



2018
LATINA
MATERNAL & CHILD HEALTH
REVIEW



2018 **LATINA** MATERNAL & CHILD HEALTH REVIEW



It is with great pride that I present the sentinel report, 2018 Latina Maternal and Child Health Review. Urban Strategies had the honor and tremendous responsibility to be the facilitator of this report which is a culmination of a decade of our work with and for the Latino community to support the health and well-being of families.

Urban Strategies was founded to connect, resource and tool faith and community-based organizations to serve children and families in need. As a social enterprise for the last 15 years, we have facilitated more than \$150 million of programming, supporting transformational work at a community level. We have a national network of over 2000 community-based partner organizations, with an earned history of trust within the communities they serve. Together with these on-the-ground heroes, we do more than we could have ever done alone.

The Review includes topic areas in Latina maternal and child health that have been central to Urban Strategies' work for over a decade. The issues discussed in this report are critical to local community programming but have been missing in the national dialogue. This has created a void that has led to limited investment in Latina maternal and child health, threatening the future well-being of our communities. Recognizing this void, we set forth to create a narrative and call to action to support a more equitable public dialogue on Latina maternal and child health, spur increased investment in research, policy and programming and encourage community centered dialogue on health and well-being.

I would like to offer special thanks to our guest authors, our editorial team, the WK Kellogg Foundation and the many partners who made this project possible. Of note is the work of our editor and contributor, Dr. Diana N. Derige, who has championed the cause of maternal and child health throughout her career. I would also like to take a moment to recognize the invaluable contribution of our community partners who have humbled us year after year with their dedication to families and their commitment to social justice even in times of challenge. Our hope is that this report is a tribute to their work and that it will further the case for health equity. We look forward to working with our consortium of partners, the Center for Latina and Family Health Research at the University of Houston and all of you to ensure the future health of our Nation.

Lisa Cummins



Lisa Treviño Cummins
President, Urban Strategies





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LETTER FROM THE GUEST EDITOR



Over the past six months Urban Strategies, under the leadership of Dr. Derige and Ms. Hojvat-Gallin, assembled experts across the United States to contribute and inform the 2018 Latina Maternal and Child Health Review. Latina maternal and child health disparities in gestational diabetes, hypertension and childhood obesity are well documented. We know that at this time we must promote and institute the translation and use of evidence-based strategies to address and improve health outcomes. Methods and strategies to accomplish this goal are summarized across the contributions.

Studies have shown variations across racial and ethnic health disparities in Latina maternal and child health; consistently, specific barriers and challenges impacting access to prenatal care, post-delivery care and child health are found. These challenges were important to consider and were integrated across the contributions. The timing of the Latina Maternal and Child Health Review is also important, given new and emerging health needs that expand beyond a focus on physical and clinical care to a holistic and behavioral health approach that takes into consideration the social determinants of health. Throughout the contributions you will find evidence that informs practice and community level strategies. The vision for the Review was to serve as a synthesis of information that could be readily used to assist policy makers, providers, community organizations and communities in understanding key factors contributing to Latina maternal and child health. As an editor for the Review, it was important that we consider cross-cutting themes and challenges to identify opportunities and serve as a focus for next steps. Latina maternal and child health needs cannot be solved independently but will require continued engagement and partnership across key stakeholders and communities.

We again thank the contributors and the support of our foundation funders. We know that health outcomes must be acknowledged and believe that sustainable changes will emerge to address the pressing priorities in Latina maternal and child health.

A handwritten signature in black ink that reads "Melissa Valerio". The script is fluid and cursive.

Melissa Valerio, PhD
Associate Professor and Campus Dean
UTHealth School of Public Health San Antonio



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PREFACE

From its inception, Urban Strategies has focused on building the capacity of communities, by bolstering the programmatic and administrative abilities of the organizations that serve them, capitalizing on their strengths so that children and families can flourish. One of our goals is to promote a culture of health for families and children. Since 2003, we have facilitated partnerships, programming and advocacy to bolster transformational work within communities to promote greater access to life-giving resources, services and building of healthy relationships. We have a national network of partners with an earned history of trust within the communities they serve.

As part of a Latino maternal and child health initiative funded by the WK Kellogg Foundation, Urban Strategies was charged with fostering a national dialogue on Latina Maternal and Child Health (Latina MCH). The intent of the project is to promote health equity and reduce health disparities. To this end, Urban Strategies has assembled leading researchers, thought leaders and scholars in the field of Latina MCH to contribute to the report.

The 2018 Latina Maternal and Child Health Review contains 11 chapters organized to address key areas in Latina MCH. In each chapter, the experts provide a synthesis of U.S. data and peer reviewed literature to allow the reader the opportunity to gain a broad understanding of the topic and identify potential strategies to address the scope and impact of Latina MCH needs. The Review also includes an overview of Latina MCH in the United States and a number of critical areas that we have identified as strategic opportunities for improvement.

We want to express our gratitude to our experts and thank them for their commitment to this process and to building health equity. The Review will appeal to a broad range of readership, including community leaders, key stakeholders and health care providers, as well as policy makers. We see the 2018 Latina Maternal and Child Health Review as an opportunity to initiate an inclusive dialogue in the field to achieve health equity and focus attention on Latina MCH.

INTRODUCTION

Latinos in the United States

As one of the fastest growing ethnic minority in the United States, the health of Latinos is inextricably linked to the health trajectory of the U.S. in general. In 2014, there were 55.3 million Latinos (17.3% of the total population) living in the United States, compared to 6.8% in 1980. From 2000-2014, Latinos accounted for more than 54% of the country's population growth. By 2060, the U.S. Census predicts that Latinos will comprise 30% of the U.S. population.¹

The 2010 U.S. Census defines Latino as a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin. This definition includes individuals from at least 28 distinct countries of origin with unique cultural and social practices and geopolitical relationships with the U.S., as well as individuals who can trace their heritage on U.S. soil to before the U.S. was even a country. Important to any health conversation is the recognition that people identified as Latino are not a homogenous group. Recognizing differences among Latino subgroups is important to understanding their unique histories and developing programs that address their health needs.

Latinos are the youngest racial or ethnic group in the U.S., with a median age of 27 and about one-third (17.9 million) of the population being younger than 18. As such, the economic prospects of Latinos are intricately tied to the economic prospects of the U.S. About a quarter (14.6 million) of Latinos are Millennials (ages 18 to 33 in 2014). Altogether, nearly 60 percent of U.S. Latinos are Millennials or younger, according to a Pew Research Center report.² Latinos make up 16% of the U.S. labor force. By 2020, Latinos

Nearly 4 million births in the U.S.



Approximately
1 in 4 births
were to ***Latinas***



70.6
per 1,000 Hispanic
women 15-44 in 2016

National Center for Health Statistics. 2018.



are expected to comprise 19% of the U.S. labor force and 30% by 2050. The number of Latinos in the U.S. workforce more than doubled, from 10.7 million to 25.4 million workers between 1990 and 2014. This 137% increase dwarfed the 13% increase in the number of non-Hispanic workers. As such a large proportion of the labor force, the health and vitality of Hispanic workers directly impacts U.S. economic growth and productivity.

Social Determinants of Health

Social determinants such as income, education, health care access and literacy contribute to health inequities impacting Latinos. Cultural and societal values (within various sub-groups of Latinos), as well as gender, ethnicity, education, occupation, income, material circumstances, behaviors and psychosocial factors should be carefully examined and considered when guiding both programming and policy making.³ According to a report by the Pew Hispanic Center and the Robert Wood Johnson Foundation, Latinos confront a unique set of social, cultural and economic circumstances that contribute to inequality in healthcare.⁴

Income

Twenty-three percent of Latino families are living in poverty, and 40% of Latina-headed households live below the poverty level.⁵ Although Latinos have the highest labor participation rate of any demographic group, they are overrepresented in several high-growth occupations that tend to pay below-median wages. As a result, Latinos are vulnerable to economic downturns and experience high poverty rates, especially among working families with children.⁶

Education

The number of Hispanic students enrolled in schools, colleges and universities in the United States doubled from 8.8 million to 17.9 million from 1996 to 2016.⁷ They form a significant proportion of school enrollments from early childhood to higher education and continue to narrow the educational attainment gap between them and their White peers. Twelve percent of Latinos drop out of high school, a rate higher than that of Blacks (7%), Whites (5%) and Asians (1%).⁵



Health Care Access

In 2008, more than one-fourth of U.S. Hispanic adults lacked a usual health care provider, and a similar proportion reported obtaining no health care information from medical personnel.⁴ Latinos are less likely to be offered health insurance coverage through their employer.^{4,6} Latinas have the least access to health care of any group of women. In 2011, 37% of Latinas were uninsured compared to just 14% of White women. The situation is even bleaker for immigrant women. Lack of access to health care for oneself and one's family leads to chronic health conditions that steal time from both work and school, often meaning losing a job or failing in school due to health-related absences.⁸ Despite the discouraging statistics, access to health care services for Latinas has increased over the last few years, as a result of the Affordable Care Act.⁹

Health Literacy

Individuals with both limited-English proficiency and low health literacy are at high risk for poor health.¹⁰ Further, limited-English proficiency may carry greater health risk than low health literacy.¹⁰ Currently there is a shortage of bilingual medical and mental health professionals, and lack of linguistic competency threatens effectiveness of communications about health issues, even when health care is accessed.¹¹

Related to social determinants, but specific to the Latino experience, is the culturally-held phenomenon of familismo. Further, acculturation has proven to play a significant role in health outcomes and health seeking behaviors.^{12,13}

Familismo

Familismo, a cultural value present in most Latino communities, refers to the importance of strong family loyalty, closeness and getting along with and contributing to the well-being of the nuclear family, extended family and kinship networks.¹⁴ Familismo embodies the idea of family unity and support that often extends to social networks, building on the collective qualities of traditional Latino communities. It can be a protective element against the stress one confronts in life and can also provide a source of identity and a sense of belonging.

Acculturation

Acculturation is a multidimensional and continuous process where individuals simultaneously learn and adopt aspects of a new culture while modifying facets of their culture of origin.¹⁵ Acculturation has been documented to play an important role in determining health outcomes of immigrant populations. As noted by the Institute of Medicine and demonstrated through research and scholarship, the acculturation process plays a key role in understanding ethnic health disparities,



making measures of acculturation just as important as measures of race and ethnicity.^{13,15} Acculturation has been associated with a number of negative health outcomes and health risk factors including poor diet, smoking, substance abuse and suboptimal breastfeeding. Consequently, acculturation should be taken into consideration when planning and programming for immigrant communities and should be an integral part of data collection. Finally, investment in scholarship is needed to better understand the many ways the acculturation process affects health.

Focus on Latina Health

One in 5 women in the U.S. identifies as Latina, and they make up nearly half of the 57 million Latinos. By 2035, Latinas are projected to represent nearly 1 in 4 of all women, and by 2060, Latinas will form nearly a third of the female population of the nation.¹⁴ According to the March of Dimes Perinatal Data Center, with data from the U.S. Census Bureau, between 2010 and 2060, the number of Latinas of childbearing age (15-44) is expected to increase 74%. While the overall teen birth rate has declined almost continuously over the past 20 years, in 2014, Hispanic adolescent females ages 15-19 had the highest birth rate (38 births per 1,000 adolescent females.)¹⁶ The population growth of the Latino population, the relatively young age of the population and the high birth rate all point to a critical need to focus on prevention for Latinas. Further, Latinas are central to the Latino family and thus community well-being. The socio-cultural structure of the Latino family makes Latinas the engines of the family and the community. As such, Latinas are critical to both family and community functioning.

Both informal and formal support networks that reduce stress and support positive birth outcomes are asserted through the Life Course Perspective model.¹⁷ This model is one of cumulative impact and maintains that a woman's cumulative level of chronic stress results in the depression of the body's adaptive system, thus resulting in declining health of the woman, thereby increasing vulnerability to poor birth outcomes, preterm labor and low birth weight in her offspring.¹⁸ Additionally, these negative birth outcomes and in utero chronic stress can have negative long-term outcomes for offspring and may even have detrimental impacts on consecutive generations. This cumulative stress is often linked to factors associated with interpersonal and structural racism, as well as experienced or perceived racism.

Recognizing the burgeoning population and understanding the significance of women's health and maternal health on current and future population health, it is critical to understand the data surrounding Latina health and its reciprocal relationship to overall family health. Further, with little investment in MCH programming that addresses the needs of Latina mothers and their children, we may see significant increases in morbidity among Latinos. A sicker population of Latinos will



have direct implications on both healthcare expenditures and productivity in the labor force, which in turn could have critical consequences for the U.S. economy. Thus, understanding early health through meaningful data analyses, dissemination of evidence and programming that is appropriately tailored to the Latina community is greatly needed. The growing field of implementation science and dissemination of evidence could support better health programming and result in long-term health improvement for the entire United States.

For references see Appendix A.

GUEST AUTHOR ARTICLES

We invited a number of well-respected, academic researchers and experts in the field of Maternal and Child Health to contribute to this publication. While the Latina MCH issues highlighted in the following section are comprehensive, they are not exhaustive. The topic areas have been identified as critical foci by Urban Strategies and the 2018 Latina Maternal and Child Health Review editors, their importance being underscored by community or research. Preventative measures and early investment in these areas offer the most return on investment for long term health and well-being. The intent of this section is to inform the field, encourage community dialogue, future research and community-driven policy.



ACCESS TO MATERNAL AND CHILD HEALTH CARE SERVICES FOR LATINAS

José A. Pagan, PhD

Chair and Professor, Department of Public Health Policy and Management,
College of Global Public Health, New York University

Elizabeth Howell, MD, MPP

Professor, Departments of Population, Health Science & Policy and Obstetrics,
Gynecology, and Reproductive Science, Mount Sinai

From 2013 to 2016, the proportion of nonelderly Latinos and Latinas with health insurance coverage increased from 74% to 83%—a 4 million decrease in the number of uninsured children and adults.¹ Although access to health care services for Latinas has increased over the last few years, as a result of the Affordable Care Act,² some of these gains are likely to disappear due to projected increases in health insurance premiums. Access to maternal and child health care services for Latinas is lower than for Whites.³ Further reductions in access to prenatal and postnatal health care services by Latinas is problematic because it provides key opportunities to address harmful health behaviors (such as smoking and substance abuse) and chronic health conditions (such as hypertension, diabetes and depression). Chronic diseases such as hypertension and obesity are more common in Latinas versus Whites and increase a woman's risk of severe complications related to childbirth.⁴ Prenatal and postnatal care provide opportunities to address both maternal and infant health issues, and ultimately, reduce maternal and infant mortality.

Disparities in access to maternal and child health care services between Latinas and Whites are a result of multiple factors. Many Latinas, particularly Latina immigrants, have intermittent health insurance coverage or limited experience with the health care delivery system in the United States.⁵ Other barriers include lack of childcare, inadequate access to transportation, language barriers, inability to obtain timely pregnancy testing, work constraints for daytime appointments and health literacy.⁶ Limited access to and knowledge of the health care delivery system impacts continuity of care. Access to care is particularly important during pregnancy and after delivery to reduce the long-term consequences of health conditions such as preeclampsia or gestational diabetes. Access to care also

KEY WORDS

Prenatal Care

Preventive care during pregnancy that enables health care providers to monitor and prevent health care problems and promote healthy habits in the mother and child. (OWH 2018)

Postnatal Care

The care provided to a mother and child for the first six weeks of life. (March of Dimes 2018)

Continuity of Care

The provision of health care in a consistent manner and across areas of clinical expertise by a health care team as needed and recommended. (Haggerty 2003)

Preeclampsia

A pregnancy complication characterized by high blood pressure and signs of damage to an organ system. Left untreated, preeclampsia can lead to serious — even fatal — complications for both mother and child. (Mayo Clinic)

Gestational Diabetes

A type of diabetes with onset or first recognition during pregnancy, with screening recommended between 24-28 weeks of pregnancy. (Kim, 2018)

Medical Home

A model of primary care that is patient-centered, comprehensive, team-based, accessible, and focused on quality and safety. (Patient Centered Primary Care Collaborative)

increases the ability of health care providers to identify developmental problems in children.

Addressing health insurance coverage gaps and making sure that Latina mothers and their babies have a medical home are important goals. It is important to note that many Latinas have specific needs related to varied health risks, culture, language and socioeconomic status. There are several innovative solutions to address many of these factors. For example, some health care delivery systems have utilized patient navigation and health education programs that can improve care coordination and facilitate health management. These programs can be particularly effective if they align the incentives of health insurance plans and providers to pinpoint access challenges and make resources readily available where they are needed.

Our own experience working to improve postpartum care access for low income Latina and African American women in New York City may prove instructive. A timely postpartum care visit occurs within 21 to 56 days after giving birth, yet many Latina mothers enrolled in Medicaid miss this visit. With the financial support of the Robert Wood Johnson Foundation, the Icahn School of Medicine at Mount Sinai, and working with Healthfirst (a Medicaid health plan), we created a postpartum care program facilitated by a social worker and a community health worker. The program was successful in increasing timely postpartum care visits for this at-risk population by increasing social support and enhancing the self-management skills of the new mothers.⁷ In the end, improving access to health care services for Latinas is important, but the need to deliver culturally-competent care is essential to closing health care access gaps.

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ABOUT THE AUTHORS

José A. Pagán, PhD

Chair and Professor, Department of Public Health Policy and Management, College of Global Public Health, New York University

Director of the Center for Health Innovation at The New York Academy of Medicine

Adjunct Senior Fellow of the Leonard Davis Institute of Health Economics at the University of Pennsylvania

Chair of the National Advisory Committee of the Robert Wood Johnson Foundation's Health Policy Research Scholars

Dr. Pagán is a health economist who has led research, implementation and evaluation projects on the redesign of delivery and payment systems. His research interests include population health science, health care payment and delivery system reform and social determinants of health.

Elizabeth Howell, MD, MPP

Professor, Departments of Population Health Science & Policy and Obstetrics, Gynecology, & Reproductive Science, Mount Sinai

System, Vice Chair of Research, Department of Obstetrics, Gynecology, and Reproductive Science, Mount Sinai Health System

Director, The Blavatnik Family Women's Health Research Institute

Dr. Howell is a NIH-funded OB-GYN health services researcher whose work addresses quality of care and racial/ethnic disparities in maternal and child health. Her major research foci are postpartum depression and its impact on underserved communities and the intersection between quality of care and disparities in maternal and infant mortality and morbidity.

PRECONCEPTION HEALTH FOR LATINAS

Rebecca B. Russell, MSPH

Senior Vice President, Science and Strategy (interim)
Senior Director, Applied Research and Evaluation
March of Dimes

Preconception health care is part of women's health care delivery, aimed at improving a woman's health in preparation for pregnancy. Preconception care is defined as "a set of interventions that aim to identify and modify biomedical, behavioral and social risks to a woman's health or pregnancy outcome through prevention and management."¹ There are 13 million Hispanic women of reproductive age in the U.S. (20.5% of all women 15-44), and they have a higher fertility rate than most racial and ethnic groups (70.6/1,000 Hispanic women 15-44).² While the Hispanic population is diverse and includes many different cultures, preconception health is relevant to each woman regardless of background.

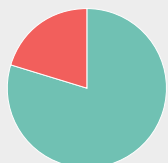
Evidence-based risk screening and risk reduction measures are essential aspects of preconception care. Hispanic women in the U.S. are less likely to use contraception than White women,³ and more than half of all pregnancies to Hispanic women in the U.S. are unintended (54%).⁴



13 Million HISPANIC WOMEN

of Reproductive Age in the U.S.

20.5 %
of all women
15-44



Fertility Rate: 70.6 per 1,000 Hispanic women 15-44 in 2016

KEY WORD

Preconception Care

The medical care a woman or man receives from the doctor or other health professionals that focuses on the parts of health that have been shown to increase the chance of having a healthy baby. (NICHD 2017)

underscoring the importance of addressing modifiable risk factors and chronic health conditions before a woman becomes pregnant. Almost 4 percent of Hispanic women have diabetes (3.6%) and 1 in 10 have hypertension (9.5%), conditions that can complicate pregnancy.⁵ Among Hispanic women 18-44, about 1 in 10 report cigarette smoking (8.9%) and binge drinking (11.0%).⁶ Additionally, roughly 1 in 6 Hispanic women indicate they have been told by a health care provider that they had a depressive disorder (15.5%), and 70% indicate they have adequate social and emotional support.⁶

Physical activity and nutrition are important to health across a woman's lifespan, including prior to conception. Only about half of Hispanic women (46.0%) met the recommended level of physical activity, and just over one third (37.2%) were of normal weight.⁶ Despite the overall decline in prevalence of neural tube defects (NTD) across all racial/ethnic groups, after mandatory fortification of cereal grains in the late 1990s⁷ data from the 2005–2007 National Birth Defects Prevention Network indicates that Hispanic women were still 21% more likely to have a baby affected by a NTD than non-Hispanic White women.⁸ Adequate folic acid intake before and during early

Martin JA, Hamilton BE, Osterman MJ, Driscoll AK, Drake P. Births: Final data for 2016. National Vital Statistics Reports; vol 67 no 1. Hyattsville, MD: National Center for Health Statistics. 2018.

pregnancy has been shown to reduce a woman's risk of having a baby with a NTD. While national surveys have shown no differences in awareness of the importance of folic acid between Hispanic and non-Hispanic women (85% and 84%, respectively),⁹ the proportion of women who report taking a multivitamin prior to pregnancy is lower among Hispanics than among non-Hispanic White women.¹⁰ The March of Dimes, American Academy of Pediatrics, Spina Bifida Association, National Council of La Raza and Gruma Corporation obtained and obtained FDA approval for voluntary fortification of corn masa flour with folic acid in 2016 to potentially reduce the disparity in the rates of NTDs in the U.S.¹¹

Social Determinants of Health

Research to identify reasons for disparities in women's health and birth outcomes suggest that the causes are multifactorial and complex and that social determinants of health play an important role. The conditions in which people are born, grow, work, live and age, as well as the wider set of forces and systems that shape daily life conditions, can impact a person's health. In 2016, about half of Hispanic women ages 18-44 have some college education or a college or higher degree (46.4%). Almost one quarter of Hispanic women ages 18-44 are living in poverty (24.7%).¹² The proportion of women ages 15-44 who do not have health insurance has fallen in recent years to 12.8% in 2015.¹³ However about one quarter of Hispanic women and more than one third of poor Hispanic women did not have health insurance in 2015 (24.7% and 36.4% respectively).¹⁴ Access to preconception and prenatal care services is more difficult without health insurance. In 2016, 72.0% of Hispanic women initiated prenatal care in the first trimester of pregnancy.¹⁵

Barriers to Preconception Care

Although the importance of preconception health to women and infants has been acknowledged for almost forty years and supported by national and international organizations,^{16,17} barriers to preconception care remain in the U.S. Not fully planning the pregnancy, the perceived absence of risk, and a general lack of awareness of the benefits are some of the reasons women have provided for not utilizing preconception care services.¹⁸ In a survey of pregnant or recently pregnant Mexican American women in Arizona, about 60% responded that no physician had spoken to them about preconception health,¹⁹ indicating that provider and system barriers exist as well. Continued work by providers, and maternal and child health advocates and organizations to strengthen and improve access to preconception care within the broader context of women's health could have an impact on maternal and infant health outcomes.

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ABOUT THE AUTHOR

Rebecca B. Russell, MSPH

Senior Vice President, Science and Strategy (interim)
and Senior Director, Applied Research and Evaluation
March of Dimes

Rebecca B. Russell provides leadership and managerial oversight to the Science and Strategy Division of the Mission Impact Department including the following sections: the Prematurity Collaborative, the Prematurity Campaign, Health Information, Applied Research and Evaluation and the Office of Sponsored Programs. She is responsible for the analytic, epidemiology and evaluation activities of the organization, oversight of the Perinatal Data Center, the PeriStats website and production of the March of Dimes Premature Birth Report Cards.



LATINA PRENATAL CARE

Rosamar Torres, PhD, RN
Clinical Assistant Professor
School of Nursing
The University of Texas at Austin

Prenatal care is essential for reducing adverse fetal, birth and maternal outcomes by controlling acute or chronic maternal health conditions, promoting safe medication use during pregnancy and screening for fetal abnormalities.¹ Initiating prenatal care during the first trimester of pregnancy and obtaining 14+ prenatal care visits is the standard of care for women in the United States.^{2,3} Since the risks of poor or no prenatal care are well documented⁴, the U.S. has increased efforts to make prenatal care accessible for all women.⁵ Despite these endeavors, nearly 30% of U.S. Latinas (vs. 18% non-Latina Whites and 22.5% of Asians) begin care after the first trimester and obtain less than the recommended number of visits resulting in inadequate prenatal care.⁴⁻⁷

U.S. Latinas have higher birth and fertility rates compared to non-Latina Whites, Blacks, Asians, and Native Americans.^{1,4} However, only 71% of Latinas obtain adequate prenatal care compared to other non-Latina ethnic groups.^{ii,8} Inadequate prenatal care utilization in Latinas should be of national concern considering its relationship with low birth weight, small-for-gestational age, stillbirths, prematurity and neonatal/infant death.^{2,9,10} In addition, inadequate prenatal care is associated with deficient postpartum or well-baby care,^{9,11} resulting in a myriad of missed preventive and well-check examinations for mother and baby. These include screening for maternal postpartum depression, intimate partner violence, breast engorgement, or mastitis² and assessment of infant feeding, screening for weight loss and jaundice, state-mandated congenital screenings, infant immunizations and Hepatitis B or HIV prophylaxis (if mother's status is positive).²

KEY WORD

Prenatal Care

Preventive care during pregnancy that includes assessment of gestational age, pregnancy progression, laboratory testing, childbirth education, social service coordination and on-going maternal-fetal risk assessment that may include referrals to specialty and subspecialty care. (AAP 2012)

Trained promotoras de salud (trusted lay Community Health Workers) have been shown to provide bilingual culturally competent healthcare education and counseling to Latino communities and assist with healthcare access and maintenance. In low-income communities, promotoras have been instrumental in helping Latinas access first trimester prenatal care in addition to providing information on health promoting behaviors during pregnancy.^{12,13} Additionally, promotoras are able to educate Latinas about common pregnancy discomfort symptoms versus dangerous symptoms thereby reducing the number of unnecessary emergency room visits and healthcare expenditures.^{13,14} Lastly, collaborative partnerships with promotoras have the potential to assist Public Health Nurses (PHN) gain the community's trust in order to deliver prenatal care directly to Latinas in their own households, neighborhoods and communities.

A successful example of partnered care is the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) of which an estimated 42% of participants are Latina.¹⁵ WIC counseling on nutrition and healthy pregnancy behaviors has been found to be associated

with positive birth and infant outcomes.^{16,17} However, only 53% of WIC participants enroll in the first trimester of pregnancy.¹⁵ This may be due to the fact that many states require referrals from healthcare providers for program participation. Promotoras de Salud are in a prime position to assist Latinas with provider access or in bringing PHN's into the community to provide WIC referrals.

The traditional U.S. model where patients must actively seek prenatal care from healthcare providers may be unfavorable for Latinas due to individual, community or organizational level factors. As researchers and healthcare workers, we must find innovative ways to gain access to vulnerable Latino communities and advocate for the delivery of prenatal care within communities.

i Latinas (16 per 1000 live births; fertility rate 70.6); non-Latina Whites (10.5 per 1000; 58.8); Blacks (14 per 1000; 63.3); Asians (14.6 per 1000; 61.1); and Native Americans (13.3 per 1000 ; 62.7)

ii Rate of adequate prenatal care (1st trimester initiation and at least 14 office/clinic visits): Latinas 70.8%; non-Latina Whites 80.5; Blacks 66.4; Asians 77.5; and Native Americans 59.1.

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ABOUT THE AUTHOR

Rosamar Torres, PhD, RN

Clinical Assistant Professor

The University of Texas at Austin, School of Nursing

Dr. Torres is a nurse scientist with expertise in Maternal-Child Health. Her research focus examines perinatal depression with an emphasis on adolescent Latinas. She maintains a clinical practice in Neonatal and Pediatric ICU's in Texas and California and was previously on faculty at UCLA.



POSTPARTUM DEPRESSION IN LATINAS

McClain Sampson, PhD, MSSW

Associate Professor

Graduate College of Social Work, University of Houston

Mothers are often the nucleus of families within Latino communities. Yet, policy makers overlook the importance of positive mental health functioning of mothers, in all cultures. perinatal mood disorders are now the leading cause of maternal morbidity.^{1, 2} Research among U.S. and foreign-born Latinas indicates depression prevalence during or after pregnancy ranges from 23%-51%,³⁻⁶ which is double the prevalence of the general population. Early intervention is essential for treatment of Postpartum Depression (PPD), but disparities exist between prevalence rates and rates of mental health service utilization among Latinas,⁷ especially those who have immigrated to the U.S. When a mother's mental health is compromised it can affect the way she parents or emotionally attends to her child, thus putting herself and the child at risk for difficulty with emotional attachment and regulation.

Stigma, lack of recognition of symptoms and/or misconceptions about PPD among Latinas and their service providers makes early detection of depressive or anxiety symptoms challenging.⁸ One barrier to proper recognition of PPD is that Latina mothers, especially those who are immigrants to the U.S., may have different perceptions of diagnosis, treatment and management of depression. A survey of Latina women, of which 89% were first generation immigrants, found that nearly a quarter of postpartum mothers self-reported depressive symptoms and felt they needed help, yet only half of them were assessed or provided resources for treatment from their health care provider.⁴

Negative perceptions of mental illness and their treatments permeate Latino communities and result in stigma. Fear of

KEY WORDS

Postpartum

"There is consensus that the postpartum period begins upon delivery of the infant. The end is less well defined but is often considered the six to eight weeks after delivery because the effects of pregnancy on many systems have largely returned to the prepregnancy state. However, all organ systems do not return to baseline within this period, and the return to baseline is not necessarily linear over time. For this reason, some authors describe women as postpartum for as long as 12 months after delivery." (UpToDate.com 2018)

Postpartum Depression (PPD)

Defined in the DSM-5 as a major depressive episode with pregnancy or postpartum onset (American Psychiatric Association 2013)

Interpersonal Therapy (IPT)

A form of psychotherapy where the client focuses on present day functioning to explore interpersonal relationships. IPT focuses on modifying dysfunctional patterns of relationships (Miniarti 2014).

Cognitive Behavioral Therapy (CBT)

A form of psychotherapy that focuses on internal thought processes and teaches behaviors to change thought processes (Stangier 2011)

being labeled as “crazy” or disgracing the family combined with cultural norms that discourage people from talking about mental illness create barriers for treatment.⁸ In a qualitative study using an interview approach, immigrant Latinas with high levels of PPD symptoms who had declined opportunities for counseling attributed their symptoms to financial or family stress. In addition, the mothers cited that stigma of mental illness, cultural beliefs of motherhood, limited English proficiency, child care and occupational conflicts and immigration status were barriers to treatment.⁹

Interpersonal therapy (IPT) or cognitive-behavioral therapy (CBT) are the most common modalities used in interventions cited in the PPD research literature.¹⁰ IPT is a form of psychotherapy that has the client focus on present day functioning to explore interpersonal relationships and is delivered in a particular number of sessions depending on desired outcome.¹¹ Interpersonal therapy (IPT) focuses on modifying dysfunctional patterns of relationships versus CBT, which focuses on internal thought processes and teaches the patient behaviors to change thought processes.¹² Research-tested mental health interventions that are culturally adapted are shown to be more effective than non-culturally adapted interventions.¹³ Interventions that use cognitive behavioral techniques that are easy to understand and deliver, are available in English and Spanish, and are accessible at home or other easy-to-access locations show promise in reducing depression and increasing the mother’s sense of competency during pregnancy and postpartum.^{14,15}

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ABOUT THE AUTHOR

McClain Sampson, PhD, MSSW

Associate Professor

Graduate College of Social Work, University of Houston

Dr. Sampson’s published research focuses on health promotion and includes topics such as racial/ethnic disparities of postpartum depression and anxiety, the use of Motivational Interviewing in substance abuse settings, and health care provider’s comfort with delivery of palliative care. Dr. Sampson is also the Principal Investigator for the Department of Health and Human Service/HRSA funded GLOBE project. This project delivers training of bilingual social workers in advanced, clinical, behavioral health social work.



TYPE 2 AND GESTATIONAL DIABETES IN LATINAS

Edith C. Kieffer, MPH, PhD

Professor

University of Michigan School of Social Work

Type 2 diabetes (T2DM) and gestational diabetes (GDM) are diseases in which levels of glucose in the blood is too high.¹ Risk of T2DM and GDM increase with age, family history of diabetes, being overweight or obese and non-White race/ethnicity.^{1,2,3} Being overweight, obesity, physical inactivity and inadequate fruit/vegetable consumption are more common among Latinas than non-Hispanic white women 18-44 years of age.⁴

Among women ages 18-44 who live in the U.S., T2DM and GDM are more prevalent among Latinas relative to non-Hispanic White women. An estimated 10.5% and 11.5% of all Hispanic and Mexican-American women, respectively, have GDM compared to 6.7% of non-Hispanic White women. An estimated 19.0% of all Hispanic and 12.9% of Mexican-American women are subsequently diagnosed with T2DM.² An estimated 3.6% of Latinas aged 18-44 have diabetes, excluding GDM, compared to 2.3% of non-Hispanic White women. Actual prevalence of GDM and T2DM is likely higher for Latinas because estimates exclude undiagnosed diabetes. Latinas have less access to healthcare services,⁴ resulting in fewer opportunities for diagnosis. An estimated 50.3% of Latinas had health care in the month before pregnancy and 80.3% had the recommended postpartum visit, compared to 81.9% and 91.6% for these visits, respectively, among non-Hispanic White women.⁴

Congenital malformations, pregnancy and newborn health problems, high birth weight, preterm birth, cesarean delivery and birth injuries are common complications of diabetes during pregnancy.^{1,4} Children born to women with diabetes during pregnancy and women with GDM have increased risk of developing T2DM in subsequent years.¹⁻⁴ Preconception, prenatal and postpartum care can help

KEY WORDS

Type 2 Diabetes

A disease that is the result of the pancreas making insufficient insulin, or the body using it ineffectively. As a result, the level of glucose in the blood is too high. High blood can cause other serious health problems, such as heart disease, vision loss, and kidney disease. (NIDDK, 2017)

Gestational Diabetes

A type of diabetes with onset or first recognition during pregnancy, with screening recommended between 24-28 weeks of pregnancy. (Kim, 2018)

reduce complications and risk factors for GDM and T2DM.²⁻³ The Diabetes Prevention Program (DPP) and evidence-based lifestyle intervention demonstrated that T2DM could be prevented among people with impaired glucose tolerance. Subsequently, the DPP has been adapted and tested, especially for women with previous GDM, to promote healthful eating, regular exercise and achieving weight goals, including reduced postpartum weight retention³ - examples include Healthy MOMs,⁵⁻⁶ Balance After Baby,³ Sweet Success,⁷ STAR MAMA,⁸ Estudio Parto⁹ and Moms (GEM).¹⁰ However, only a few have full study⁵⁻⁶ or pilot results for Latinas.⁷⁻⁸ Some results are not reported by ethnicity, although they included Latina participants.^{3,7,9} Healthy MOMs, an early adaptation of the DPP for pregnant and early postpartum Latinas regardless of GDM history, was conducted by Spanish speaking, female community health workers (CHWs) in community organizations in Detroit. The CHW intervention participants had significantly increased intake of vegetables, fruits and

fiber, reduced intake of saturated fat and added sugars⁵ and significantly lower depressive symptoms⁶ compared to a healthy pregnancy education control group.

To reduce prevalence and consequences of T2DM and GDM in Latinas and their children, policy-makers and clinicians should partner to focus strategies on increasing access to preconception, prenatal and postpartum care for Latinas. Additional research to identify practical community- and clinic-based interventions with all Latinas of childbearing age, regardless of pregnancy status or GDM history, is needed. Results with sufficient representation of Latinas in their sample should report research results separately to allow for greater understanding of factors influencing disparities, including sociodemographic, behavioral and clinical indicators. Support by insurance companies, health systems and government to sustain and disseminate successful interventions and strategies are also critically needed.

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ABOUT THE AUTHOR

Edith C. Kieffer, MPH, PhD

Professor

University of Michigan School of Social Work

Member, University of Michigan Institute for Healthcare Policy & Innovation

Member, Michigan Center for Diabetes Translational Research

Dr. Kieffer conducts research addressing health and health care disparities. Using community-based participatory research (CBPR) approaches, she and collaborators have evaluated the effectiveness of Detroit-based community health worker programs aimed improving the health of pregnant and postpartum Latina women and Latinos and African Americans with, and at risk for, type 2 diabetes, in Detroit.

PRETERM BIRTHS IN THE LATINO POPULATION

Diana E. Ramos, MD, MPH

Adjunct, Assistant Clinical Professor

Keck University of Southern California School of Medicine,

Department of OB-GYN

Preterm births, those before 37 weeks gestational age, are a reflection of maternal and infant health and a call to action. Preterm births are the leading cause of infant mortality in the United States¹ and the cause of multiple life-long disabilities such as learning, developmental, visual, auditory problems and many others.

Data from 2017 National Center for Health Statistics (2017)² indicate an increasing trend in preterm births, which are up to 9.93% from 9.85% in 2016. Hispanic preterm births increased from 9.45% in 2016 to 9.6% in 2017. Currently, 1 in 4 babies born in the U.S. are Hispanic. By 2050, it is estimated that 1 in 3 babies born in the U.S. will be Hispanic. Identifying and implementing interventions to reduce preterm births is critical in setting a healthy lifelong trajectory for the Latino population and the United States. We now know that female infants born preterm are at increased risk of having a preterm baby when they have children.³

Solutions to reduce preterm births are complex and multifactorial. In many instances, the cause is unknown. We do know certain genetic, social and environmental contributors play a role.⁴ Among risk factors known to increase preterm births are a previous preterm birth, multiple pregnancy (twins, or more), certain cervical or uterine abnormalities and certain medical conditions such

as high blood pressure, cigarette smoking, alcohol and illicit drug use, domestic violence, high stress levels and prolonged work hours involving standing are risk factors that contribute to increased preterm births.⁵

For women with a previous preterm birth, options to prevent a recurrent preterm birth include treatment with progesterone or a cerclage (a stitch to help keep the cervix closed). Recommendations are dependent on a patient's history and provider advice; therefore, bidirectional communication and sharing of information to ensure

understanding of patient needs is critical. However, for Latina women who lack access to healthcare, they may not get the early treatment needed to prevent a recurrent preterm birth.

Habits That Contribute To INCREASED PRETERM BIRTHS



Very High
Stress Levels



Cigarette
Smoking



Domestic
Violence



Alcohol &
Illicit Drug
Use



Prolonged
Work Hours
(Involving Standing)

Innovative solutions to lower the risk of preterm births include changing the current healthcare framework from

treating disease to one of prevention and well-being. This means receiving preconception care - a visit with a health provider *before* pregnancy. During this visit, health issues such as weight, medical conditions and healthy behaviors are addressed. A novel intervention includes incorporating social determinants of health as part of that visit. But, because more than 56% of Hispanic births are unintended,⁶ we need to strive for “healthy women at all ages and all times,” not just before pregnancy and during pregnancy.

Collaboration with health providers, community organizations and, most importantly, the individual in addressing all components of health is needed to reduce preterm births. Healthy living needs to be part of the Latino culture so that not just preterm births but health outcomes in general are improved. These efforts will not only improve the health of Latinos but contribute to a healthier U.S.

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ABOUT THE AUTHOR

Diana E. Ramos, MD, MPH

Adjunct, Assistant Clinical Professor
Keck University of Southern California School of
Medicine, Department of OB-GYN

Dr. Ramos is the Public Health Medical Officer for the California Department of Public Health, Maternal, Child and Adolescent Health. Previously, she was the Los Angeles County Public Health Department's Director for Reproductive Health. Her areas of expertise include health disparities, preconception/interconception health, contraception and quality improvement in women's health.

FERTILITY, UNINTENDED PREGNANCY AND INTERPREGNANCY IN LATINAS

Divya A. Patel, PhD

Assistant Professor

University of Texas Health Science Center at Tyler,

Department of Community Health

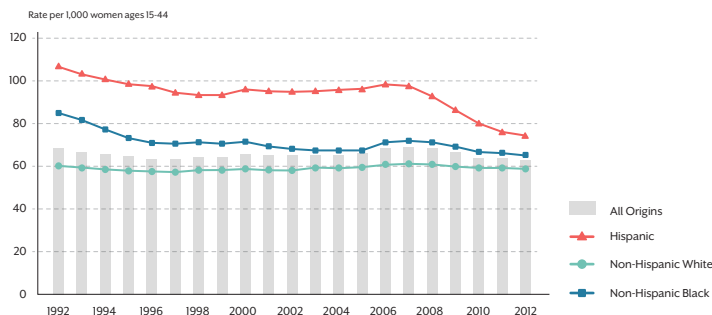
University of Texas System Population Health, Office of Health Affairs, Austin

Adjunct Faculty, UTHealth Houston School of Public Health in Austin

Fertility rates, unintended pregnancy and interpregnancy intervals are central measures of reproductive health, providing insights into both the fertility of populations as well as the unmet need for contraception and family planning. Each year in the U.S. there are 6 million pregnancies. Hispanic women of childbearing age consistently have the highest fertility rate compared to other racial/ethnic groups.¹

Birth rates among Hispanic teens are more than twice that of White teens. In 2016, Hispanic adolescent females ages 15-19 had a substantially higher birth rate (31.9 births per 1,000 adolescent females) compared to Black (29.3) and White adolescent females (14.3).²

Fertility rates by maternal race/ethnicity, United States, 1992-2012



National Center for Health Statistics, 1992-2012 final natality data.
Figure source: March of Dimes Perinatal Data Center, 2014.

Nearly half of all pregnancies in the U.S. are unintended.³ An unintended pregnancy is one that is reported to have been either unwanted or mistimed, and results mainly

KEY WORD

Reproductive Care and Parity

Interpregnancy Interval (IPI) the timing period between delivery of the previous infant and conception of the next pregnancy (CDC 2015).

from not using contraception, or inconsistent or incorrect use of effective contraceptive methods.⁴ While unintended pregnancy occurs in all subgroups of the population, important disparities exist. Among women who are ages 18-24, the highest rates of unintended pregnancy occurs among women who have lower income and educational attainment and who are Black or Hispanic.³ Unintended pregnancy is associated with an increased risk of problems for the mother and baby. If a pregnancy is not planned, a woman may not be in optimal health for childbearing. Women who have unintended pregnancies are more likely to have inadequate or delayed prenatal care, to smoke and consume alcohol during pregnancy and to have preterm and low birthweight infants.^{3,5} The period between delivery of the previous infant and the conception of the next pregnancy, or interpregnancy interval (IPI), can affect the risk of pregnancy complications. While there is no consensus on the optimal IPI, short (<18 months) and long intervals (≥60 months), are associated with higher risks of adverse perinatal outcomes, including preterm birth, low birthweight, small gestational age and preeclampsia.⁶ Overall, Hispanic women have the lowest percentage of short IPI compared to non-Hispanic White and Black

women.⁷ However, U.S. born Hispanic women have a higher percentage of short IPI compared to non-U.S. born Hispanic women. Further, non-U.S. born Hispanic women have the highest percentage of long IPI compared to all other racial/ethnic groups.⁷

The ability to time and space pregnancies, including delaying the first pregnancy and the spacing or limiting of subsequent pregnancies, is vital to achieving optimal reproductive health outcomes.⁸ The availability of family planning services and contraception allows individuals to achieve desired birth spacing and family size and reduce short IPI and unintended pregnancy. Hispanic women in the U.S. continue to face barriers in consistently accessing these services,⁹ which may contribute to higher rates of fertility, unintended pregnancy and sub-optimal interpregnancy intervals. Differential access to medical care, and differences in the experience interfacing with the medical system, may contribute to the observed disparities.¹⁰ Hispanics in the U.S. have the highest uninsured rate (16%),¹¹ which leads to challenges in ability to afford and obtain quality care.¹² Even among women who use contraception, Hispanic women are less likely than White women to use highly or moderately effective methods.¹³ Differences in knowledge and attitudes about contraception and pregnancy, as well as differing levels of ambivalence about pregnancy,¹⁴ may contribute to disparities in reproductive health outcomes.¹⁰ Cultural norms, social support, self-efficacy and acculturation affect contraceptive use. For example, the belief that contraceptive responsibility is a woman's role and perception of opposition to use of birth control by the partner have been shown to be related to lower contraceptive use among Hispanic women.¹⁵ Disparities in key reproductive health indicators suggest important implications for the health of Hispanic populations, as well as for the broader public health.

Implications for Practices to Address Reproductive Health of Hispanic Populations

A Healthy People 2020 goal is to improve pregnancy planning and spacing and prevent unintended pregnancy.¹⁶ While causes of the observed disparities are complex, there are several opportunities for change, which could contribute to improved reproductive health outcomes for Hispanic infants, children, women and families.

1. There is a need to improve women's access to the full range of safe, effective and affordable contraception. Long-acting, reversible contraceptives (LARC), including intrauterine devices and contraceptive implants, are particularly well-suited to lengthening the interpregnancy interval and reducing unintended pregnancy.¹⁷ Experiences in Colorado¹⁸ and St. Louis¹⁹ demonstrate that provision of adequate counseling and convenient no-cost access to LARC can result in substantial reductions in unintended pregnancy and

abortion, particularly among teens.

2. Healthcare providers play a vital role in ensuring that women have the tools to make informed choices surrounding family planning. Providers must strive to provide high quality, patient-centered family planning care to all women, with sensitivity to the historical and cultural context that may affect these interactions. By helping women explore pregnancy intentions and helping women who wish to avoid pregnancy identify and understand the contraceptive method which is best for them, healthcare providers can positively impact women's ability to make choices about their fertility.
3. Information about family planning and contraceptive options needs to be provided in accessible, culturally appropriate ways. Easy access to trusted information sources is crucial for health promotion efforts but may be a particular challenge for the Hispanic population who may not access and use the same information as non-Hispanics due to language, cultural and media use differences.²² Further work to identify avenues for effective communication with Hispanic communities, such as social media and peer-to-peer education, will enhance public health efforts.
4. Programs that provide support for families during pregnancy and through early childhood should be expanded to better meet the needs of Hispanic populations. Maternal and child home visitation, which uses trained nurses to regularly visit expecting women from the prenatal period through the first several years of a child's life, shows promise as a way to work with families who may be difficult to engage in supportive services. While the benefits of home visitation programs for improving birth outcomes among Hispanic families have been demonstrated,²⁶ increasing recruitment and engagement of Hispanic families into home visitation programs may require targeted strategies.

These recommendations offer a starting point toward ensuring that Hispanic women have equitable access to the knowledge and health care needed to make informed decisions about family planning, which will ultimately benefit women, their families and society.

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ABOUT THE AUTHOR

Divya A. Patel, PhD

Assistant Professor

University of Texas Health Science Center at Tyler,

Department of Community Health

University of Texas System Population Health, Office of Health Affairs, Austin

Adjunct Faculty, UTHealth Houston School of Public Health in Austin

Dr. Patel is an epidemiologist with a broad interest in women's health research. Previously, she served on the faculty in the Department of Obstetrics and Gynecology at the University of Michigan (2004-2010) and in the Department of Obstetrics, Gynecology and Reproductive Sciences at Yale University (2010-2012). She has worked at the Texas Department of State Health Services and at the U.S. Centers for Disease Control and Prevention on population-level maternal and child health projects.

BREASTFEEDING AND LATINAS

Diana N. Derige, DrPH
National Director of Health Initiatives
Urban Strategies

Breastfeeding has been well documented to provide the perfect nutrition that infants need for healthy growth. Exclusive breastfeeding for six months protects babies from asthma, ear and respiratory infections, Sudden Infant Death Syndrome (SIDS), Type 2 Diabetes, obesity and necrotizing enterocolitis in preterm infants.^{1,2} For mothers, exclusive breastfeeding reduces Type 2 diabetes, breast cancer, ovarian cancer and hypertension.^{3,4} Achieving exclusive breastfeeding for six months could reduce medical costs by up to \$13 billion and prevent 911 deaths annually in the U.S.⁵

Black and Latino children who experience sub-optimal breastfeeding are at a greater risk for childhood disease and death than children who were breastfed for six months or more. For instance, Latino infants who experience suboptimal breastfeeding are twice as likely to experience necrotizing enterocolitis, 1.4 times as likely to die from SIDS and 1.4 times as likely to suffer a gastrointestinal infection requiring hospitalization. Aggregate national data show that Latinas overall have higher rates of breastfeeding initiation (80%+) and duration than the general population.⁶ While breastfeeding initiation rose between 2000 and 2008 by 3.4% for Whites and 9% for Blacks, there was only a 2.4% increase among Hispanics. Importantly, Latinos are not a homogenous group and

RATES OF ANY AND EXCLUSIVE BREASTFEEDING BY SOCIO-DEMOGRAPHICS AMONG CHILDREN BORN IN 2015 (Percentage +/- half 95% Confidence Interval)^{1,2}

	ANY BREASTFEEDING			EXCLUSIVE BREASTFEEDING	
	Ever Breastfed	Breastfed at 6 Months	Breastfed at 12 Months	Exclusive Breastfeeding through 3 Months	Exclusive Breastfeeding through 6 Months
Socio-demographic Factors	% ± half 95% CI	% ± half 95% CI	% ± half 95% CI	% ± half 95% CI	% ± half 95% CI
US National	83.2±1.0	57.6±1.4	35.9±1.3	46.9±1.4	24.9±1.2
RACE/ETHNICITY					
Hispanic	84.6±2.4	54.1±3.3	32.6±3.1	42.2±3.3	20.9±2.6
Non-Hispanic White	85.9±1.2	62.0±1.6	39.8±1.6	53.0±1.7	29.5±1.6
Non-Hispanic Black	69.4±3.5	44.7±3.8	24.0±3.2	36.0±3.8	17.2±3.1
Non-Hispanic Asian	89.3±1.5	72.2±5.2	50.3±6.8	45.7±7.0	30.1±5.8
Non-Hispanic Hawaiian/ Pacific Islander	83.0±3.8	57.8±6.3	24.4±11.7	45.3±6.6	29.0±5.1
Non-Hispanic American Indian/Alaska Native	76.4±11.3	55.0±12.4	31.3±10.7	44.6±12.1	19.6±7.2

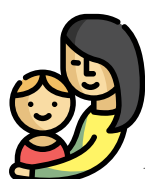
¹Data from the U.S. territories are excluded from the national breastfeeding estimates to be consistent with the analytical methods for the establishment of Healthy People 2020 targets on breastfeeding.

²Exclusive breastfeeding is defined as ONLY breast milk – NO solids, no water, and no other liquids.

Centers for Disease Control, Division of Nutrition, Physical Activity and Obesity, 2018 U.S. Breastfeeding Report Card

breastfeeding rates differ among Latina subgroups. For example, 91% of South American Latinas surveyed initiated breastfeeding compared to 71.9% of Puerto Rican Latinas. Location matters; breastfeeding rates on the island of Puerto Rico are lower than rates of Puerto Rican women living on the United States mainland.⁷ It is important to recognize these differences when analyzing policies and designing programs.

Latinas initiate breastfeeding at relatively high rates. Approximately 85% started breastfeeding in 2015, but only about 21% exclusively breastfeed for six months. Further, breastfeeding data from 2015 noted minimal gain in breastfeeding initiation and any breastfeeding among Latinas. More interestingly, it showed a decline of exclusive



**In 2015, over
85%**
of Latinas initiated
breastfeeding

Unfortunately only about **21%**
were able to exclusively breastfeed
for **6 months**

Centers for Disease Control, Division of Nutrition, Physical Activity and Obesity, 2018 U.S. Breastfeeding Report Card

breastfeeding among Latinas at both 3 and 6 months compared to 2014.⁸ The steep drop-off in breastfeeding rates suggests systematic barriers that prevent Latinas from meeting breastfeeding recommendations.

Additionally, it has been documented that there is a widespread belief among Latinas that a combination of breastfeeding and supplementing with formula, “las dos cosas” or “both things,” affords babies added benefits versus exclusive breastfeeding.⁹ This belief exists even though exclusive breastfeeding has been repeatedly shown to be the optimal nutrition for infants. Misunderstanding of the protective factors of breastfeeding and lack of education and support can lead to mother’s not meeting their breastfeeding goals, reduced breastfeeding duration, exclusivity and decreased health benefits.

Next Steps

Given the burgeoning Latino population, understanding the significance of the protective factors breastfeeding affords to the current and future population health, it is critical to understand and apply culturally-based, evidence informed practices. A healthier population of Latinos will have direct implications on both healthcare expenditures and productivity in the labor force, which in turn could have critical consequences to the U.S. economy.

2012 Breastfeeding Rates National Immunization Survey

DEMOGRAPHIC	% INITIATE BF	% EXCLUSIVE BF AT 6 MONTHS
National	76.8	17.1
Non-Hispanic White	78.6	18.4
Non-Hispanic Black	61.8	13.2
Hispanic	80.3	16.4
MEXICAN	82.1	14.2
MEXICAN/AMERICAN	80.6	17.6
CENTRAL AMERICAN	82.2	14.9
SOUTH AMERICAN	91.6	15.7
PUERTO RICAN	71.9	14.4
CUBAN/AMERICAN	90.6	14.6
SPANISH CARIBBEAN	85	14

Recommendations to Help Latinas Meet Their Breastfeeding Goals



Paid Family Leave



Access to pumps, places to pump, and space to store breast milk for all women



Early and frequent breastfeeding education



Inclusion of family in breastfeeding education



Multilingual and culturally sensitive lactation support



Community-based lactation support when mothers return home and to work



Baby Friendly Hospitals™



Breastfeeding support in childcare settings



Training for childcare staff on handling breastmilk

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ABOUT THE AUTHOR

Diana Derige, DrPH, MPH
National Director of Health Initiatives
Urban Strategies

Dr. Derige leads Urban Strategies' development, program implementation and evaluation of the organization's broad health equity agenda. She is also co-director of the Center for Latina Maternal and Family Health Research at the University of Houston. Over the past fifteen years, Dr. Derige has designed and managed several private philanthropic, government, and non-profit programs. Throughout her career, she has concentrated on promoting public health and social equity for marginalized communities.



LATINA MATERNAL AND INFANT IMMUNIZATIONS: VACCINE-PREVENTABLE DISEASE

Margie E. Padilla, PharmD, CDE, BCACP
Clinical Associate Professor
The University of El Paso School of Pharmacy

In the past decade, there have been notable advancements in the development of vaccines and eradication of vaccine-preventable diseases. Despite positive advancements, Latina pregnant women and children, specifically neonates, continue to be at high risk.¹ The Pan American Health Organization (PAHO) defines maternal and neonatal immunization as: “immunization given prior to pregnancy, during pregnancy, and during the post-partum period (... mother and her newborn), ... provide protection to both the mother and her newborn child.”² Neonates and premature babies are most vulnerable to vaccine-preventable diseases with an estimated 40% of cases leading to death. More recently, morbidity and mortality rates have been influenced by global pertussis outbreaks.^{2,3} Pertussis exposures (40%-60%) occur because of direct caregiver contact.³ Through active tetanus, diphtheria and pertussis vaccination programs, mothers can provide passive immunity to the unborn baby.

Influenza vaccine coverage for pregnant Hispanic women increased from 51.8% in 2016 to 61.2% in 2017.⁴ Despite increased coverage, 20% of pregnant women can acquire an influenza-like illness.³ Morbidity and mortality from Influenza, may occur from changes in heart-lung physiology and immunology, leading to hospitalizations and death complications.⁵ In addition, the mother may experience pre-term delivery, fetal death or spontaneous abortion.¹ See recommended vaccinations in Appendix C.

In an effort to reduce maternal and childhood mortality and morbidity rates, educational strategies should be culturally and linguistically relevant for the Latina community. A study reviewing cultural interventions in education suggested training providers on culturally competent care,

KEY WORDS

Neonate

A baby who is 4 weeks old or younger (MedLine Plus)

Morbidity

Having a disease or a symptom of disease, or to the amount of disease within a population (NCI)

providing culturally appropriate educational material, and offering interpreter services to reduce language barriers.⁶ However, the recent decline of infant vaccinations as a result of factors, such as non-medical exemptions (e.g. religious beliefs), suggest that additional efforts, aside from culturally relevant education, are necessary. The role and responsibility of the healthcare provider (e.g. pharmacist, physician) has become essential for providing supplementary ways to increase vaccine coverage. Suggested practice-centered interventions include a standardized vaccine protocol into workflow, effective utilization of medical technology, counseling at multiple touch points and access to vaccinations.⁷ Alternative considerations include providing immunizations through diversified settings such as daycare facilities, pharmacies, retail stores and Women, Infant, Children (WIC) offices.⁸ Immunization access and practices vary state-to-state and impact the type of provider that can offer and administer vaccines.

It is important to understand the different aspects of cultural and contributing factors on Latina immunization health, such as family immunization experiences. A study by Stockwell and colleagues showed that Hispanic family units with negative experiences to immunizations were more likely underimmunized.⁸ Negative experiences were defined as adverse events experienced by the child, time waiting to be seen and office personnel behavior. Additionally, experiences were influenced by the lack of family-oriented, comprehensive and compassionate care – care that incorporates “compassion, concern, communication, commitment and competence.”^{9,10}

Most of the negative experiences identified above can be modified (e.g. staff and provider level communication and practices). However, culturally and linguistically appropriate immunization resources and provider training are needed to support immunization recommendations. Lastly, all healthcare providers, regardless of profession, should be unified in an effort to increase vaccine coverage across the Latina population to improve long-term child health outcomes.

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ABOUT THE AUTHOR

Margie E. Padilla, PharmD, CDE, BCACP

Clinical Associate Professor

The University of El Paso School of Pharmacy

Dr. Padilla began her service to medically underserved and vulnerable populations almost 12-years ago. She has been recognized for her accomplishments in advancing disease state management and medication therapy management in community health care settings that serve a primarily Spanish-speaking lower-income population. In addition to helping manage medication needs of her patients, she is actively involved in increasing awareness to immunization health and vaccine-preventable diseases.



EARLY NUTRITION FOR LATINA MOMS AND THEIR CHILDREN

Lucy Martinez Sullivan
Executive Director
1,000 Days

Nutrition during the first 1,000 days -- the beginning of a woman's pregnancy to her child's second birthday -- provides the essential building blocks for children's brain development, healthy growth and a strong immune system. Unfortunately, Latinos in the U.S. experience significant nutrition disparities during this critical time period. Latinos are more likely to live in food deserts than their White counterparts,¹ and 1 in 4 Latino children are at risk of hunger, compared with 1 in 9 White children.² Latino children are also more likely to experience obesity³ -- putting them at risk for poorer health, including Type 2 diabetes and other chronic metabolic syndrome related conditions throughout their lifetime.

One area of opportunity to improve Latino health is breastfeeding. For both mothers and babies, breastfeeding provides significant health benefits. The good news is that 4 in 5 Latinas start out breastfeeding; however only 16% of them are breastfeeding exclusively at 6 months, as recommended by both the American Academy of Pediatrics and the American Congress of Obstetricians and Gynecologists.⁴ Increasing the duration of breastfeeding is critical for the health of Latina women and their children. Greater support is needed, especially in the area of paid parental leave.

Additionally, what and when babies are introduced to solid foods impacts both the short and long-term health of children. More than half of infants are introduced solid foods too soon, and 85% of all infants and toddlers consume added sugar on a given day.⁵ In particular, Latino babies consume sugary drinks earlier and at higher rates than other non-Latino children.⁶ Ensuring parents have access to affordable and nutritious foods -- as well

KEY WORD

Food deserts

Food deserts are defined as parts of the country lacking fresh fruit, vegetables and other healthful whole foods due to a lack of grocery stores, farmers' markets and healthy food providers. (CDC 2017)

as evidence-based information on what, when and how to introduce solid foods -- is essential to building healthy lifelong habits. Children with healthier eating patterns in their first year of life are more likely to have healthier eating patterns as they grow older.

But perhaps the most serious threat to the health of Latina mothers and children to emerge over the past two years is the growing hostility toward Latino immigrants in the U.S. The harsh anti-immigrant rhetoric, coupled with policies intended to discourage immigrants from coming to the U.S. or accessing critical health, nutrition and other safety net services, are having a harmful effect on Latino families. There are indications that Latino families are forgoing participation in programs like the Special Supplemental Nutrition Program from Women, Infants and Children (WIC) and the Supplemental Nutrition Assistance Program (SNAP) out of fear of potential retaliation from immigration authorities.⁷ These programs help families keep enough nutritious food on the table and improve health outcomes.

Given that Latinos are the fastest growing segment of the U.S. population, it is essential to the future well-being of

the country that Latina women and children have a healthy first 1,000 days. Ensuring women get the nutrition they need to have healthy pregnancies and birth outcomes and the support to breastfeed and provide for their babies and toddlers is an investment in a more prosperous future for all.

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ABOUT THE AUTHOR

Lucy Martinez Sullivan

Executive Director
1,000 Days

Lucy Martinez Sullivan helped found 1,000 Days and serves as its Executive Director. At 1,000 Days, Lucy is proud to lead a team of fierce advocates who work tirelessly on behalf of women and children in the U.S. and throughout the world. Prior to 1,000 Days, Lucy worked as Executive Director at CCS Consulting, Inc., a management-consulting firm that provides counsel to nonprofit institutions on issues of strategy and philanthropy.



MATERNAL MORBIDITY AND MORTALITY AMONG LATINAS

Andreea A. Creanga, MD PhD

Associate Professor

Department of International Health & Department of Gynecology and Obstetrics

Johns Hopkins University

Almost 4 million births occurred in the United States in 2016, including 918,447 (23.3%) births to Hispanic women.¹ In line with the national average, 31.7% of births among Hispanic women were by cesarean.¹ Childbearing is associated with risks of death, illness and disability.² In the United States, the numbers and characteristics of women who die from pregnancy-related complications from conception to one year after delivery (i.e. pregnancy-related mortality) are monitored at the local, state and federal level.³ Data is also collected about women who suffer severe, life-threatening complications such as hemorrhage, severe hypertension and infection (i.e. severe maternal morbidity).⁴

During 2011-2013, pregnancy-related mortality was lowest among Hispanic women at 11 deaths per 100,000 live-births, compared to 12.7 and a high 43.5 deaths per 100,000 live-births among non-Hispanic White and non-Hispanic Black women, respectively.^{2,3} Pregnancy-related mortality has been increasing the U.S. overall and for Hispanic women, being higher for foreign-born than U.S.-born Hispanic women.^{2,5} The leading cause of pregnancy-related death in Hispanic women is hypertensive disease (complications of high blood pressure),⁶ with other important contributors to mortality being hemorrhage, infection and cardiovascular conditions.^{5,6} Pregnancy-related mortality increased with age among all racial-ethnic groups, ranging between 6.7 and 44.1 deaths per 100,000 live-births.²

Studies show that overall rates of severe maternal morbidity are about 20% higher for Hispanic than non-Hispanic White women. Factors associated with the higher morbidity for Hispanic women are: age <20 and

KEY WORD

Hispanic Paradox

A statistical finding in which Hispanic groups are characterized by low socioeconomic status, but better than expected health and mortality outcomes. The explanation for this paradox is likely to be multifactorial and social in origin. (Franzini 2001)

≥30 years, self-pay or Medicaid coverage for delivery, low socioeconomic status and presence of chronic medical conditions.^{6,7} Yet, in some states and for certain subgroups of women by birthplace, rates of severe maternal morbidity were found to be 40% higher for Hispanic than non-Hispanic White women.⁸

Current levels of pregnancy-related mortality and morbidity among Hispanic women substantiate the “Hispanic Paradox.”^{5,6} Notably, studies investigating the quality of care in hospitals serving a majority of non-Hispanic White, non-Hispanic Black and Hispanic pregnant women found similar quality of care being offered at predominantly Hispanic and White serving hospitals but poorer at predominantly Black-serving hospitals.^{6,9} Explanations for documented differences in severe maternal morbidity rates between Hispanic and non-Hispanic White women include higher percentages of Hispanic pregnant women having preexisting conditions, such as obesity, entering prenatal care late or receiving no such care and being insured by Medicaid.^{1,6} Findings that foreign-born Hispanic women are more likely to die from pregnancy complications than their

U.S.-born counterparts may be due to language barriers, concerns by undocumented immigrants over legal action, and lack of familiarity with the U.S. health care system that deter foreign-born Hispanic pregnant women from obtaining adequate health care.⁵

Access to health insurance may ensure that women are monitored throughout pregnancy, including the postpartum period, to identify and manage pregnancy-related complications.^{5-8,10} Women with pregnancy-related complications (e.g. gestational diabetes, preeclampsia) are more likely to develop metabolic (e.g. diabetes) and cardiovascular disease (e.g. chronic hypertension).^{3,5,10} Early detection of chronic disease and preventive health care to optimize health before the subsequent pregnancy.¹⁰

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ABOUT THE AUTHOR

Andreea A. Creanga, MD PhD

Associate Professor
Department of International Health & Department of
Gynecology and Obstetrics
Johns Hopkins University

Dr. Creanga is an Associate Professor in the Department of International Health at the Johns Hopkins Bloomberg School of Public Health with a joint faculty appointment in the Department of Gynecology and Obstetrics at the Johns Hopkins School of Medicine. Previously, she spent six years at the Centers for Disease Control and Prevention working on maternal mortality and severe morbidity in the United States. Currently, Dr. Creanga is developing a research and practice agenda focusing on maternal health and the quality of care in obstetrics – both domestically and internationally.



CONCLUSION AND NEXT STEPS

Paradigm Shift

Expanding the paradigm of how Maternal and Child Health is conceptualized and addressed is key to better serving Latinas and other women of color. A Life Course Perspective¹⁷ is a model that asserts cumulative impact and maintains that a woman's cumulative level of chronic stress (allostatic load) results in the depression of the body's adaptive system. This results in decline in the woman's health and increases in her offspring's vulnerability to poor birth outcomes, preterm labor and low birth weight.¹⁸ This cumulative stress is often linked to factors associated with racism, interpersonal and structural, as well as experienced or perceived racism. As race is a social construct, one can postulate that as Latinas spend more time in the United States and experience increased and prolonged exposure to chronic stress in the form of racism, their birth outcomes and those of their offspring could be negatively impacted. Further, Tully, Stuebe and Verbiest have recommended recognition of a distinct fourth trimester, to support improved health outcomes and long term well-being. The fourth trimester includes the 12-week period following delivery. During this time, a woman must recover from childbirth, adapt to changing hormones and learn to feed and care for her newborn. Many mothers feel unprepared and experience considerable challenges including fatigue, pain, breastfeeding difficulties, depression, lack of sexual desire and incontinence. Amid these concerns, postpartum care is often fragmented, with most women not scheduled for follow-up care or poorly attending doctor visits in the six weeks following births. Improving postpartum services includes providing convenient care for families that is holistic, culturally appropriate, conversation based and equitable. These improvements offer an opportunity to reduce maternal and infant morbidity and support long-term health and wellbeing. Finally, an essential element to expanding the MCH paradigm is supporting mother and family-centered care and collaboration among health care providers to improve the focus of clinical interactions that address the interrelated health issues most important to women.

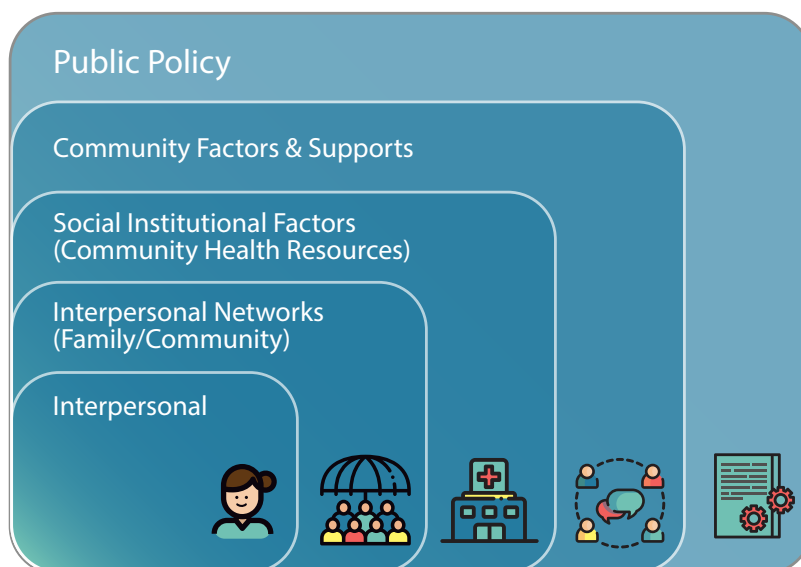
Social Ecological Model

To guide our conversation on solutions and opportunities to support health and well-being in the Latino community and prevention in Latina MCH, it is essential to keep in mind not only the collective nature of the Latino community (which can provide protective factors and social support), but we must also strive to understand the environmental, social and political climates communities experience. Using an ecologically-based conceptual model can help us better understand and develop systematic solutions to support health and well-being. The Ecological Model, as developed

by McLeroy, Steckler, Bibeau and Glanz (Figure 1), recognizes that the health of an individual and a community is directly impacted by social factors outside of simple disease exposure and the individual health response.¹⁹ Further, the model recognizes that an individual exists within a family and community structure. Understanding the ecological model will help to better conceptualize prevention and intervention opportunities in Latina MCH.

The guest authors offer insight into the state of Latina MCH. Many of the authors point out that further research and investment is needed to fully understand and subsequently address the needs of the burgeoning Latino populations. As noted, there is a glaring lack of Latino specific interventions and insufficient investment in maternal and infant health services for U.S. Latinas in general, leaving a noticeable void in national MCH policy. This void, when coupled structural racism, can have severe consequences leading to dire outcomes for the health and well-being of the Latino community and the U.S as a whole. The importance of usable data in supporting community health cannot be overstated. This structural impediment is one that reinforces colonization by marginalizing communities of color, in this case Latinos, that limits their ability to tell their story (access and interpret data to influence policy) and threatens their future (limiting effective policy and programming and hindering positive health outcomes). Addressing broader public policy offers a way to correct the structural barriers that impede proper support of Latinas.

Figure 1 - Social Ecological Model





We encourage continued dialogue and research but, more importantly, propose a call for immediate action to support an equitable and comprehensive national and local MCH agenda that is inclusive of Latinas. Based on our long history of trusted relationships and our principles of partnership, we believe that health programming is rooted in trust and authentic community partnerships. These partnerships are key to the long-term sustainability needed to improve community health. Further, policies that continue to segment and separate families, threaten mixed-status families or increase stress on families and communities, will have a negative impact on the health and well-being of both the Latino community and also the U.S. as a whole. We encourage investment in community-centered programming and co-creation of culturally and linguistically relevant programming.

Next Steps



INTERPERSONAL

- Culturally competent programming (recognizing sub group affiliation)
- Linguistically appropriate programming
- Social media campaigns tailored to Spanish speaking families that are personal and not generalized



COMMUNITY FACTORS & SUPPORTS

- Cross Programming, including MCH programming incorporated into other family and religious programming
- Health Provider cultural competency and equity education



INTERPERSONAL NETWORKS

(FAMILY/COMMUNITY)

- Communications and outreach plans that support positive community norms.
- Anchoring MCH community programming in both traditional cultural practices and creating new social norms



PUBLIC POLICY

- Paid Family Leave
- Both aggregated and disaggregated data for Latinos
- Data driven program and policy development
- Development of a national Center for Latino Maternal and Child Health
- Dissemination of this data and other Latino maternal health data
- Accessible data for analysis and community consumption



SOCIAL INSTITUTIONAL FACTORS

(COMMUNITY HEALTH RESOURCES)


- Programs developed specifically in communities of interest that incorporate cultural norms in the context of the population's unique history in the U.S.



APPENDIX A

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APPENDIX B

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Fertility, Unintended Pregnancy and Interpregnancy in Latinas

Interpregnancy Interval - https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_03.pdf

Latina Maternal and Infant Immunizations: Vaccine-Preventable Disease

Neonate - <https://medlineplus.gov/ency/article/002271.htm>

Morbidity - <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/morbidity>

Early Nutrition for Latina Moms and their Children

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APPENDIX C

U.S. Recommended Vaccines for Pregnant Women and Neonates

Table 1. U.S. Recommended Vaccines for Pregnant Women and Neonates

PREGNANT WOMAN	Hib	Hepatitis A & B	HPV	Influenza (Inactivated)	Influenza (LAIV)	MenACWY MenB	MMR	PCV13 PPSV23	Tdap	Herpes Zoster	Varicella	IPV
Recommended				✓					✓			
Not Recommended			✓		✓		✓			✓	✓	✓
Maybe Recommended	✓	✓				✓		✓				
NEONATES [0-3 MONTHS(M)]	Hib	Hepatitis A & B	HPV	Influenza (Inactivated)	Influenza (LAIV)	MenACWY MenB	MMR	PCV13 PPSV23	DTaP, DT	RV	Varicella	IPV
Recommended	✓ (2m)	✓ (Hep B: 0m)						✓ (PCV13:2m)	✓ (2m)	✓ (2m)		
Not Recommended at this age		✓ (Hep A)	✓	✓	✓	✓	✓	✓ (PPSV23)			✓	✓ (2m)

LAIV=Live Activated Influenza; IPV=Inactivate Polio; MenACWY= Meningococcal conjugate; MenB=Meningoccal Serogroup B; MMR=Measles, Mumps, Rubella; Tdap=Tetanus, Diphtheria, and Pertussis

*Immunization schedule guidelines change. Please review www.immunize.org for the latest updates

Reference: ACIP Guidelines (accessed 6-14-2018) @ www.immunize.org

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ABOUT THE EDITORS

Melissa Valerio, PhD

Associate Professor

Campus Dean, UTHealth School of Public Health San Antonio

Dr. Valerio serves as the Campus Dean of The University of Texas Health Science Center in Houston (UTHealth) School of Public Health in San Antonio and is an Associate Professor of Health Promotion and Behavioral Sciences at the UTHealth School of Public Health. Her ongoing research is in the design and evaluation of complex interventions to address disease prevention and management, promote health outcomes and the conduct of implementation science. She serves as PI and Co-I on various studies to evaluate interventions in asthma, patient-provider communication, maternal and child health, and type 2 diabetes. A majority of the studies have been conducted in partnership with community organizations, schools or health systems using community-based participatory research approaches. She also serves as a lead in the Community Engagement Core of the Institute for Integrated Medicine and Science, UT Health San Antonio.

Diana N. Derige, DrPH

National Director of Health Initiatives, Urban Strategies

Dr. Derige leads Urban Strategies' development, program implementation and evaluation of the organization's broad health equity agenda. She is also co-director of the Center for Latina Maternal and Family Health Research at the University of Houston. For the past fifteen years, Dr. Derige has designed and managed several private philanthropic, government and non-profit programs. Throughout her career, she has concentrated on promoting public health and social equity for marginalized communities.

Nara Hojvat-Gallin, MPH

Project Analyst, Urban Strategies

Nara assists in managing Urban Strategies' public health programs. She completed her MPH at the University of Illinois at Chicago focusing on maternal and child health and women's studies. Ms. Hojvat-Gallin previously worked at Health & Medicine Policy Research Group, a think tank in Chicago where she ran the Chicago Schweitzer Urban Fellows Program and worked on the Illinois Women's Health Coalition.



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