articles were reviewed to discuss the barriers and possible benefits of prenatal care for undocumented women in the United States.

Research Proposal: An exploratory quantitative study using a survey to gather information from nurses working in NorthBay Medical Center in Fairfield, California. The purpose of the survey will be to evaluate nurses' knowledge on the barriers that pregnant undocumented women face in the United States to access prenatal care.

Keywords: Undocumented women, barriers to healthcare and prenatal care.

Acknowledgment

With much gratitude, I want to give thanks to my Lord and Savior, Jesus Christ, who opened the door for me to achieve higher education. Also, for His faithfulness, because without his grace, I would not be able to make it this far.

Furthermore, with deep respect and much appreciation, I want to give thanks to the Wagner Family, Chuck, Connie, and my dearest friend Lorna. Thank you for blessing me with this opportunity providing the financial resources for my education.

To my family in Mexico, my father, and my mother, I want to say that I will always be in debt for the unconditional love and support that you all are giving me.

Nevertheless, I want to thank my husband, Raul Tamayo, for the unconditional support and the encouragement that he has given me through this journey. Thank you to my son Erick for his help and for making me a better person, giving me a reason not to give up when life was not easy for us. Finally, I want to give thanks to my youngest son Raul, for always making me smile and for filling my heart with joy.

But those who wait on the LORD shall renew their strength; They shall mount up with wings like eagles; they shall run and not be weary, They shall walk and not faint (Isaiah 40:31, NKJV).

Table of Contents

	Page
Abstract _____	2
Acknowledgment _____	3
Table of contents _____	4
Introduction _____	5
Review of literature _____	6
Discussion of the literature _____	9
Rationale for proposed study _____	10
Theoretical Framework _____	10
Proposal for Further Research _____	11
Conclusion _____	13
References _____	16
Appendix _____	17

Prenatal Care for Undocumented Women in the United States

Prenatal care is an essential and necessary health care service that all pregnant women should be able to receive (Fabi, 2019, para. 3). According to the National Institute of Health, prenatal care significantly reduces the risk of complications during pregnancy as well as the risk of fetus/infant complications during birth such as congenital disabilities, premature birth, still-birth, and low birth weight. Prenatal care can help to control pre-existing conditions in prospective mothers, such as high blood pressure and diabetes, to prevent severe complications throughout the pregnancy (National Institute of Child Health and Human Development, 2017). The importance of ensuring access to prenatal care has been strongly remarked in recent years by various groups, however, “Federal data show that nearly a quarter-million mothers of babies born in 2016 received late (third trimester) or no prenatal care” (Lee Park & Valentine, 2018, para. 3). Within this number, undocumented women are the mostly affected since they have little to no access to receive essential prenatal care. Fabi (2019) notes, “undocumented immigrants are less likely than the U.S. general population to receive adequate levels of prenatal care” (para. 3).

Consequently, undocumented women are at higher risk of having complications during pregnancy and are at higher risk of delivering a baby prematurely. Dr. Gamboa, an Obstetrician working in a Federal Clinic in Watsonville, California stated that “the higher rate of preterm birth could be related to limited access to prenatal care due to their immigration status” (Howard, 2018, para. 24). Therefore, the focus of this analysis is to explore what is the likelihood for undocumented immigrants to received prenatal care in the United States.

Review of the Literature

Search Strategy

The National Institute of Health's database, PubMed, and The National Institute of Public Health, was used to search for articles related to the experience of undocumented Hispanic women in receiving prenatal care in the United States. The search terms used were “prenatal care” and “undocumented women.” The research was further narrowed down to data that was collected in the United States within the last 15 years.

Road Map: Organization of the Review

Seven articles were chosen to review. While all of the articles discuss barriers, two of the articles also discuss benefits (Swartz et al., 2017; Swartz et al, 2018) .Therefore, two categories were identified as important: (a) Barriers to prenatal care for undocumented women (all seven articles), and (b) Potential benefits for allowing prenatal care for undocumented women (two articles). See Literature Review Table in Appendix A for a summary of each article.

Barriers to Prenatal Care for Undocumented Women

While prenatal care is an essential preventive service, access is not equal. “Throughout the United States, standard Medicaid provides coverage for all pregnancy-related care, encompassing the antenatal period, childbirth and postpartum” (Swartz et al., 2018, p.2). However, lack of proper documentation disqualifies pregnant undocumented women from receiving these services. An experimental study done by The Department of Health and Human Services in the United States exposes that “under federal law, unauthorized immigrants are ineligible to participate in full-scope Medicaid using federal funds. For this immigrant population, Emergency Medicaid covers the cost of birth but not prenatal care or postpartum contraception” (Swartz et al.,

2017, p.2). As a result, undocumented women who live in states where access to prenatal care requires legal documentation, lack essential services that can profoundly affect the outcome of their pregnancy. According to this study, undocumented women who receive only emergency Medicaid did not have adequate prenatal care; as observed by a decrease in numbers of women receiving prenatal visits, an ultrasound during pregnancy, vaccination for Tetanus, Diphtheria, and Pertussis (Tdap), Rhesus (Rh) immunoglobulin administration (for women with Rh-negative blood type), and diabetes screening (Swartz et al., 2017, p. 15). In line with this, a study by the *Maternal and Child Health Journal* states that “individuals qualifying for Emergency Medicaid must meet the same financial eligibility criteria as standard Medicaid applicants; however, Emergency Medicaid only covers life-threatening conditions or admission for childbirth and excludes antenatal or postpartum care” (Swartz et al., 2018, p. 174). Swartz states that “laws requiring strict proof of citizenship before enrollment in Medicaid resulted in significant delays in prenatal care increasing health risks for women and their children.” (Swartz et al., 2018, p.179).

A study by the *Global Pediatric of Health* found that undeterred by federal restrictions; states can determine eligibility for immigrants excluded from federal programs by using their own funds (Pintor et al., 2019, p.1). However, “as of 2008, only 16 states plus the District of Columbia fund any coverage for pregnant women regardless of documentation status” (Pintor et al., 2019, p. 2). Pintor states that “unequal access to or delayed initiation of prenatal care can have health consequences for both mothers and children and also excludes mothers from an important opportunity to connect to a wealth of resources beyond health care” (Pintor et al., 2019, p. 2). Likewise, a retrospective study by the *BioMed Center Public Health* in the state of Colorado states that “under the Personal Responsibility and Work Opportunity Act of 1996 un-

documented immigrants are ban form receiving most public benefits” (Reed et al., 2005, p. 2). For this population, Emergency Medicaid is only available. As a result, Undocumented women had less prenatal care and higher rates of maternal medical risks. A quote, “only about half of the undocumented women began prenatal care in their first trimester, as compared to almost 85 percent of the general population” (Reed et al., 2005, p. 5). According to this study, lack of prenatal care results in undocumented women experiencing “more complications during labor and delivery. They were significantly more likely to have meconium staining, excessive bleeding, precipitous labor, breech presentation, cord prolapse, and fetal distress” (Reed et al., 2005, p.4). Reed goes on to said that “lack of documentation creates an evident barrier to access to care” (Reed et al., 2005, p. 5).

Furthermore, a study by the Department of Health and Human Services in the state of Utah found that “undocumented status often results in marginalization, as undocumented pregnant women fear of having contact with institutions and government agencies that could expose their immigration statues jeopardizing once’s residency in the U.S (Korinek et al., 2018, p.4). According to Korinek, “Hispanic and foreign-born women are least likely to obtain adequate levels of prenatal care as a result of financial difficulties, lack of insurance coverage, structural barriers that impair efforts to locate providers, and make and keep appointments, and psychosocial obstacles that make women reluctant to trust or rely upon healthcare professionals” (Korinek et al., 2018, p.4). Korinek states that “lack of access to prenatal care to undocumented mothers significantly increases the number of mothers and children at risk of poor health outcomes during pregnancy, infancy, and early childhood” (Korinek et al., 2018, p. 13). He further goes on to said

that “For the foreign-born, legal status remains a poorly understood, but likely a highly salient factor differentiating integration and, therefore, access to healthcare” (Korinek et al., 2018, p. 3).

A study done by the Harvard Chan School of Public Health found that “sociopolitical stressors increase psychological distress and decrease access to health services, worsening birth outcomes and affecting the health of undocumented women and their children” (Krieger et al., 2018, p. 1147). According to Krieger, stressors that arise from the constant threats of the actual administration affect the pregnancy outcome of the undocumented women resulting in an increase number of premature births (Kreger et al., 2018, p. 1147). The study finds that “preterm birth rate increased from 7.0% to 7.3%, with foreign-born Latinas from Mexico and Central America seeing the highest increase (7.3% pre-election to 8.4%) after the 2016 elections” (Krieger et al., 2018, p. 1151). Krieger remarks that “the health impacts of political campaigns and policies affect both population health and health inequities, creating a barrier to received imperative healthcare” (Krieguer et al., 2018, p. 1151).

Lastly, a study by the Hispanic Health Care International in the state of Nebraska states that “fear of deportation, lack of proficiency in English, and low health literacy prevent undocumented women from utilizing prenatal care” (Held et al., 2018, p.193). Consequently, the study found that undocumented pregnant women have a higher risk of preterm birth, obesity, hypertension, and inadequate prenatal care (Held et al., 2018, p.193). Although Nebraska provides an expansion of the Emergency Medicaid, offering coverage for prenatal visits throughout the pregnancy, “the inability to speak English, cultural challenges, socioeconomic status, and lack of health insurance, place pregnant undocumented women and their children at higher risk for complications during birth” (Held et al., 2018, p. 190). Held states that “limited understanding of the

U.S. health care system and fear of retaliation by immigration agents also increase the risk” (Held et al., 2018, p.190).

To eliminate the challenges that undocumented women face to obtain prenatal care, Held suggests that: “federal and state government should consider policies that better support undocumented pregnant women’s ability to access and utilize services where they feel safe and have a trusting relationship with their physicians” (Held et al., 2018, p.193). As stated by Held, Nebraska is an example that providing prenatal care services to undocumented immigrants is essential, but not enough if other barriers exist and pregnant undocumented women are not protected (Held et al., 2018, p. 194)

Potential Benefits of Providing Prenatal Care for Undocumented Women

“Prenatal care is an important component of preventive health care, with multigenerational consequences for women and their families. For the woman, prenatal care promotes health, helps prepare for birth, and prevents and detects complications including anemia, hypertensive diseases of pregnancy and infection. For the neonate, regular prenatal care decreased incidence of low birth weight and neonatal deaths” (Swartz et al., 2017, p. 2). The study *Expanding Prenatal Care to Unauthorized Immigrant Women and the Effects on Infant Health* (Swartz, 2017) reveals that in the state of Oregon, where an extension of Emergency Medicaid applies, an increase in utilization and quality of prenatal care among undocumented women occur. The study found a “decrease in infant mortality, low-birth weight, and Sudden Infant Death Syndrome” (Swartz et al., 2017, p.7). Swartz notes that with the extension of Emergency Medicaid, “unauthorized immigrant women have at list one prenatal care visit in the first trimester and received adequate prenatal care (defined as one visit in the first pregnancy trimester plus a total of nine or more vis-

its overall), attend recommended pregnancy care, well-child checks and visits and vaccines” (Swartz et al., 2017, p.5). An increased number of women received “Rh immunoglobulin during pregnancy, Tdap vaccine, diabetes screening with oral glucose tolerance testing, and fetal ultrasound.” (Swartz et al., 2017, p.6).

Moreover, having prenatal care not only identify and avoid complications of pregnancy for the woman, but also improve the health of the neonate (Swartz et al., 2018, p.173). According to a comparative study by the Maternal and Child Health Journal, “Oregon provides an excellent case study for understanding the effects of expanded coverage for prenatal care, with a specific focus on unauthorized immigrants” (Swartz et al., 2018, p. 174). The study found that, “more undocumented women had access to adequate prenatal care which permits early detection of hypertension, gestational diabetes mellitus and inadequate weight gain during pregnancy” (Swartz et al., 2018, p. 180). In addition, the study revealed that early detection of medical conditions during pregnancy decreased the cost that otherwise would have been reflected in medical treatment during birth (Swartz et al., 2018, p.180).

Discussion of the Literature

There is a correlation between immigration status and adverse pregnancy outcomes. Barriers to received adequate prenatal care include sociopolitical stressors that increase psychological distress and decrease access to health services, increasing the risk of pregnancy-related complications. Under federal law, undocumented pregnant women qualify to received only Emergency Medicaid, which covers the cost of labor and delivery but not prenatal care. In the United States, only 16 states and the District of Columbia have implemented an extension of Emergency Medicaid to allow undocumented women to receive adequate prenatal care, in this states, an in-

creasing number in utilization and quality of prenatal care occur as well as a decreased number of mother-infant birth complications. The benefits of allowing prenatal care for undocumented women include more prenatal care visits, preventive treatments such as vaccines, screenings, and fetal ultrasound. These benefits result in a significant decrease in infant mortality, low birth weight, and Sudden Infant Death Syndrome. Besides that, a noticeable reduction in the cost of treatment associated with complications during pregnancy and preterm births results.

Rationale for Proposed Study

Further research is essential to create awareness of the need to provide adequate prenatal care for undocumented women. A gap in the literature shows the need for health care professionals to advocate on behalf of pregnant, undocumented women who may not have the voice to speak for themselves. Nurses may believe that changes in healthcare policies affecting undocumented pregnant women should only be the concern of politicians and are outside the scope of nursing practice. However, the perceptions and medical experience of healthcare providers are invaluable and may influence the federal Government to make much needed changes. Health care policies that deny adequate prenatal care for undocumented women create a conflict with the ethical and professional norms that healthcare professionals uphold. Prenatal care is a necessity, and all women, regardless of their immigration status, need to have equal access to adequate care.

Theoretical Framework

The Commission on Social Determinants of Health (CSDH) was established by the World Health Organization in March 2005 to support countries and global health partners in addressing the social factors leading to ill health and health inequities (Commission on Social Determinants of Health, 2008, para 1). “Social determinants of health are increasingly used by re-

searchers as an acceptable framework to understand how inequities rooted in conditions produced and reproduced by political economy, such as social structures, policies, and institutions affect the health of individuals” (Castañeda et al., 2015, p.376). As an increase in migration worldwide has observed, “the social determinants of health surround the many individuals who choose to or are forced to leave their homelands for survival, work, safety, and, in some cases, a new home in another land” (Castañeda et al., 2015, p.376). In this research proposal, using immigration status as a social determinant of health will provide a holistic theoretical framework to allow greater understanding of the barriers that pregnant undocumented women face to received adequate prenatal care in the United States.

Proposal for Further Research

Many challenges remain for undocumented pregnant women in the United States. There must be changes in federal policies to create an environment in which undocumented women feel safe to seek adequate prenatal care. Research articles included in the literature review provide data that clearly state the benefits and consequences of not having access to prenatal care. Nevertheless, improving health care providers' knowledge and understanding of the barriers that pregnant undocumented women face is vital for creating awareness that improved the health of all mothers and infants.

Methodology

This proposal for further research will entail an exploratory study that would allow health care professionals to gain an understanding of the barriers that undocumented women face as a result of their immigration status. A qualitative approach could provide valuable insight regarding the lack of advocacy by medical care providers for undocumented immigrants. The study will

include a total of 20 nurses working in NorthBay Medical Center in Fairfield, California, in the area of Maternity, Labor and Delivery, and Postpartum. Nurses from the different departments would be asked to complete a confidential questionnaire online. No identifying information will be collected. An explanation about the purpose of the study survey would be that it will be used to analyze nurses' willingness to advocate for undocumented women who need adequate prenatal care. Nurses will be encouraged to be open and honest about their answers. Qualitative, open-ended questions in the survey will include the following:

- 1) Do you believe that undocumented women have adequate prenatal care (defined as one visit in the first trimester and nine or more visits for a pregnancy of 36 or more weeks) in the United States? (state your answer and please explain why)

Do you know how the Affordable Care Act affects undocumented immigrants? (please explain)

- 2) Should undocumented women who work in the United States have access to prenatal care and all of the services available to citizens? If yes/no, please explain why.
- 3) Do you know what are the challenges that health care providers face, besides language barriers, when providing care to undocumented women? (please list challenges below)
- 4) How do you think that lack of access to prenatal care for undocumented immigrants affects all the citizens in the community where they reside?

Why do you think that the federal government and some states banned undocumented women from receiving prenatal care?

- 5) What changes, if any, in the federal laws do you think are necessary to allow adequate prenatal care for undocumented women in the United States?

- 6) Do you think nurses should advocate for prenatal care for all women regardless of immigration status? If yes, how could nurses be a voice for these women

Ethical Implications

About the research explain that submission of the online survey implies. No personal identifiers will be collected. All data will be stored on password protected computers only to be viewed by the researcher.

Strengths of the Research

NorthBay Medical Center is a nonprofit community-based health care system that provides care to immigrant women receiving emergency Medicaid throughout pregnancy. The hospital is located in an area with a high number of immigrants and most maternity nurses are familiar with health care implementations that concern undocumented immigrants.

Limitations of the Research

Although the study will be confidential, nurses may not be open to disclosing personal beliefs in fear of being judge. Nurses participating in the survey may lack knowledge about immigration policies affecting undocumented immigrants. Moreover, nurses may lose interest in participating in the study due to exhaustion after working long shifts.

Conclusion

The importance of prenatal care cannot be understated as it affects the outcome of the pregnancy and birth. Although, other factors such as age, nutrition and preexisting conditions affect the outcome of pregnancy, adequate prenatal care is of great importance to decrease the risk of complications during pregnancy and to prevent congenital anomalies in the newborn. Barriers to health care such as lack of documentation prevent undocumented women living in the

United States for receiving adequate prenatal care. The Affordable Health Care Act and other federal programs ban undocumented women from receiving adequate prenatal care. Some states such as California, Oregon, Nebraska and Utah have an extension of Medicare which allows undocumented women to be seen during the first trimester of the pregnancy. Following up visits and adequate prevention test and treatments including an ultrasound are some of the benefits of this programs. In contrast, states lacking programs that allow access to prenatal care for undocumented women, not only jeopardize the life of the mother and the newborn, but increases the cost of treatments and long-care health needs for the children.

The American College of Obstetricians and Gynecologists (ACOG) have echoed this statement, suggesting public education to help society understand the importance and widespread benefit of universal health care access for all U.S. residents, regardless of immigration status, advocating for policies that promote affordable coverage for all—supporting programs that serve unauthorized immigrants. Encourage states to accept the Medicaid extensions that cover the most vulnerable populations—providing a culturally-diverse office atmosphere with interpreters and materials available in languages appropriate for the patient population—and becoming involved in the American Congress of Obstetricians and Gynecologists’ Government Affairs Department activities (Health Care for Unauthorized Immigrants, 2017, para 6).

Based on the research in the literature review, the proposed study aims to contribute to the body of knowledge about prenatal care for undocumented women in the United States by creating awareness of the barriers faced by pregnant undocumented women to receive adequate prenatal care and the need for advocacy by healthcare providers to promote changes.

References

- American College of Obstetricians and Gynecologists. (2017, January). *Health Care for Unauthorized Immigrants*. Retrieved March 25, 2020, from <https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Health-Care-for-Under-served-Women/Health-Care-for-Unauthorized-Immigrants>
- Castañeda, H., Holmes, S. M., Madrigal, D. S., Young, M.-E. D., Beyeler, N., & Quesada, J. (2015). *Immigration as a Social Determinant of Health*. *Annual Review of Public Health*, 36(1), 375–392. doi: 10.1146/annurev-publhealth-032013-182419
- Fabi, R. (2019, January). Why physicians should advocate for undocumented immigrants' unimpeded access to prenatal care. *AMA Journal of Ethics*, 21(1), E1-118. Retrieved March 15, 2020, from <https://journalofethics.ama-assn.org/article/why-physicians-should-advocate-undocumented-immigrants-unimpeded-access-prenatal-care/2019-01>
- Held, M. L., Anderson, K., Kennedy, D., Vernon, E., Wilkins, J., & Lindley, L. C. (2018). Differences in maternal risk factors among undocumented Latinas in Nebraska by country of origin. *Hispanic Health Care International*, 16(4), 189–196. doi: 10.1177/1540415318808829
- Howard, J. (2018, October 24). The stress pregnant immigrants face in America. *CNN Health*. Retrieved February 10, 2020, from <https://www.cnn.com/2018/10/23/health/pregnant-immigrant-women-every-mother-counts/index.html>
- Kemmick Pintor, J., & Call, K. T. (2019, September 26). State-Level Immigrant Prenatal Health Care Policy and Inequities in Health Insurance Among Children in Mixed-Status Fami-

- lies. Retrieved March 26, 2020, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6764026/>
- Korinek, K., & Smith, K. R. (2011). Prenatal care among immigrant and racial-ethnic minority women in a new immigrant destination: Exploring the impact of immigrant legal status. *Social Science & Medicine*, 72(10), 1695–1703. DOI: 10.1016/j.socscimed.2011.02.046
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6125157/#R2>
- Krieger, N., Huynh, M., Li, W., Waterman, P. D., & Wye, G. V. (2018). Severe sociopolitical stressors and preterm births in New York City: 1 September 2015 to 31 August 2017. *Journal of Epidemiology and Community Health*, 72(12), 1147–1152. doi: 10.1136/tech-2018-211077
- Lee Park, J. J. and Valentine, T. L. (2018, April 4). Support rather than scold mothers who don't seek prenatal care. *American Association of Pediatrics*. Retrieved March 25, 2020, from <https://www.aap.org/en-us/aap-voices/Pages/Support-Rather-Than-Scold-Mothers-Who-Don't-Seek-Prenatal-Care.aspx>
- Pintor, J. K. & Call, K. T. (2019). State-level immigrant prenatal health care policy and inequities in health insurance among children in mixed-status families. *Global Pediatric Health*, 6, 1–12. doi: d0o.i.1o1rg7/71/02.13137377/29343X3719948X713958733553. Retrieved March 16, 2020, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6764026/pdf/10.1177_2333794X19873535.pdf
- Reed, M. M., Westfall, J. M., Bublitz, C., Battaglia, C., & Fickenscher, A. (2005, October 4). Birth outcomes in Colorado's undocumented immigrant population. *BMC Public Health*,

5(100). doi:10.1186/1471-2458-5-100. Retrieved March 16, 2020, from <https://>

www.ncbi.nlm.nih.gov/pmc/articles/PMC1262728/

Swartz, J. J., Hainmueller, J., Lawrence, D., & Rodriguez, M. I. (2017). Expanding prenatal care to unauthorized immigrant women and the effects on infant health. *Obstetrics & Gynecology*, *130*(5), 938–945. doi: 10.1097/aog.0000000000002275

Swartz, J. J., Hainmueller, J., Lawrence, D., & Rodriguez, M. I. (2018). Oregon's expansion of prenatal care improved utilization among immigrant women. *Maternal and Child Health Journal*, *23*(2), 173–182. doi: 10.1007/s10995-018-2611-1

Wallace, S. P., Young, M.-E. D. T., Rodríguez, M. A., & Brindis, C. D. (2019). *A social determinants framework identifying state-level immigrant policies and their influence on health*. *SSM - Population Health*, *7*, 100316. doi: 10.1016/j.ssmph.2018.10.016

APPENDIX A - Literature Review Table: Prenatal Care for Undocumented Women in the U.S.

Objectives	Investigator	Sample	Design	Major Finding	Strengths	Limitations
<p>To compare maternal risk factors by country of origin for Mexican and Guatemalan unauthorized immigrants.</p>	<p>Held, M. L., Anderson, K., Kennedy, D., Vernon, E., Wilkins, J., & Lindley, L. C. (2018). Differences in maternal risk factors among undocumented Latinas in Nebraska by country of origin. <i>Hispanic Health Care International</i>, 16(4), 189–196. doi: 10.1177/1540415318808829</p>	<p>The study sample included 4,188 women ages 18 years or older and originating from either Mexico or Guatemala.</p>	<p>Qualitative comparative study. Data included public birth certificate records from Nebraska from 2007 to 2011. The birth-certificate data files contain information on demographics, health before pregnancy, prior pregnancies, health during pregnancy, and birth outcomes.</p>	<p>Targeted strategies to delivering prenatal care to unauthorized immigrants are essential for the well-being of mothers and newborns. Findings suggest that both Mexican and Guatemalan immigrants encounter maternal risk factors that could threaten not only their own health but that of their infants as well.</p>	<p>Study use key informant such as social worker to address barriers to prenatal care. Results of the study provide meaningful insight into each subgroup of Latina immigrants that can inform policies and service delivery strategies for not only improving health of undocumented Latina immigrants, but also for their U.S.-citizen children.</p>	<p>Lack of a social security number on birth certificates was used as a proxy for undocumented status. Relying on the social security number might not be an accurate assessment of documented status, as some women might have excluded their social security number from the form. Data did not allow for analysis of acculturation level, which can affect health outcomes.</p>

<p>The analyses focus on the racial-ethnic, nativity and legal status of mothers as factors that influence prenatal care utilization.</p>	<p>Korinek, K., & Smith, K. R. (2011). Prenatal care among immigrant and racial-ethnic minority women in a new immigrant destination: Exploring the impact of immigrant legal status. <i>Social Science & Medicine</i>, 72(10), 1695–1703. DOI: 10.1016/j.socscimed.2011.02.046 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6125157/#R2</p>	<p>The study analyzed 387,864 birth certificates issued for all live, singleton births occurring in the state of Utah between 2000 and 2007.</p>	<p>Quantitative, descriptive, comparative. The study analyzes birth complications using medical record and birth certificates in the state of Utah. Analyses include, utilization of prenatal care, predisposed risk factors, mother risky health behaviors and poverty to assess pregnancy outcomes in undocumented women</p>	<p>Low birth weight increase in Hispanic women who lack adequate prenatal care. Risky health behaviors, in particular smoking and drinking alcohol during pregnancy, are observed among mothers whose prenatal care utilization was inadequate. Concentration of poverty and the concentration of foreign-born residents is significantly higher in the neighborhoods surrounding mothers who did not obtain adequate prenatal care as compared to the overall sample of mothers.</p>	<p>The study contributes to understanding of disparities across racial-ethnic and immigrant groups in health care access, in particular utilization of prenatal care among expectant in the state of Utah. Study confirms previous studies indicating that health care access among Hispanics is stratified along lines of immigrant legal status, with the undocumented particularly vulnerable to low levels of prenatal care utilization</p>	<p>Relying upon birth certificate data prohibits consideration of other elements relevant to healthcare utilization. Study miss data on fathers' characteristics, especially in cases of births to unwed mothers, as well as maternal and paternal education and ethnicity-nativity status.</p>
---	---	--	--	---	---	---

<p>To assess and compare the number of preterm birthrates in NYC pre- and post the 2017 inauguration.</p>	<p>Krieger, N., Huynh, M., Li, W., Waterman, P. D., & Wye, G. V. (2018). Severe sociopolitical stressors and preterm births in New York City: 1 September 2015 to 31 August 2017. <i>Journal of Epidemiology and Community Health</i>, 72(12), 1147–1152. doi: 10.1136/jech-2018-211077</p>	<p>n=230105) Birth certificates for all singleton births that occur in New York between September 2015 and August 2017.</p>	<p>Quantitative, descriptive, comparative. A trend analysis utilizing birth certificates for all singleton births that occurred in NYC. Report data analyzed in the birth certificate includes, maternal ‘race’, ‘ancestry’ and ‘nativity’ to classify mothers in relation to being at risk of anti-immigrant, discrimination.</p>	<p>Significant increases in PTB rates were especially evident for births to Hispanic women. The Hispanic PTB rate was higher post-inauguration versus pre-inauguration (RR=1.07; 95%CI 1.01 to 1.13). This pattern was driven by births to Hispanic women born outside of the USA (RR=1.08; 95%CI 0.99 to 1.17), with the increase greatest among foreign-born Hispanic women with Mexican or Central American ancestry (RR=1.15; 95%CI 1.01 to 1.31</p>	<p>Evidence indicates risk of preterm birth (PTB; gestation <37 weeks) can be raised by exposure to severe stressors, including economic and social threats and interpersonal violence. Evidence additionally indicates that in the USA, exposure to severe sociopolitical stressors for targeted racial/ethnic, immigrant populations, has been on the rise since the start of the US presidential campaign in 2015.</p>	<p>The results suggest changes in the severity of sociopolitical stressors may be adversely impacting health of the targeted populations and these health impacts warrant public health monitoring. This is the first study to look at the impact of the most recent US presidential campaign and election on rates of PTB. The overall rise of PTB rates during this time period, was most pronounced for post-inauguration versus pre-inauguration period.</p>
---	---	---	---	--	--	---

<p>To examine the role of state-level immigrant health care policy—namely, state-level immigrant access to prenatal coverage.</p>	<p>Pintor, J. K. & Call, K. T. (2019). State-level immigrant prenatal health care policy and inequities in health insurance among children in mixed-status families. <i>Global Pediatric Health</i>, 6, 1–12. doi: doi:10.1017/g771/02.13137377/29343X3719948X713958733553. Retrieved March 16, 2020, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC66764026/pdf/10.1177_2333794X19873535.pdf</p>	<p>Sample includes 4080 US-born children in immigrant families</p>	<p>Quantitative Comparative The study estimate differences by mother’s documentation status in the probability of US-born children being uninsured. An in-person and telephone survey was done after followed individuals in the civilian non-institutionalized population for 3 to 6 years in 4-month waves.</p>	<p>Unequal access to or delayed initiation of prenatal care can have health consequences for both mothers and children and also excludes mothers from an important opportunity to connect to a wealth of resources beyond health care. Children whose mothers were undocumented immigrants had the highest rate of un-insurance (31.9%), while children whose mothers were citizens had the lowest (14.9%). Findings in the study demonstrate the potential for state-level immigrant health care policy to mitigate or exacerbate inequities that could extend to affect the likelihood of children’s to have insurance coverage.</p>	<p>The study provides valid evidences that prenatal coverage is an important buffer to any potential fear, hesitation, or confusion that undocumented immigrant parents would have felt in signing up their US-born children, since mothers learned during pregnancy about their children’s eligibility for coverage regardless of parents’ own documentation status.</p>	<p>The sensitivity of the documentation status measure presents limitations. Item nonresponse is relatively high, but the Census Bureau takes steps to correct it and our findings were robust to sensitivity analyses. Coverage and nonresponse error may contribute to underestimation of the total population of undocumented immigrants. Prenatal care was only observed on a macro-state level. Study that not take into consideration mothers’ insurance during pregnancy, whether these policies were in effect at the time of pregnancy, and state of residence during pregnancy.</p>
---	--	--	---	--	---	--

<p>To identify the factors that relate to optimal birth outcomes of undocumented immigrants in Colorado</p>	<p>Reed, M. M., Westfall, J. M., Bublitz, C., Battaglia, C., & Fickenscher, A. (2005). Birth outcomes in Colorado's undocumented immigrant population. <i>BMC Public Health</i>, 5(1). doi: 10.1186/1471-2458-5-100, form https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1262728/</p>	<p>5961 undocumented women using birth certificate data for 1998–1999.</p>	<p>Qualitative Correlation Analyze the correlation between lacking prenatal care and low-birth weight and prematurity.</p>	<p>Undocumented mothers were younger, lacking education, and less likely to receive early prenatal care. Undocumented women had a lower rate of low birth weight or preterm infants. Undocumented women experienced higher rates of labor complications including excessive bleeding and fetal distress</p>	<p>The creation and analysis of a database of a large cohort of women and infants that has previously gone unstudied. Birth certificate records are very accurate in terms of delivery method and birth weight and represent the standard measure for research on birth outcomes.</p>	<p>There were a significant number of files that did not match to a birth record and some that matched to more than one birth record. Un-match birth certificates complicate the the technique used to merged into different databases. un-match birth certificates were not include in the analysis.</p>
---	---	--	---	---	--	--

<p>To determine whether expanding Emergency Medicaid to cover prenatal care in Oregon affected maternal health outcomes for unauthorized immigrants.</p>	<p>Swartz, J. J., Hainmueller, J., Lawrence, D., & Rodriguez, M. I. (2018). Oregon’s expansion of prenatal care improved utilization among immigrant women. <i>Maternal and Child Health Journal</i>, 23(2), 173–182. doi: 10.1007/s10995-018-2611-1</p>	<p>A total of 213,746 pregnancies were included, with 35,182 covered by Emergency Medicaid, 12,510 covered by Emergency Medicaid Plus (with prenatal care), and 166,054 covered by standard Medicaid. The study takes place in Oregon from 2003 to 2015.</p>	<p>Quantitative, Observational Isolate the effect of expanding access to prenatal care by using difference-in-differences approach that exploits the staggered rollout of the prenatal care program.</p>	<p>Emergency Medicaid Plus coverage did not affect severe maternal morbidity. The program did reduce inadequate care among all pregnancies and among high risk pregnancies and increased diagnosis of gestational diabetes and poor fetal growth. Also increased diagnosis of pre-existing diabetes mellitus, hypertensive diseases of pregnancy and a history of preterm birth.</p>	<p>This study contributes to the body of evidence demonstrating the multigenerational positive effects of these programs for immigrant women and their children. Use of Medicaid claims improves the outcomes but capturing data not recorded on birth certificates.</p>	<p>Inaccuracies and omissions could affect our results. For example, sources of prenatal care only include community health centers and other safety net providers that were providing care through alternative funding mechanism. Women with complicated pregnancies may have been more likely to seek care prior to the introduction of the program. Oregon is a relatively small states with less number of hispanics in comparison to California as an example.</p>
--	--	--	---	---	---	---

<p>To measure the result of access to prenatal care on unauthorized and low-income, new legal permanent resident immigrant women and their offspring in the state of Oregon.</p>	<p>Swartz, J. J., Hainmueller, J., Lawrence, D., & Rodriguez, M. I. (2017). Expanding Prenatal Care to Unauthorized Immigrant Women and the Effects on Infant Health. <i>Obstetrics & Gynecology</i>, 130(5), 938–945. doi: 10.1097/aog.0000000000002275</p>	<p>Reproductive aged women (12-51), and their offspring aged 0-1 years</p> <p>Sample included pregnancies covered by Emergency Medicaid (34,319), Emergency Medicaid Plus (12,344), and Medicaid (163,537)</p>	<p>Quantitative Comparative</p> <p>Include low-income immigrant women who are either unauthorized or have fewer than 5 years of legal permanent residency.</p>	<p>Expanding access to prenatal care increased both utilization of and quality of prenatal care and women were much more likely to receive adequate care and recommended preventive health services.</p> <p>Health care accessibility during pregnancy result in increase compliance of mothers to seek advise care for their children after they were born.</p>	<p>Important findings related to prenatal care access by separating target groups (women who have insurance and women who are affected by the new regulations). Provide evidence of improved outcomes and subsequent reduction in morbidity and mortality.</p>	<p>Database used did not include information on socio-economic status, education or other obstetric risk factors</p> <p>Database claims do not reflect women self-pay prenatal visits.</p> <p>Relatively small population with significant demographic differences from other regions of the US</p>
--	--	--	--	--	--	---