INTEGRATING INTERCONCEPTION CARE INTO EXISTING PRACTICES

Mary C Mazul, CNM
WAPC Annual Conference
April 16, 2012

Objectives
The participant will
• Have a better understanding of the history of preconception care in the United States
• State at least two pregnancy related outcomes that can be improved by preconception and interconception care.
• State at least two interventions that can make providing pre and interconception care in a busy medical practice less demanding.

Preconception Care

….. interventions that aim to identify and modify biomedical, behavioral, and social risks to a woman’s health or pregnancy outcome through prevention and management, emphasizing those factors which must be acted on before conception or early in pregnancy to have maximal impact.

CDC, 2006

Interconception care

• Care between pregnancies

  All women with poor birth outcomes should have access to appropriate health care to improve outcomes in subsequent pregnancies.

  *CDC* 2006

History

• 1989 Caring for our Future: The Content of Prenatal Care.

  “The preconception visit may be the single most important health care visit when viewed in the context of its effect on pregnancy”

  US Public Health Service, 1989

History

• 1995, Institute of Medicine


  ‘All pregnancies should be intended’
History

- 2006 CDC Report Recommendation to Improve Preconception Health and Healthcare United States. ..integrating preconception health into existing systems of care..

History

- Since 1996, progress in the United States to improve pregnancy outcomes, including low birth weight, premature birth, and infant mortality has slowed, in part, because of inconsistent delivery and implementation of interventions before pregnancy to detect, treat, and help women modify behaviors, health conditions, and risk factors that contribute to adverse maternal and infant outcomes

MMR, 2006

HEALTHY PEOPLE 2020

- MICH–16.1 (Developmental) Discussed preconception health with a health care worker prior to pregnancy.
- MICH–16.2 Took multivitamins/folic acid prior to pregnancy
- MICH–16.3 Did not smoke prior to pregnancy.
- MICH–16.4 Did not drink alcohol prior to pregnancy
- MICH–16.5 Had a healthy weight prior to pregnancy
- MICH–16.6 (Developmental) Used contraception to plan pregnancy

HEALTHY PEOPLE 2020

- MICH-16

Increase the proportion of women delivering a live birth who received preconception care services and practiced key recommended preconception health behaviors

Pre-and Interconception Care

Improve Birth Outcomes

Infant Mortality
Health Objective 2020

National goal for 2020 is:
6.0 deaths /1,000 live births without any disparity

2009 Infant Mortality Rates:
- US: 6.9
- Wisconsin: 6.0
- Milwaukee: 11.1
Disparity by Race and Ethnicity
In 2005-2008, Black infants died nearly three times more often than White infants.

- Black 15.7
- White 6.4
- Hispanic 7.4

Of the 807 infant deaths and stillbirths, 686 or 85%, were infants of color.

2010 City of Milwaukee FIMR report

The Problem
The disparity between Milwaukee’s infant mortality rates for African Americans and whites is one of the worst in the nation.

2010 City of Milwaukee FIMR report

Preterm Birth
Gestational Age
Milwaukee: 14.4
Wisconsin: 11.0
Overall in U.S.: 12.7

Black infant deaths and stillbirths were premature almost five times more often than White or Hispanic infant deaths and stillbirths.

Low Birth Weight
Birth weight is a strong indicator not only of a birth mother’s health and nutritional status but also a newborn’s risk for infant mortality and its chances for healthy long-term growth, psychosocial development, and school performance.

Center of Urban Population Health, Milwaukee Health Report 2011
Low birth weight

Milwaukee: 10.3
Wisconsin: 7.0
Overall in U.S.: 8.2

- 65% of LBW in Milwaukee from PTD
- And IUGR

Maternal Outcomes

The pregnancy-related mortality ratio:

15.1 deaths per 100,000 live births for the period 2006–2007.

Maternal Mortality

- However, for women who had no prenatal care, approximately 1% of the population, the risk of a pregnancy-related death was five times greater than for women with any prenatal care.

Maternal Mortality

Racial Disparities

11.0 White.
34.8 Black.

http://www.cdc.gov/reproductivehealth/MaternalInfantHealth/Pregnancy-relatedMortality.htm
Hypertension in Pregnancy

- 2nd leading cause of maternal death in the U.S.
- Most common medical disorder of pregnancy.
- Hypertension was associated with at least 15% fetal deaths in Milwaukee.

Chronic Hypertension
Epidemiology

- 12.2 per 1,000 live U.S. births
  - Non-hispanic whites – 12.4
  - Non-hispanic blacks – 22.6
  - Hispanic – 7.2

Chronic Hypertension
Pathophysiology

- Secondary hypertension
  - 2% - 5% of hypertension is caused by an underlying renal disease
- Young women with preexisting hypertension are more likely to have secondary hypertension

Chronic Hypertension
Adverse Fetal/Newborn Outcomes

- Intrauterine Growth Restriction (IUGR)
- Placental Insufficiency
- Stillbirth
- Abruption

Maternal Birth Outcomes
Hypertension

- Preeclampsia
  - Placental Abruption
  - Acute Renal Failure
  - Cerebral Hemorrhage
  - Hepatic Failure or Rupture
  - Pulmonary Edema
  - DIC
  - Eclampsia

Diabetes

- Prevalence
  - 1.7% of women of childbearing age (20-39)
  - 3.3% Black
  - 2.7% Hispanic
  - 1.3% White

- Women of color have a higher rate of undiagnosed Type 1 and Type 2 Diabetes Mellitus.
- Diabetes was associated with 7.6% of fetal/infant deaths in Milwaukee between 2005-2008
Diabetes
Adverse Fetal/Neonatal Complications
• Spontaneous Abortion
• Preterm Delivery
• Late Fetal Death 1.5% vs 0.3%
• Intrauterine Growth Restriction (mothers with renal or vascular disease)
• Neonatal hypoglycemia and other metabolic disorders
• Respiratory issues
• Macrosomia
  • Shoulder dystocia,↑ risk of brachial plexus injuries

Diabetes
Adverse Fetal/Neonatal Complications
• Congenital Malformations related to glycemic control at the time of organogenesis.
  • Overall risk is more than double of non diabetic mothers
    • Heart Defects, Neural Tube Defects and Renal agenesis/caudal dysgenesis.

Maternal Complications
• PREECLAMPSIA
  • Mild 9% vs 2%
  • Severe 4.3% vs .8%
• CARDIOMYOPATHY
• THYROID DISEASE
• WORSENING OF DIABETIC RETINOPATHY AND NUEROPATHY
• CESAREAN SECTION (46% VS 12%)

Case Example
• 36 yo
  • G5 P0040
  • Type II DM
  • CHTN on Lisinopril
  • One Kidney
  • Bicornate Uterus

Case Example
• Receives Clomid
• First prenatal visit
  • Hgb A1C 12
  • 24 urine protein 8,000 mg/dl
• 24 week IUFD

The Problem
•integrating preconception health into existing systems of care.
The Process

• Started with surveys to health care providers, RNs and SWs.

• SurveyResults06172011.pdf

The Process

• Goal #1

• Create a process that helps providers comply with the recommendations for preconception and interconception care.

The Grant

• Identify women that qualify for the pilot
  • Childbearing age 15-44
  • HMO
  • Children’s Community Health Plan
  • Community Connect

The Grant

Who is responsible for dealing with the issues of pre-and interconception health?

- Health care provider
- RN
- Social Worker
- Patient Care Assistant
The Grant

- Health care Provider is ultimately responsible for making sure pre-interconception health is discussed at EVERY VISIT.

The Grant

- Prescription for a Healthy Future
  - Used as talking points with women and their families.

Prescription for a Healthy Future

- Women identified have a Preconception Problem List
- Identified patients will try to be placed in continuity clinics or APN clinics.
- Close work with the HMO to help identify and provide resources for women

Prescription for a Healthy Future

- All pregnancies should be intended
  - Discussing family planning at every visit.

Prescription for a Healthy Future

- Tobacco, illicit drug and alcohol use:
  - Encourage cessation:
    - RNs have a smoking cessation initiative and can help with non pregnant women.
    - SW can help address issues of illicit drug use and alcohol use.
Prescription for a Healthy Future

• Healthy Foods
  - Barriers to healthy foods and eating well
    Not enough places to buy fruits and vegetables
    Culturally don’t eat whole grains
    Good food can be more expensive
  
  Programs in the community to encourage healthy eating

  Registered Dietician for elevated cholesterol or other risk factors

Prescription for a Healthy Future

• Be active and get to a healthy weight.
  - Several barriers in our community for daily exercise.
    - Focus groups
    - Reaching out to community programs

  - Weight management during pregnancy.
    - IOM guidelines for pregnancy weight gain according to BMI
    - Tools and Toys for self management of weight. We will follow after postpartum period.

Prescription for a Healthy Future

Mentally healthy women make better life choices!

• Mental Health
  - All of our Social Workers are advanced practice.
  - Skilled in helping identify and screen out women
  - Can help with outside agencies for therapy, etc
  - Can help you decide if medication is appropriate
  - Group for discussing mental health.

Prescription for a Healthy Future

• Health Problems
  - We are creating a strong relationship with the Family Care Center
  - We will have ‘slots’ open to us every week for women identify as needing a PMD.
  - The FCC ..Family Practice Residents
    - Have many of the same resources we have in the clinic
    - Develop strong rapport with their families
  - Engaging women in primary care

  WFMG Family Practice MDs come to the clinic to see patients.
  - Engage women in care and keep them in their practices.

Prescription for a Healthy Future

• Dental care
  - HMOs can help find a dentist to see women and their families.
  - Ask about dental care at every annual exam.
  - Serious dental issues are documented on the problem list so that others may address as well.

Prescription for a Healthy Future

• Keep yourself safe
  - IPV ask at every visit
    - Every woman in the clinic is roomed alone and asked by PCA or RN if she feels safe at home.
    - Please ask every visit. Women often share with provider things they won’t share with others
    - SW are here to help us with these issues
The Grant Outcomes

- Surveys will be completed at the end of the pilot.
- Do health care providers feel that they are able to meet the recommendations for pre-and interconception care?
- Are the checklists on the chart being filled out?
- Are we making a difference?
- Are patients keeping PMD appointments
- Are subsequent pregnancies planned
- Are we making a difference in birth outcomes.

References

- Beckles, GLA, Thompson-Reid, PE (ed) (2001) Diabetes in women’s health across the life stages: a public health perspective. Atlanta, US Department of Health and Human Services, Center for Disease Control National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation

Questions