Preventing Preterm Birth: A Global Perspective

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Disclosure Statement

No conflicts of interests to disclose

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- Five year, USAID award designed to support *practical, catalytic,* and *scalable* approaches to expand the uptake of interventions for preterm birth (PTB) and low birth weight (LBW) in 23 USAID priority countries primarily in Africa and Asia.

- Using an applied learning approach, the project will link current PTB/LBW evidence and resources together with country implementation research to inform and catalyze the adoption and replication of promising practices for improved PTB/LBW outcomes.

- Every Preemie will support implementation research projects in Bangladesh, Ethiopia, India and Malawi.
23 USAID Priority Countries

Afghanistan, Bangladesh, DR Congo, Ethiopia, Ghana, Haiti, India, Indonesia, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Nepal, Nigeria, Pakistan, Rwanda, Senegal, South Sudan, Tanzania, Uganda, Zambia
Global Under Five and Newborn Mortality

- Estimates from the UN Interagency Group for Mortality Estimation reports that in 2015 there are nearly 6 million deaths each year among children under five globally.
- 15 million babies are born premature (<37 weeks gestation) every year; and nearly 1 million die.
- Complications due to preterm birth comprise 18% of under five mortality and is now the leading cause of newborn and under five mortality worldwide.
- Together, direct preterm birth complications and other neonatal causes (including birth asphyxia and sepsis) account for 45% of global under five deaths.

Half of these deaths occur in India, Nigeria and Pakistan.

The vast majority of these deaths are preventable.
• There are an estimated 15 million preterm births globally each year
• Over half of these preterm births (8.7 million) are among the 23 USAID priority countries

Annual Preterm Births, 2011 estimates (adjusted)

Kenya
Uganda
Tanzania
Ethiopia
DR Congo
Bangladesh
Indonesia
Pakistan
Nigeria
India

Preterm Births

United States

Focus on Continuums

- Pre-pregnancy
- Pregnancy
- Labor and Delivery
- Immediate Postnatal Care
- Later Postnatal Care

Community/Home

Hospital ↔ Health Center
### Prevention of Preterm Birth and Low Birth Weight

#### Community/Household
- Delayed marriage/childbearing among adolescents
- Prevention of partner violence
- Family planning to prevent unintended pregnancies and to promote birth spacing
- Optimize pre-pregnancy weight/dietary advice and/or micronutrient fortification

#### Health Center
- All of above PLUS
  - Diagnosis & management of infections including HIV
  - Routine childhood immunizations including for adolescents
  - Mental health/depression assessment and referral

#### Hospital
- Counseling and services for all of above

- Management of women at higher risk of preterm birth
- Preterm induction of delivery performed only when medically indicated

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### Prevention of Preterm Birth and Low Birth Weight

#### Community/Household
- Community-based ANC
- Early determination of last menstrual period (LMP) and estimated due date (EDD) at first antenatal care (ANC) visit
- Prevention of harmful traditional practices
- Social and cultural norms to promote early care
- Counseling on reduced maternal workload
- Identification/management of partner violence
- Balanced protein/energy supplementation
- Marine oil supplementation
- Zinc supplementation
- Cessation of tobacco use, substance abuse and alcohol use

#### Health Center
- Diagnosis & management of infections including HIV
- Routine childhood immunizations including for adolescents
- Mental health/depression assessment and referral

- Management of women at higher risk of preterm birth
- Management of complications
- Refer to Management of Labor & Delivery, and Care of the Preterm or Low Birth Weight Newborn

- Identification of pregnancy complications and referral to care
- Prompt referral to health facility if newborn appears premature or small

#### Hospital
- Management of complications
- Provision of permanent or long-term FP methods (e.g. Tubal Ligation, Long Acting Reversible Contraception)
- Identification and management of new onset chronic diseases
- Diagnosis & management of infections
PREVENTING PRETERM BIRTH: THE LINC FACTORS

L = Lifestyle +

I = Infection

N = Nutrition

C = Contraception

OR = Odds Ratio  AOR = Adjusted Odds Ratio  RR = Relative Risk

(e.g. underweight = 1.32 OR means women who are underweight before pregnancy have a 32% increased risk of preterm birth)
Coverage of Antenatal Care Services

- Kenya
- Uganda
- Tanzania
- Ethiopia
- DR Congo
- Bangladesh
- Indonesia
- Pakistan
- Nigeria
- India

4 or more ANC visits %  1st ANC < 20 wks %  At least 1 ANC visit
A gentle reminder: 18% of global under five deaths are DIRECTLY related to preterm birth.

By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.

Will require significant focus on preterm birth as the primary cause of newborn deaths in most countries—both prevention and care.
How Will We Get There?

Supportive Enabling Environment

Health policy/health finance mechanisms that close equity gaps and improve access to and use of services

Adolescent Health

Delayed marriage and childbearing with improved educational and economic opportunities

Community Action

Community mobilization including male engagement and leadership around PTB risk factors & care

Community Interventions and Care

Bring services closer to where women and families live

Quality Facility-Based Health Services

Build/Strengthen linkages from the community to the facility level; engage communities in quality initiatives; improve health facility services
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