

Health Disparities in Maternal Morbidity and Mortality

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Objectives

- Awareness of trends in the incidence of maternal and infant morbidity and mortality in communities of color
- Discuss problems that can lead to maternal morbidity and mortality
- Immediate vs long term problems that contribute to this health disparity
- Current activities that can help identify issues and lead to solutions

Definitions

- Maternal Morbidity : unintended outcomes in the process of labor and delivery that result in significant short-term and long-term consequences to a woman's health(1)
- Maternal Mortality: Death with 1 year of pregnancy includes pregnant at time of death, not pregnant but was pregnant 43 days to 1 year before death or unknown if pregnant within the past year(2)

1. Severe Maternal Morbidity: Screening and Review, American College of Ob/GYN and Society for Maternal-Fetal Medicine and Center for Disease Control: 9/2016
2. MacDorman, MF, et.al., Recent Increase in the US Maternal Mortality Rate, Obstetrics & Gynecology, volume 128:3, 447-55

US Maternal Mortality Rate

- 18.8 / 100,000 live births in 2000
- 23.8/ 100,000 live births in 2014
- An increase of 26.6 % when the plan was to decrease maternal mortality by 75% by 2015

Morbidity

- Hemorrhage requiring transfusion or return to the operating room
- Peripartum hysterectomy; Uterine artery embolization; Uterine balloon or compression sutures
- Hypertension / Neurologic : Eclampsia; stroke; loss of vision
- Renal
- Sepsis
- Pulmonary
- Cardiac including peripartum cardiomyopathy
- Intensive care
- Surgical bladder or bowel injury
- Anesthesia related

Pre-Existing Conditions

- Overweight and Obesity
- Hypertension and Cardiac diseases
- Diabetes including prior Gestational Diabetes
- Asthma and Allergies
- HIV and other sexually transmitted diseases
- Psychiatric Conditions
- Maternal Age < 15 and > 35
- Prior cesarean delivery

Obesity

- Weight gain in pregnancy
- BMI > 50 high risk implications
 - Inability to care for patient
 - Emergency surgery complicated by airway issues and size of stretcher
 - Healing and problems with incision including wound disruption
 - Psychosocial detremnants

Hypertension

- Hemodynamics of pregnancy
- Complicated by pre-eclampsia and eclampsia
- Fetal growth restriction
- Cardiovascular complications
- Cardiomyopathy
- Previous cardiac anomalies
- Multifactorial including other chronic problems such as Asthma, Diabetes and others

Diabetes

- Gestational Diabetes
 - GDMA 1
 - GDMA 2
- Type 1 Pre-gestational
 - Spontaneous abortion
 - Fetal anomalies in 1 st trimester
- Type 2 Pre-gestational
 - Metabolic syndrome

Asthma and Respiratory Problems

- Environmental factors contributing
- Hereditary predispositions
- Pre-existing Asthma with discontinuation of treatment
- Smoking tobacco and other methods
- Decreased Inspiratory capacity
- Prior pulmonary problems
 - Pulmonary embolism
 - Tuberculosis

Infections

- HIV
 - Chemoprophylaxis
- Bacterial Infections
 - BV
 - GBS
- STDS
 - Syphilis
 - Chlamydia
 - Gonorrhea

Psychiatric Conditions

- Anxiety
- Pre-existing psychoses
- Post Traumatic Stress Disorders
- Depression and Suicide
- Substance Use and Abuse

Age is a factor

- Advanced Maternal Age
 - Unplanned and maybe unwanted
 - Chronic health issues
 - grandmultiparity
- Too Young
 - Unplanned and maybe unwanted
 - Immaturity and interruption of growth

Previous Cesarean Section

- Placental anomalies
 - Anterior placenta
 - Acreta or Percreta
- Uterine Rupture
- Uterine Atony
- Recurrent cesarean sections
- Complicated by abdominoplasty

Trends that can help

- Recognition of health disparities
- Research into methods to improve outcomes
- Simulation and training
- Awareness of the problems
- Prevention and education of communities and the general population on current health issues
- Programs that target health maintenance and prevention of unwanted pregnancy, promote healthy eating, decrease toxins and provide a safe living environments