Opportunities for Collaboration to Improve Perinatal Outcomes

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No Disclosures
Objectives

• Understand how addressing preterm delivery interventions can reduce infant mortality

• Understand how hospitals encounters are opportunities for health promotion

• List community programs/priorities than can supplement hospital initiatives
Background: Los Angeles County (LAC)

- Population 10.3 million
- 2.5 million reproductive age women
- LAC is more populous than 42 other US States

State of California, Department of Public Health, Birth Records, 2013
Los Angeles Mommy and Baby Study (LAMB), 2012
Los Angeles County

- ~130,000 births per year in LAC
- 1 in 30 births in the U.S.
- 1 in 4 births in California
- 62 Delivery Hospitals
Percent of Mistimed or Unwanted Pregnancy Among Women of Reproductive Age by Race/Ethnicity California 2013-2014

Data Sources: Maternal and Infant Health Assessment (MIHA) Survey, 2013-2014
Unintended/Mistimed Pregnancy
LAMB 2012: 46.8%

- White: 24.3%
- Latina: 55.7%
- AA: 61.9%
- Asian PI: 31.7%
"How can we prevent pregnancy? We don't even know what causes it."
Pregnant Women Who Receive Prenatal Care Beginning in the First Trimester, California 2005-2014

Data Sources: California Birth Statistical Master Files, 2005-2014
Prepared by the Epidemiology, Assessment and Program Development Branch, Maternal, Child and Adolescent Program, Center for Family Health
Pregnant Women Who Receive Prenatal Care Beginning in the First Trimester by Race/Ethnicity, California 2014

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Hispanic</td>
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<tr>
<td>African American</td>
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<tr>
<td>Asian</td>
<td>85.5</td>
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<td>AIAN</td>
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</table>

Data Sources: California Birth Statistical Master Files, 2014
Prepared by the Epidemiology, Assessment and Program Development Branch, Maternal, Child and Adolescent Program, Center for Family Health
The Impact of Unintended Pregnancies:

- Inadequate or delayed initiation of prenatal care
- Smoking/drinking/substance use during pregnancy
- Prematurity
- Low birth weight
- Reduced likelihood of breastfeeding

Top Five Leading Causes of Infant Mortality

- Preterm birth and low birth weight
- Birth defects
- Maternal complications of pregnancy
- Sudden Infant Death Syndrome (SIDS)
- Injuries (e.g., suffocation)

Account for Over Half (57%) Infant Deaths in 2014

https://www.cdc.gov/ncbddd/birthdefects/facts.html
Preterm Birth Rates by County California 2013

5.5% - Proposed US PTB Rate Goal for 2030 by March of Dimes
Percent of Preterm Births by Race/Ethnicity, California 2007-2014

Note: Includes California resident live births with gestational age range 17-47 weeks. Preterm is <37 weeks gestation. Gestational age is based on obstetric estimate.
Preterm Live Births by Race/Ethnicity
Los Angeles County, 2005-2011

Preterm Live Birth Rate: Live births less than 37 weeks of gestation and greater than or equal to 17 weeks per 1,000 live births.
Low Birth Weight by Race/Ethnicity
Los Angeles County 2005-2011

Low Birthweight Rate: Live births weighing less than 2,500 grams at birth per 1,000 live births.
Infant Mortality Rate by Race/Ethnicity
California 2012

Note: Width of bar shows percentage of population in each race/ethnicity group. Data Sources: California Birth Cohort File, 2012. Prepared by the Epidemiology, Assessment and Program Development Branch, Maternal, Child and Adolescent Program, Center for Family Health
Infant Mortality Rate by Race/Ethnicity
Los Angeles County 2013

<table>
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<tr>
<th>Race/Ethnicity</th>
<th>Infant Deaths per 1,000 Live Births</th>
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<tr>
<td>African American</td>
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<tr>
<td>Asian/Pacific Islander</td>
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<td>Hispanic</td>
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<td>White</td>
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<td>Two or More Races</td>
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Infant Mortality by Race/Ethnicity
Los Angeles County 2001-2011

Legend:
- WHITE
- HISPANIC
- AFRICAN AMERICAN
- ASIAN/PACIFIC ISLANDER
- LOS ANGELES COUNTY
- HP 2020 OBJECTIVE

Graph showing infant mortality rates by race/ethnicity from 2001 to 2011.
Maternal Mortality Rate (early and late deaths), California Residents; 1999-2013

SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2013. Maternal mortality for California (Early maternal deaths ≤ 42 days postpartum) was calculated using ICD-10 cause of death classification (codes A34, O00-O95,O98-O99) and code O96 is also included when calculating Early and Late Maternal Deaths up to one year postpartum. Produced by California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, May, 2015.
Maternal Mortality Rate by Race/Ethnicity
California 2004-2013

Maternal Deaths per 100,000 Live Births

Data Sources: California Birth and Death Statistical Master Files, 2004-2013
Pre-pregnancy BMI Among Major Causes of Maternal Death

Only two causes had high rates of obesity

Maternal Pre-Pregnancy Overweight and Obesity by Race/Ethnicity, 2014

- Latina: 28.6% Overweight, 24.9% Obese, 4.5% Morbidly Obese
- African American: 24.5% Overweight, 25.0% Obese, 7.2% Morbidly Obese
- White: 20.6% Overweight, 15.4% Obese, 3.2% Morbidly Obese
- Asian/Pacific Islander: 8.0% Overweight, 16.6% Obese, 0.8% Morbidly Obese
- All Races/Ethnicities: 24.1% Overweight, 19.5% Obese, 3.7% Morbidly Obese

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In Los Angeles County

1 in 2 reproductive age women are overweight/obese (46%)

LA County Overweight or Obese by Ethnicity

Hispanic and African American Women are Disproportionately Affected

Increased likelihood of retaining at least 11 pounds postpartum
Impact of Obesity on the Mother

- Chronic Disease
- Poor birth outcomes
- Lower breastfeeding rates
Public Health

Healthcare Professionals

Hospital

Public Health
What Can be Done?

- Preconception Health
- Identifying women at risk
- Discouraging deliveries before 39 weeks without a medical need
- Preventing unintended pregnancies and promoting birth spacing
- For in vitro fertilization, electing single embryo to reduce multiple births
Opportunities for Intervention

Well Woman Care

Preconception Care

Pregnancy

Inter-Conception care

Prenatal care
Take Advantage of the Time
Prior Poor Birth Outcome

Recurrence

- 15% to 30% Preterm Delivery
- 20 to 60% Pre-Eclampsia
- 2-12 fold risk for Low Birthweight infants
Closely Spaced Pregnancies (<18months)

Increased Complications

- Low Birthweight
- Small for Gestational Age
- Preterm Birth
- Rapid Repeat Birth (<6 months) Infant Death
ABOUT PRECONCEPTION HEALTH

What is Preconception Health

Preconception health is about promoting healthy living and giving babies the best start in life by improving birth outcomes. It includes a healthy body, healthy mind and healthy environment before becoming pregnant. By working with a healthcare provider before becoming pregnant to create a plan to become healthy and to choose when to have children, prepared parents-to-be will have a greater chance of having fewer pregnancy complications and better birth outcomes for their babies.

Life Course Perspective

The birth outcome of your pregnancy is the end product of not only your health during the nine months in which you are pregnant, but of your health during your entire life course leading up to the pregnancy.

Preconception Health and Los Angeles County

Los Angeles County is one of the most diverse places in the United States, with over half of the population made up by rapidly growing racial and ethnic minorities. Over 150,000 babies are born in Los Angeles County each year, and while pregnancies in Los Angeles County experience lower infant mortality, low birth weight births and preterm births than the nation as a whole, differences in outcomes exist among the different racial/ethnic groups in Los Angeles and among people living in different parts of the county. The goal of preconception health in Los Angeles is for every one to have a healthy pregnancy every time.
Birth Defects: Folic Acid Deficiency

• *Before* pregnancy 400mcg/d
• *During* pregnancy 600 mcg/d
• *4 mg* of folic acid daily starting at least one month prior to the pregnancy-history of NTD
Birth Defects:

- Uncontrolled Diabetes
- Medications
- Environmental/Chemical
ZIKA

• **Z-** screen
• **I – Inform**
  (Age Appropriate & Culturally Appropriate)
• **K-** Contraception
• **A-** Access Healthcare
FREE text messages to help improve your health!

To join text LAFAMILIA to 55000

For more information go to: http://bit.ly/joinfamilia
Choose Health LA Moms

Text LAMOMS to 55000

A program to help new moms get to a healthy weight

ph.lacounty.gov/LAMoms

Breastfeeding

Walking

Water
Sudden Infant Death Syndrome (SIDS) Program

OCTOBER SIDS AWARENESS MONTH click here

Grief Support Information
SIDS/Safe Infant Sleep Materials
SIDS/Safe Infant Sleep Videos

History:
The Sudden Infant Death Syndrome (SIDS) Program provides mandated follow-up and support services by public health nurses and social workers of the Los Angeles County Department of Public Health include but are not limited to information about SIDS, community resources for coping with infant loss for the entire family (both adults and children), and burial support.

Health Problems:
- SIDS is one of the leading causes of neonatal death
- African-American SIDS rates are 2.5 times higher than the rest of the population
Healthcare Professionals

Public Health

Hospital
Toolkits To Improve Birth Outcomes

Preterm Labor Assessment Toolkit

Elimination of Non-medically Indicated (Elective) Deliveries Before 39 Weeks Gestational Age
Toolkits To Improve Birth Outcomes
Postpartum Visit Algorithm: Overweight/Obesity

Pre-pregnancy BMI ≥ 25 and/or gestational weight gain above recommended range?

Yes: Assess comorbidities/risks to determine treatment priorities
- Hypertension
- Lipid disorders
- Diabetes
- Personal or family history of gestational diabetes mellitus and/or coronary artery disease

Advised maintaining current weight
- Encourage maintaining healthy weight, diet, and physical activity
- Discuss breastfeeding infant with appropriate diet to meet higher caloric needs

No: Agree on a treatment plan or strategy
- Discuss diet, physical activity, and behavior therapy
- Consider pharmacotherapy if BMI ≥ 27.5 with comorbidities or BMI ≥ 30 regardless of comorbidities
- Consider surgery if BMI ≥ 30 with comorbidities

Postpartum Weight Loss

What you can do to decrease risks for you and your future pregnancies

Achieving a healthy weight

Educating yourself about conditions and medications that can cause birth defects

Replicating all planning - set your personal goals for birth control and future children

Vascular doctor visits to discuss physical and mental wellness

Diet - Fruits, vegetables, and whole grains daily

Avoid tobacco, drugs, and alcohol

Your partner, friends, and family should be sources of support

Interconception Care Project for California

www.EveryWomanCalifornia.org
Los Angeles County MCAH Data

The Los Angeles Mommy and Baby Project
Healthy Mommies and Healthy Babies

L. A. HOPE

Los Angeles Mommy & Baby
Maternal, Child & Adolescent Health Expectants
Los Angeles County Maternal Mortality
Thank You!

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