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)

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

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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 determinants
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 1st 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