

Evidence-Based Practices and Medicaid Collaboration

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Using Partnerships and Evidence-based Practices...

- **Health behaviors and social support**
 - **Journey of a Lifetime**
- **Prenatal care**
 - **Evidence-based Practices Workgroup** of the Statewide Advisory Committee for Eliminating Disparities in Birth Outcomes
 - **Medicaid Collaboration** – HMO RFP and Contract
- **Racism and fatherhood**
 - **Partnership to Eliminate Disparities in Infant Mortality Action Learning Collaborative**

The Problem

Wisconsin's African American infant mortality rate has been among the best in the US...

now it is among the worst

Why?

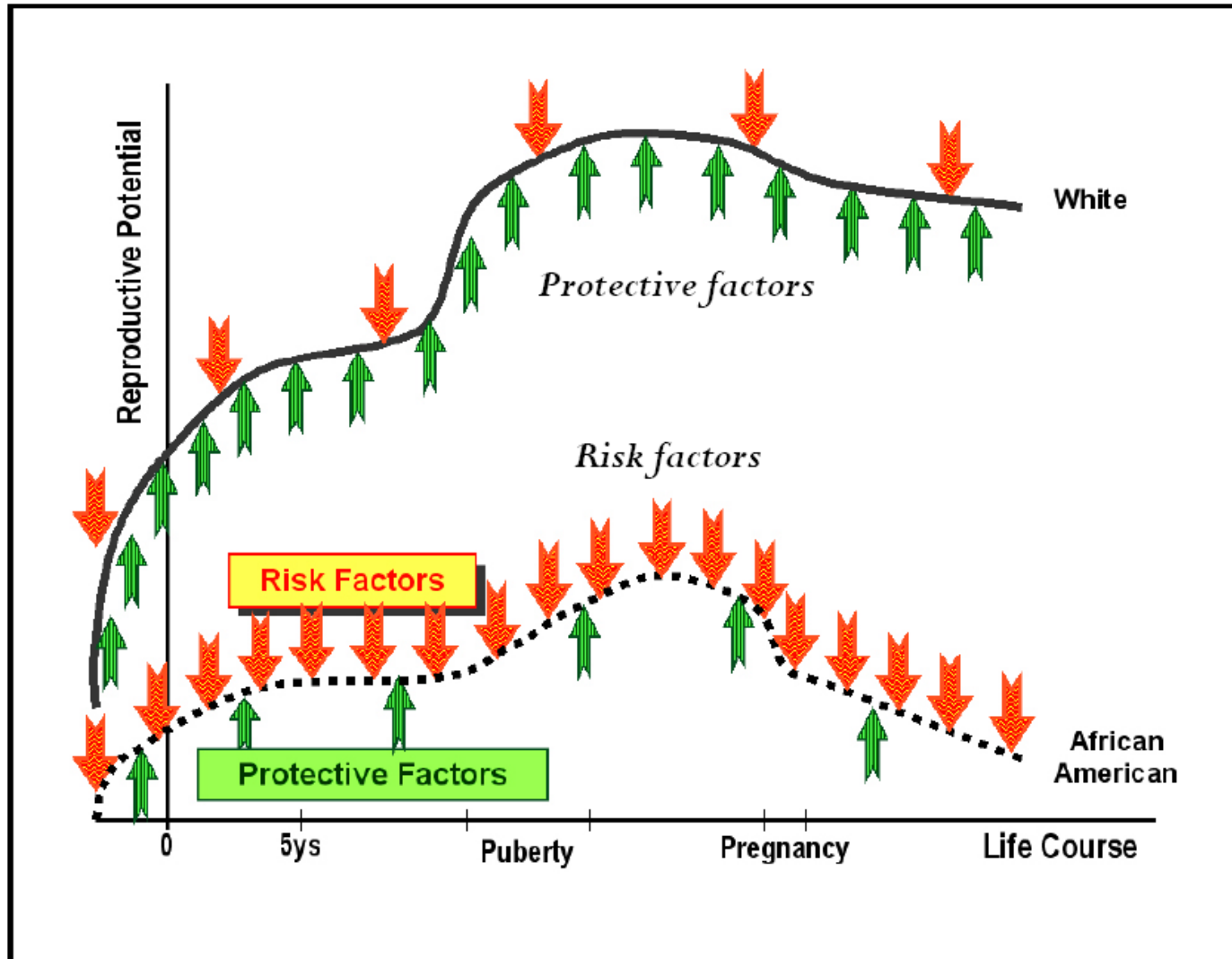
(and what can we do to reduce the disparities?)

The Solution

- ❖ **“A Framework for Action to Eliminate Racial and Ethnic Disparities in Birth Outcomes”**
- ❖ **Statewide Advisory Committee on Eliminating Racial and Ethnic Disparities in Birth Outcomes**
 - ❖ **Communication and Outreach**
 - ❖ **Data**
 - ❖ **Policy and Funding**
 - ❖ **Evidence-Based Practices (EBPW)**

<http://www.dhs.wi.gov/healthybirths>

The Life-course Model



Life Factors that Affect Infant Mortality

STRESS AND RACISM

- The **mental, emotional, and physical effects** of racism contribute to infant deaths.
- More than 25% of African Americans in WI report feeling **emotionally upset** in the past month due to treatment because of their race*
- **White applicants with a felony record** were more likely to receive a job callback than **African American applicants without any criminal record** who applied for the same positions in metro Milwaukee**

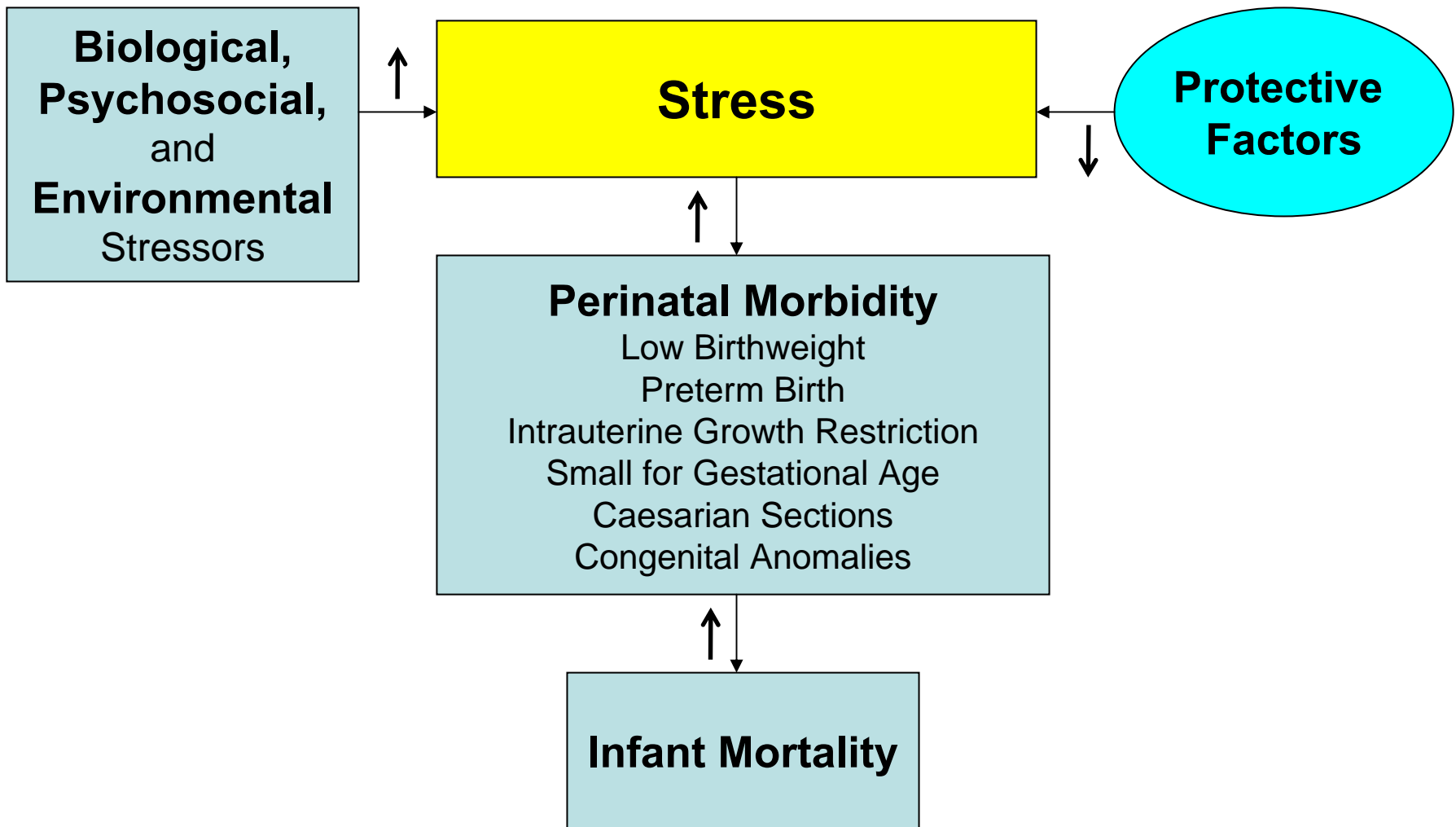
Life Factors that Affect Infant Mortality

SOCIAL SUPPORT

- The **support of family, friends, & community before, during, and after pregnancy** can be important to the health of both mom and baby
- **Group prenatal care**, such as *Centering Pregnancy*, is one model of care that aims to bring together a set of pregnant women to go through their prenatal care and pregnancies together
- ***Birthing Projects*** are designed to provide one-on-one support to women during their pregnancy

Examples from the Evidence-Based Practice Workgroup

Biopsychosocial Factors Contributing to Poor Birth Outcomes



Biological

For Mother

Maternal age <18 or >40 years; Maternal Low Birthweight

Lack of preconceptional and interconceptional health care

History of prior poor birth outcome

Absence of high-quality, culturally-competent evidence-based prenatal care

Unplanned pregnancy/lack of family planning

Short interpregnancy interval (<18 mo)

Poor nutrition and vitamin intake; Inappropriate weight gain; Obesity; Diabetes

Hypertension/preeclampsia/eclampsia

Anemia

Tobacco, alcohol, and/or other drug or medication use

Perinatal depression and other mental health conditions

Strenuous work and/or high stress

STI/STDs (Chlamydia, gonorrhea, bacterial vaginosis); HIV/AIDS

Group B beta-hemolytic strep

Bacteriuria and urinary tract infection

Periodontal disease

Cervical or uterine anomaly

Multiple pregnancy

Polyhydramnios

Biological

For Infant

Lack of breastfeeding

Lack of well-child, acute, and/or chronic disease care

Tobacco exposure

Unsafe sleep

Psychosocial

Poverty

Unstable housing

Food insecurity

Lack of transportation

Lack of child care

Decreased job opportunities

Judicial/correctional system

Decreased social support

Domestic violence

Segregation

Decreased educational opportunity

Lack of health literacy

Racism

Decreased voting participation

Hopelessness

Environmental Risk

Violence (home and community)

Unintentional injury

Toxins (lead, etc.)

Built environment

Protective Factors

Resiliency

Health education and empowerment

Family planning

Preconceptional and prenatal use of vitamins with folic acid

Prenatal screening panel

Nutritional counseling/WIC

Home visiting/community health workers/Doulas

Case management/care coordination

Health literacy/health navigator

Recognition of signs of preterm labor

Recognition of decreased fetal movement

Breastfeeding

Safe sleep

Immunization

Well child care

Evidence-Based Practice Workgroup

- ❖ Explore both medical and non-medical interventions with the potential to reduce disparities in birth outcomes
- ❖ Examine the evidence, best-practices, or accepted guidelines behind these interventions
- ❖ Make recommendations for appropriate audiences regarding each intervention

Evidence-Based Practice Workgroup Members

Murray L. Katcher, MD, PhD (*Chief Medical Officer, Community Health Promotion, State Maternal and Child Health Medical Director, Wisconsin Division of Public Health, Madison*)

Tina Mason, MD, MPH (*Program Director for Obstetrics/Gynecology Residency, Aurora/Sinai Medical Center, Milwaukee*)

Georgia Cameron (*Deputy Regional Director, Wisconsin Division of Public Health, Southeast Region, Milwaukee*)

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Jodi Klement, RD, CD, CLE (*Milwaukee County WIC Nutrition & Breastfeeding Coordinator, Wisconsin Division of Public Health, Milwaukee*)

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Kristin Lyerly, MD, MPH (*Master of Public Health Student, University of Wisconsin School of Medicine and Public Health (UWSMPH), Madison*)

Jill Paradowski, RN, MSN (*City of Milwaukee Health Department, Healthcare Outreach Coordinator, Milwaukee*)

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Jennifer Runquist, PhD, RN (*Assistant Professor, University of Wisconsin–Milwaukee, College of Nursing, Milwaukee*)

Dawn Shelton-Williams, MSW, LCSW (*Aurora Family Service, Manager of Community Based Services, Milwaukee*)

Jennifer Stenger, RN (*Public Health Nurse, Rock County Health Department, Beloit*)

Chris Van Mullem, RN (*Aurora Sinai/Samaritan Hospital, Milwaukee*)

Tina Watts, RN (*Nurse Case Manager, Safe Mom Safe Baby Project, Milwaukee*)

Janelle Wells, MD, MPH (*Master of Public Health Student, UWSMPH, Madison*)

And more...

Methods

- ❖ Leading causes of infant mortality differ between Black and White women
- ❖ Our efforts would focus on:
 - ❖ Prevention of preterm birth and low birthweight babies (30.0%)
 - ❖ SIDS (12.1%)
 - ❖ Maternal complications of pregnancy (8.4%)
- ❖ List of potentially fruitful interventions was created
- ❖ Systematic method for evidence gathering
- ❖ Reports reviewed and approved by EBPW

Evidence-Based Practice Workgroup Topics

Medical:

- ❖ Anemia
- ❖ Bacterial Vaginosis
- ❖ Chronic Diseases
- ❖ Gestational Diabetes
- ❖ Group B β -Strep
- ❖ HIV
- ❖ Hypertension of Pregnancy
- ❖ Immunizations
- ❖ 17 alpha-hydroxyprogesterone (17-P) for Previous Preterm Birth
- ❖ Mental Health/Depression
- ❖ Preconception/Interconception Care/ Interpregnancy Interval
- ❖ Sexually Transmitted Infections
- ❖ Urinary Tract Infections

Non-medical:

- ❖ Alcohol and other drug use
- ❖ Breastfeeding
- ❖ Community Health Worker/Doula/Home Visitor
- ❖ Domestic Violence
- ❖ Fatherhood
- ❖ Malnutrition/Underweight
- ❖ Oral Health
- ❖ Patient Education/Health Literacy
- ❖ Preterm Labor Awareness and Fetal Movement Recognition
- ❖ Racism
- ❖ SUID/SIDS
- ❖ Tobacco
- ❖ Unintended Pregnancy

Prenatal Care

- **Preventive Care**
- **Counseling (e.g., nutrition)**
- **Periodic Risk Assessment**
- **Screening tests (e.g., genetic)**
- **Reminder systems**
- **Checklists**

Demographic Risk Factors

- **Low socioeconomic status**
- **Low educational attainment**
- **Under age 18 or over age 35**
- **Unmarried**
- **African American**

Obstetrical History

- **3 or more 1st trimester losses**
- **Any 2nd trimester loss**
- **Previous preterm delivery**
- **Incompetent cervix**

Pregnancy Preparation

- **Preconception /
Interconception /
Life-course health care**
- **Unintended pregnancy**
- **Inter-pregnancy interval**
- **Malnutrition / Underweight**
- **Oral health**

Behavioral Risk

- **Tobacco use**
- **Alcohol use**
- **Medication effects**
- **Substance abuse**

Preventing, Testing for, and Treating Infectious Diseases

- **Sexually Transmitted Infections**
 - Chlamydia and Gonorrhea
 - Syphilis
 - HIV
 - Hepatitis B & C
 - Herpes
 - Bacterial Vaginosis
- **Urinary Tract Infections**
- **Periodontal Disease**
- **Other:** group B β -strep (GBS), rubella, chickenpox, influenza, toxoplasmosis, cytomegalovirus (CMV)

Chronic Conditions and Pregnancy

- **Anemia**
- **Chronic diseases**
- **Gestational diabetes mellitus**
- **Hypertension of pregnancy**
- **Mental health / Depression**
- **Obesity**

Community and Social Factors Impacting Pregnancy

- **Social Support**
 - **Community health worker / Doula / Home visitor**
 - **Father involvement**
 - **Social capital and community support**
- **Health literacy/Patient education**
- **Stressful lifestyle**
- **Domestic violence**
- **Racism**

Preterm Birth Prevention and Infant Care

- **17 alpha-hydroxyprogesterone (17-P)
for previous preterm birth**
- **Preterm labor awareness and fetal
movement recognition**
- **Breastfeeding**
- **Immunizations**
- **Sudden unexpected infant death /
Sudden infant death syndrome**

Uterine Distention

- **Multiple gestation**
- **Polyhydramnios**
- **Uterine anomalies**
- **Uterine fibroids**

Example: Progesterone

- ❖ Progesterone is a hormone that functions to maintain pregnancy
- ❖ As the end of pregnancy nears, progesterone levels decrease, contributing to the onset of labor

Does supplemental progesterone reduce the incidence of PTB in at-risk women?

Evidence: Progesterone

The bulk of individual studies, systematic reviews, and meta-analyses support the effectiveness of progesterone in preventing preterm labor in high risk moms

- 1. Would this impact upon the disparity?**
- 2. Who would receive this intervention?**

Recommendation: Progesterone

All women with a history of pre-term birth should be offered weekly progesterone injections.

The same should be considered for women with a short cervical length.

- ❖ **Potential to reduce disparity**
- ❖ **Benefits appear to outweigh risks**
- ❖ **Cost-effectiveness data difficult to determine**
- ❖ **Gestiva awaiting FDA approval**

Example:

Urinary Tract Infections

- ❖ **Asymptomatic bacteriuria is found in 2-10% of pregnancies**
- ❖ **Non-Hispanic Black women are at a higher risk than the general population**
- ❖ **Sequelae range from persistent maternal infection to acute pyelonephritis**

Does routine screening for asymptomatic bacteriuria reduce the incidence of PTB and LBW in non-Hispanic Black women?

Evidence:

Urinary Tract Infections

- ❖ **Cochrane: Screening and treatment of AB reduced the incidence of LBW by 33%, but did not impact PTB**
- ❖ **Romero et al (meta-analysis): Untreated AB doubled the risk for PTB; increased the risk for LBW by 33%**
- ❖ **Fiscella: approximately 5% of the racial gap in PTB can be explained by prevalence differences of AB**

Recommendation: Urinary Tract Infections

Obtain urine culture at first prenatal visit or between 12-16 weeks of gestation for all women to ensure optimal screening for urinary tract infections in pregnancy

- ❖ Preferentially benefits our population of concern**
- ❖ Benefits outweigh risks**
- ❖ Urine culture is cost-effective in populations with an AB prevalence > 5%**

SUID/SIDS

DHS Recommendations:

- **Back to Sleep.**
- **Babies should sleep in their own safe place.**
- **Firm sleep surface.**
- **Safe sleep environment.**
- **Sleep near, but separate from your baby.**
- **No smoking around the baby.**
- **Avoid overheating.**
- **Consider using a clean dry, pacifier.**

Talk about these sleep rules with child care providers, grandparents, babysitters, and everyone who cares for your baby.

Strengths / Limitations

❖ Limitations:

- ❖ Findings are only as good as the evidence
- ❖ PTB/LBW is a multifactorial problem, needs complex solutions

❖ Strengths:

- ❖ Evidence focuses on our population of interest
- ❖ SAC comprised of local experts from varied fields

Conclusions

- ❖ There are medical interventions that, if adopted as standards of care for high-risk populations, would likely result in fewer preterm and low birthweight babies
- ❖ Medical interventions alone will not eliminate the Black/White disparity in birth outcomes (10%)
- ❖ Collaborative efforts, utilizing local resources and experts, are critical in solving localized public health problems