

# HIGH-RISK, LOW- RESOURCE MATERNAL CARE



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# PRESENTATION OBJECTIVES

- Identify major causes of maternal death and strategies for improvement
- Promote effective family planning & contraception
- Manage common complications of delivery
- Empower others to provide such essential care





“I am going to sea to catch a new baby, but the journey is long and dangerous, and I may not return” ~  
Haitian proverb



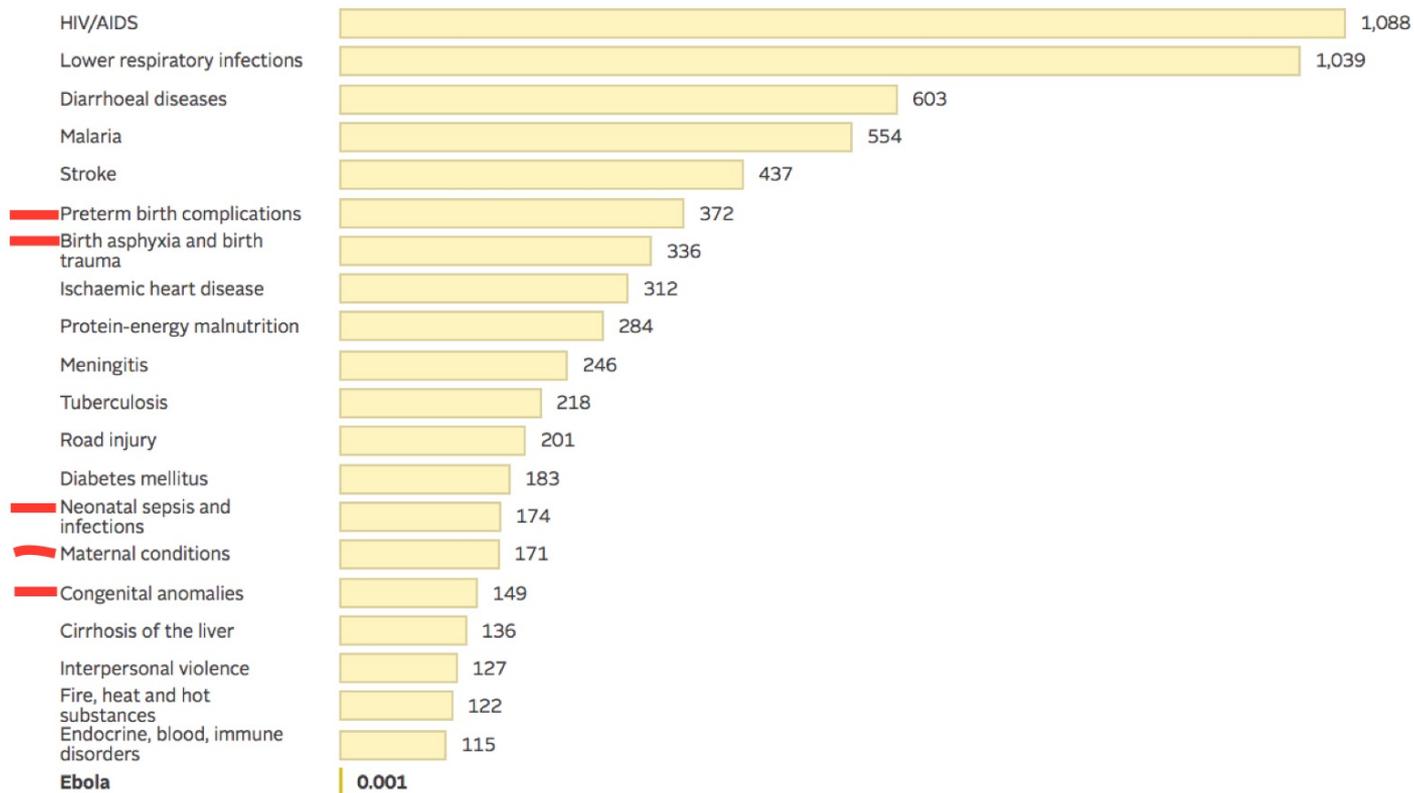
# PERSPECTIVE

Every two minutes somewhere in the world a woman dies of pregnancy related complications. Almost all these deaths occur in resource poor settings.

But how great a problem is maternal-newborn death in comparison to other pressing world health concerns?

# Leading causes of death in Africa

Deaths (000s)

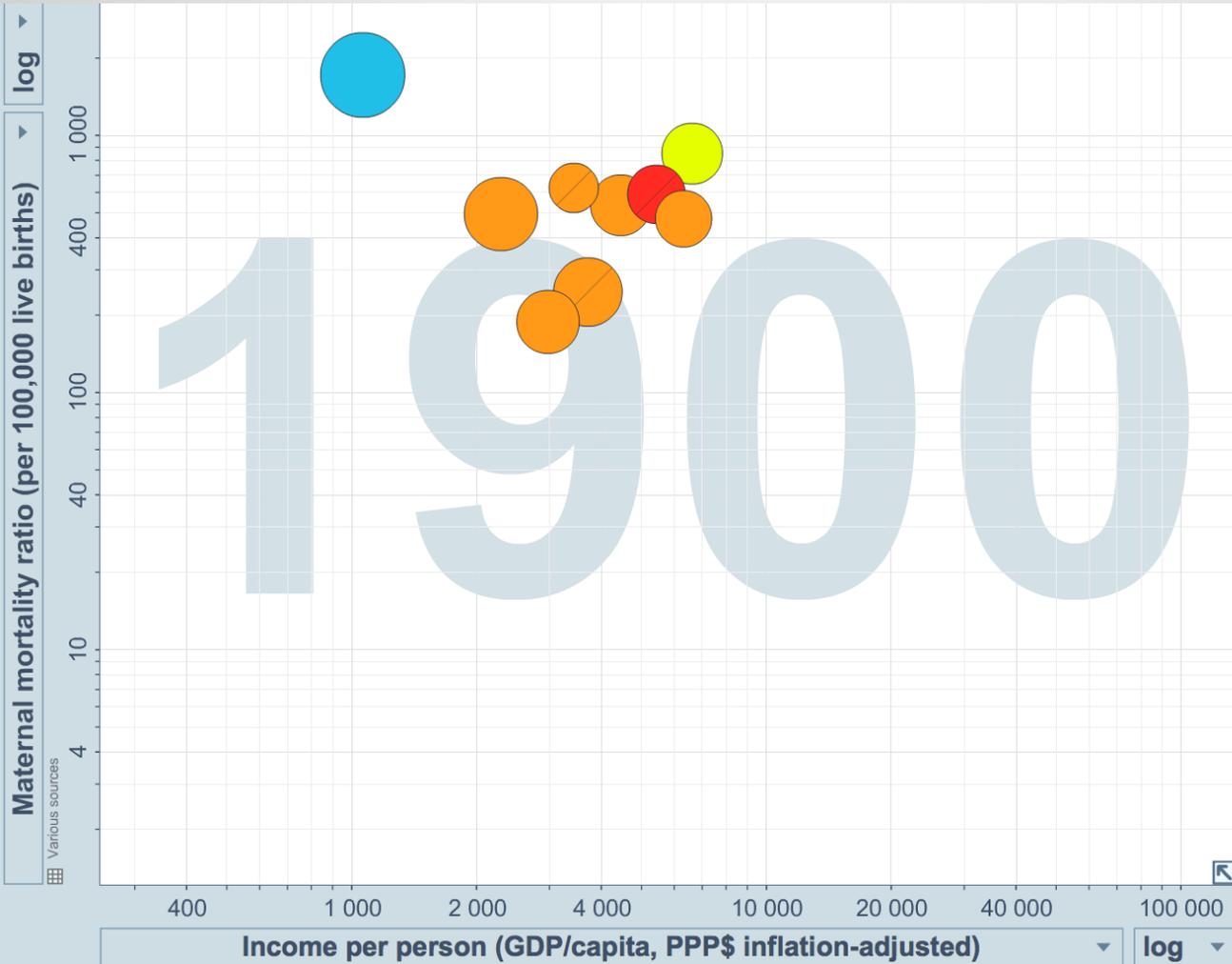


Source: WHO 2012

# PROGRESS IN MATERNAL HEALTH

The progress since 1900 according to three parameters:

- Continent & Nation
- Maternal Mortality Rate = the number of maternal deaths per 100,000 live births.
- Income per Person



Geographic regions

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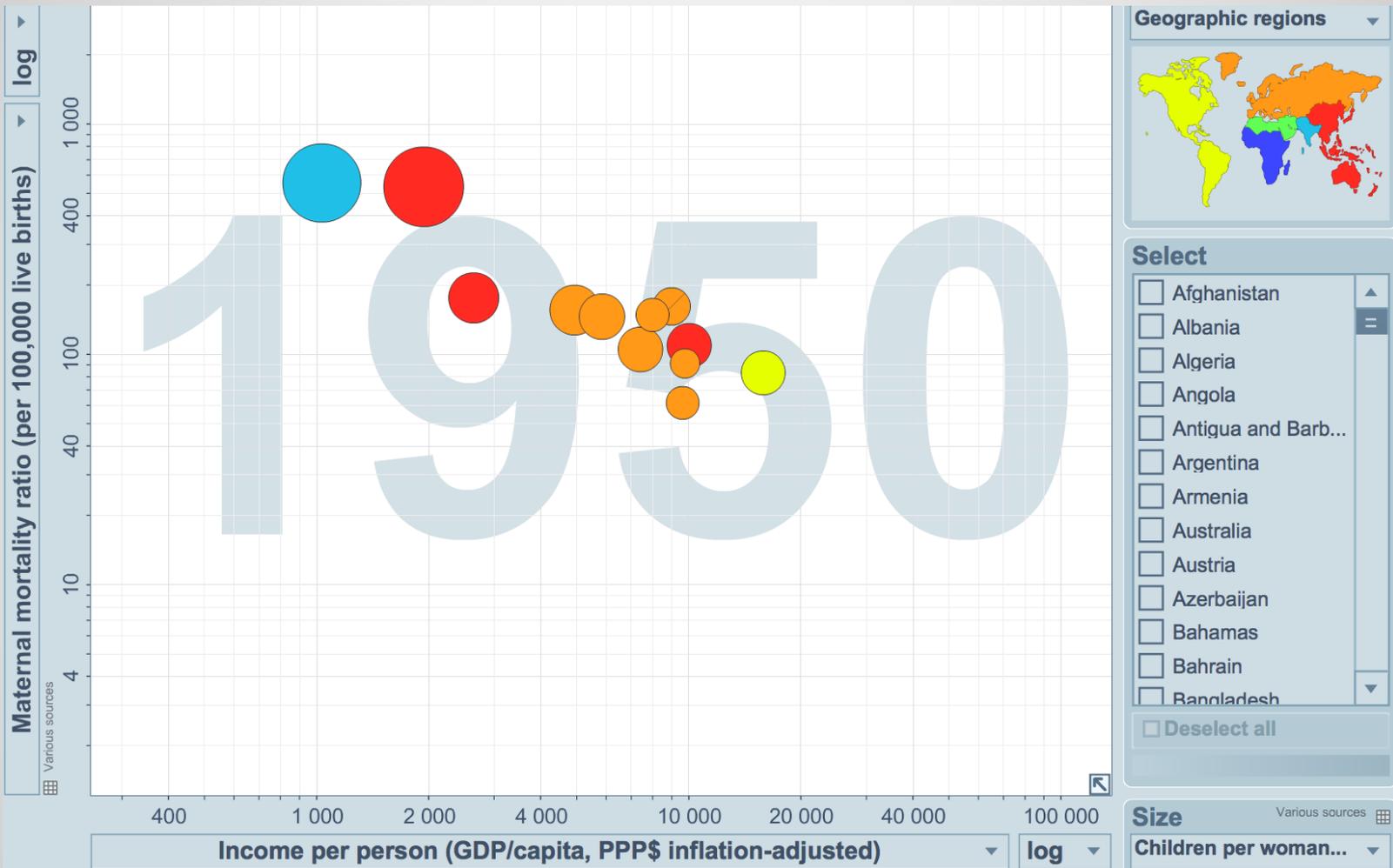
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- Bangladesh

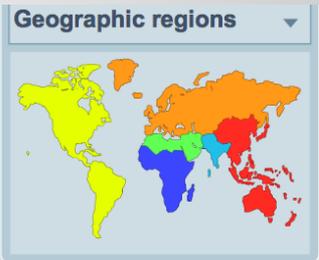
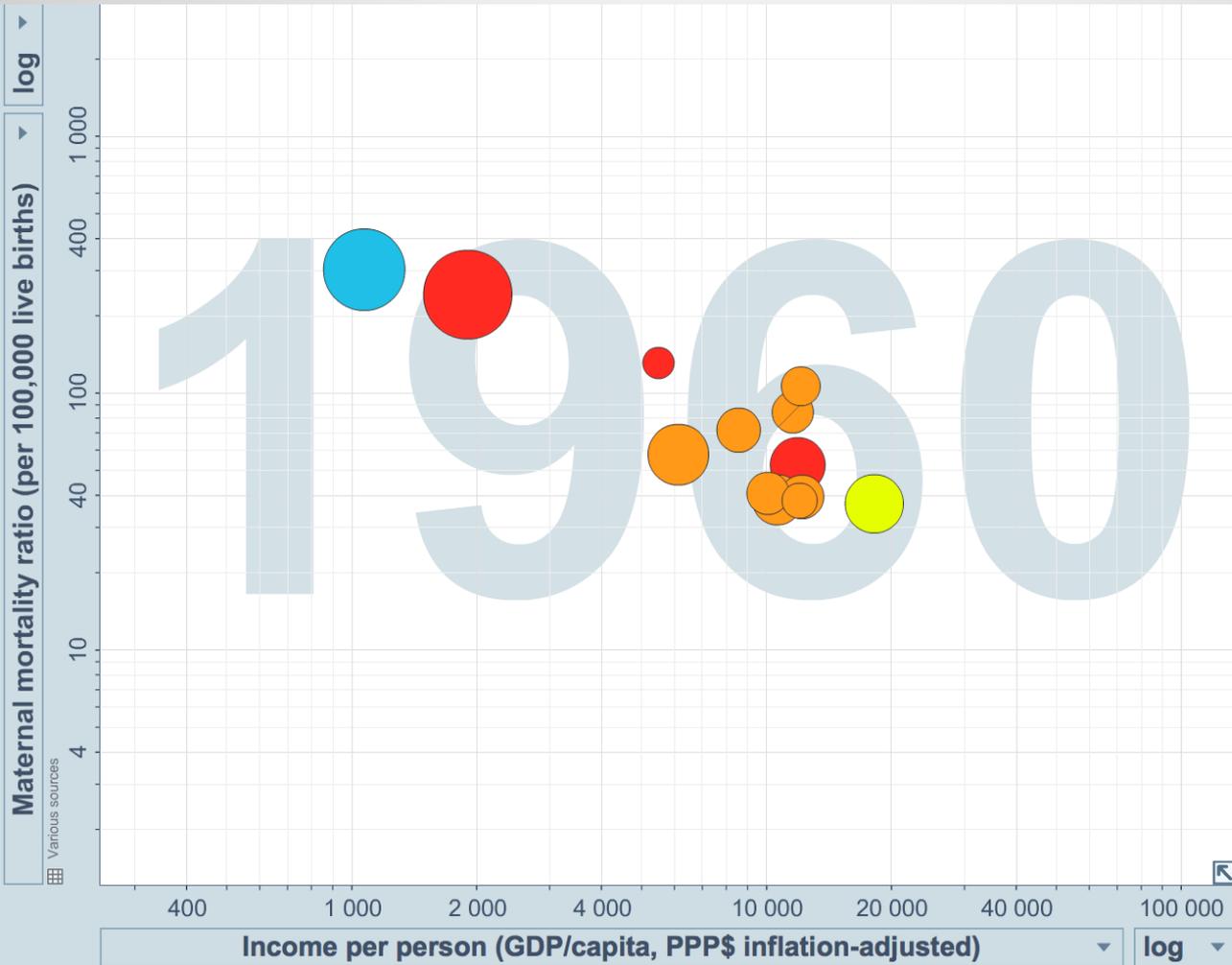
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Size

Various sources

Children per woman...

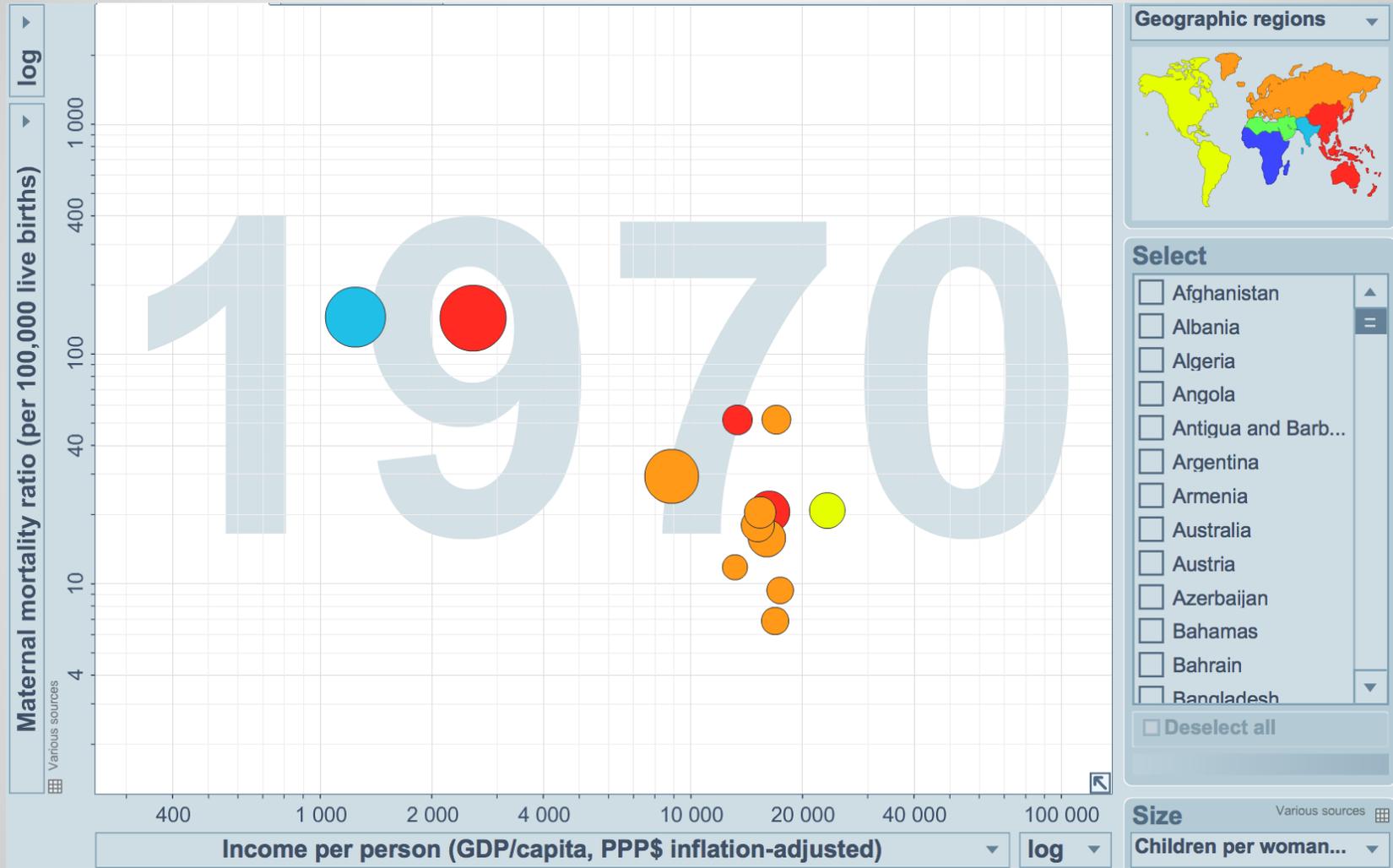


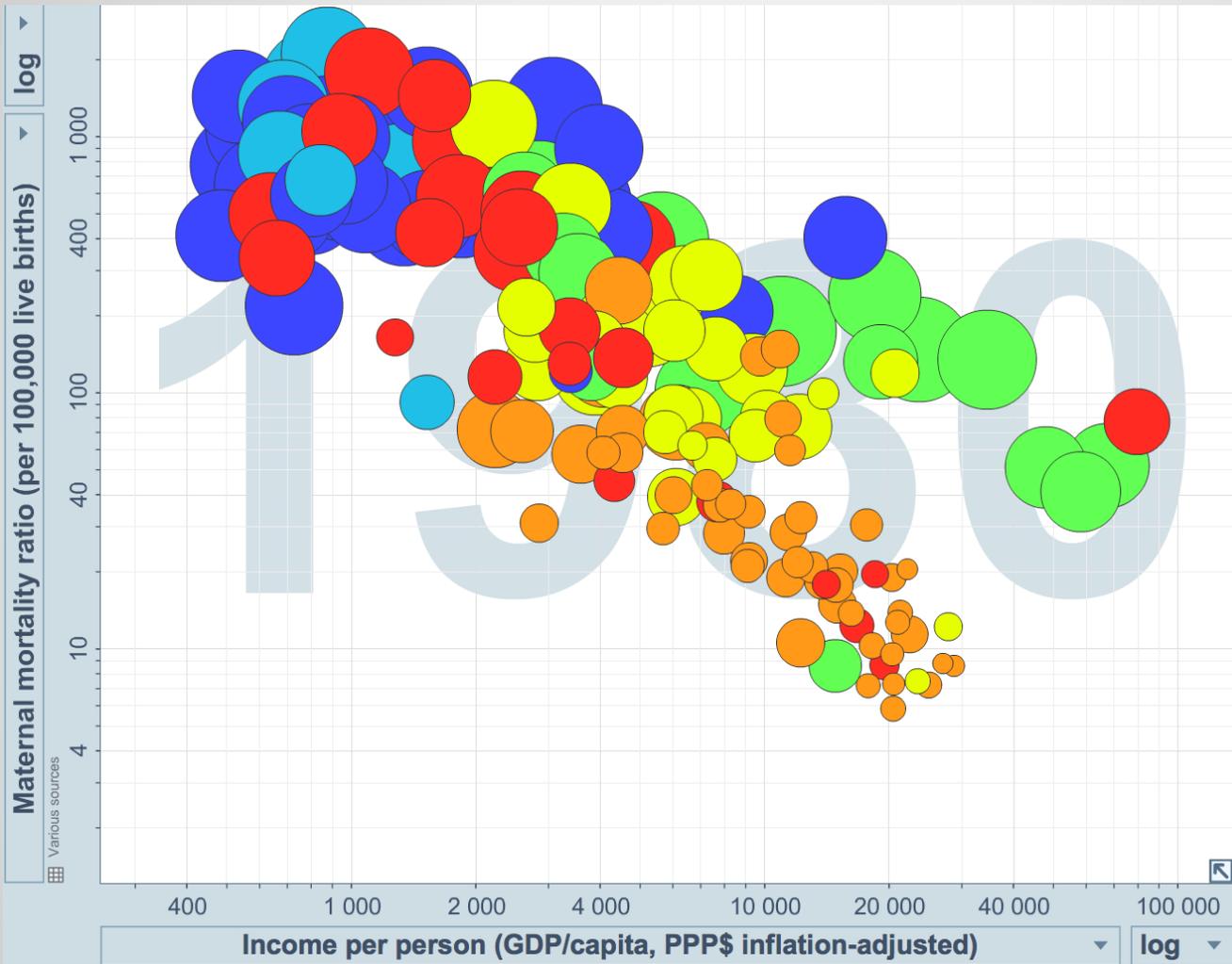


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Geographic regions



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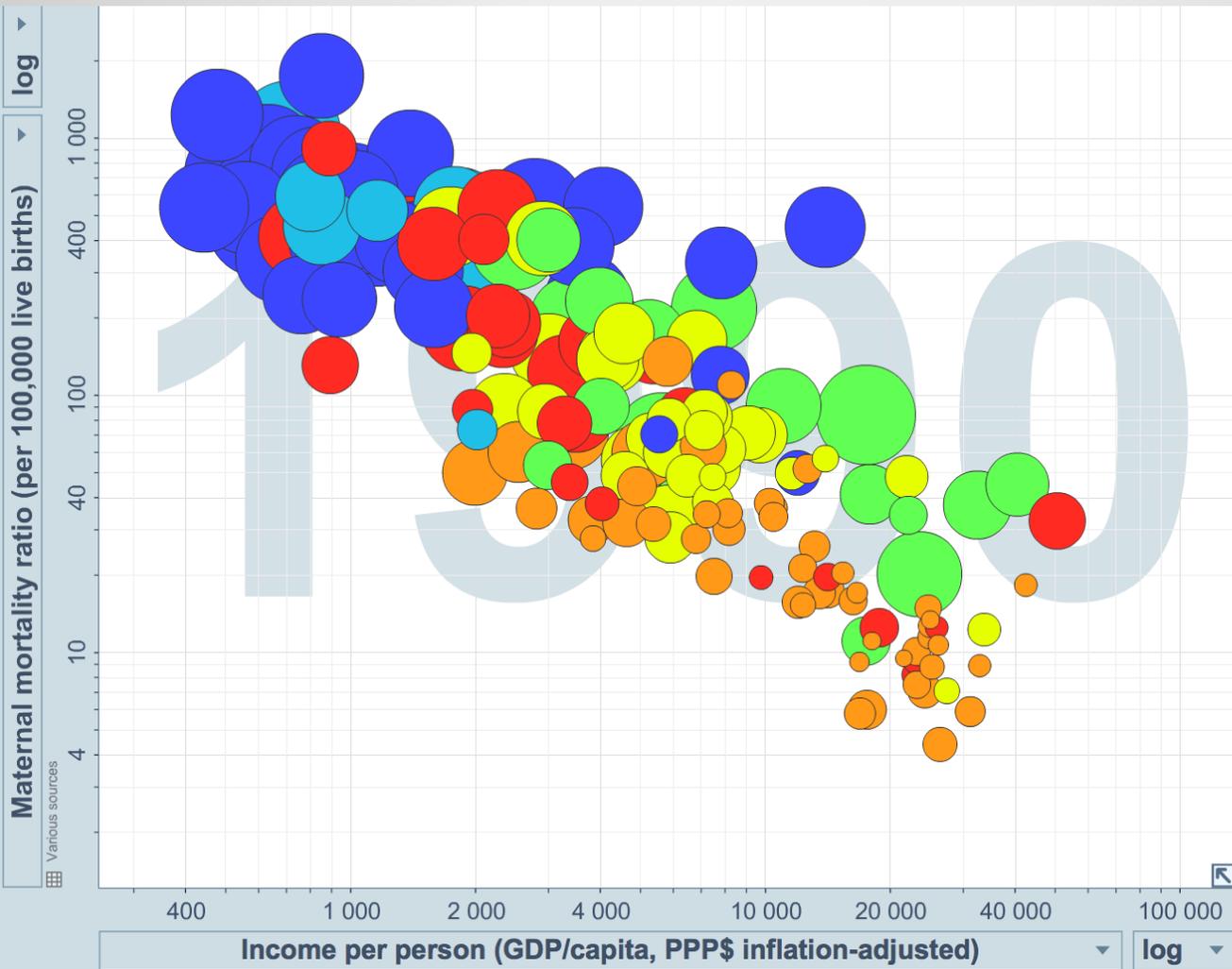
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Geographic regions

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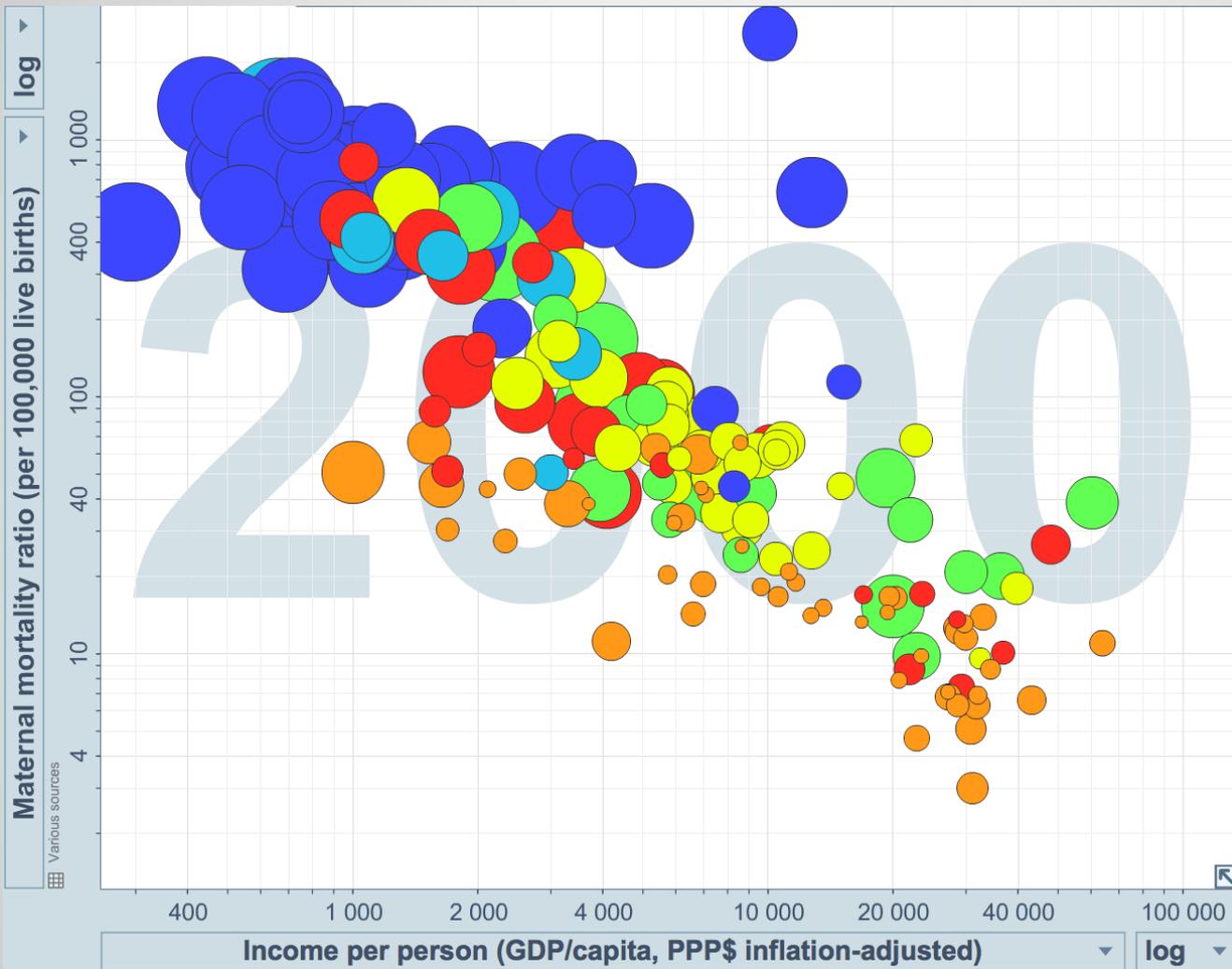
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Size

Children per woman...

Various sources



**Geographic regions** ▾

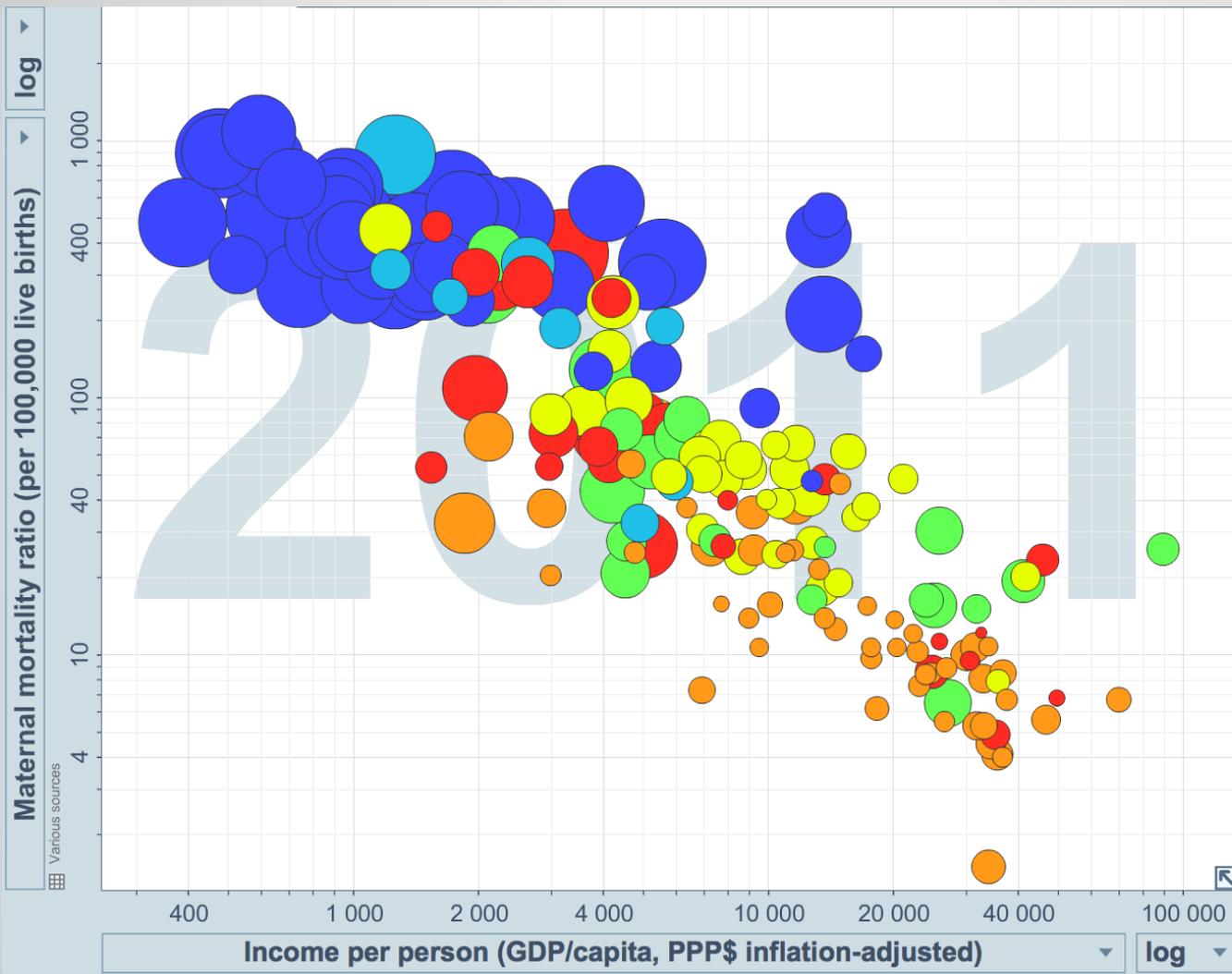
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**Geographic regions**

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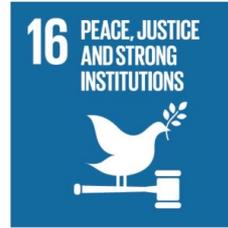
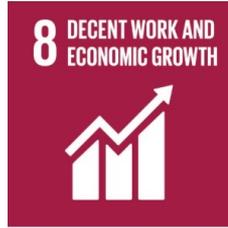
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# SUSTAINABLE DEVELOPMENT GOALS

# QUESTION

Pregnancy is a major health risk. Which one of the following is NOT a major cause of maternal deaths?

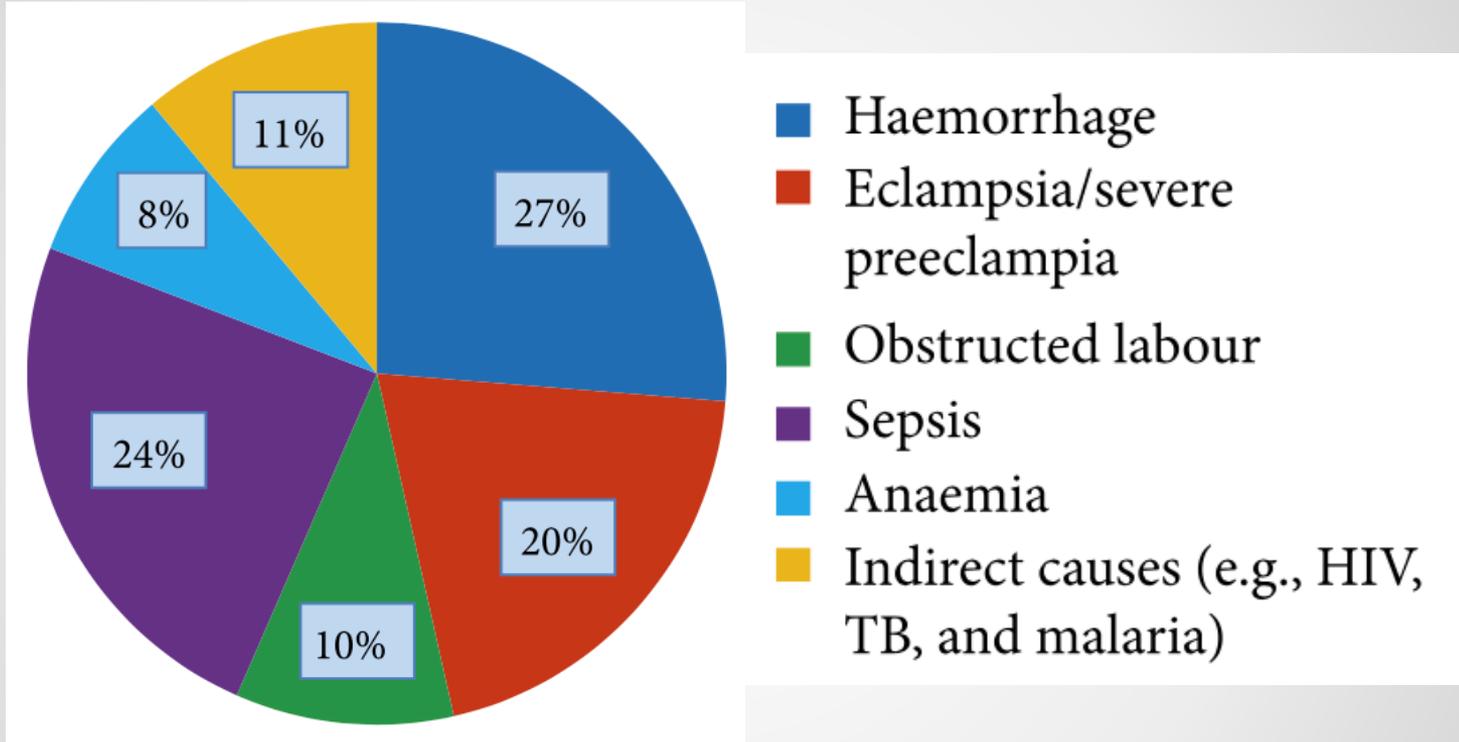
- A Eclampsia
- B Obstructed labor/ruptured uterus
- C Deep venous thrombosis
- D Hemorrhage
- E Peripartum sepsis

# ANSWER

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- A Eclampsia
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*What are the leading causes  
of maternal death?*



## *Causes of Maternal Mortality Worldwide*

# DANGEROUS PATTERNS

Some mothers are high risk of complications. Who are these women?



# DANGEROUS PATTERNS

Mothers at especially increased risk of complications:

- First-time pregnancies
- Higher number of pregnancies
- Short interval between births
- Pregnancy at advanced maternal ages
- Pregnancy in women already in poor health



Age and health of a mother are closely connected to the health outcomes of her offspring.

# QUESTION

All of the following are health risks associated with short interval between births EXCEPT which one?

- A Low birth weight
- B Herd immunity from vaccinated siblings
- C Competition among similar-aged siblings for limited family resources
- D Early termination of breastfeeding
- E Preeclampsia

# ANSWER

All of the following are health risks associated with short interval between births EXCEPT which one?

- A Low birth weight
- B Herd immunity from vaccinated siblings**
- C Competition among similar-aged siblings for limited family resources
- D Early termination of breastfeeding
- E Preeclampsia

# DANGEROUS PATTERNS

Some newborns are especially increased risk of complications. Who are these newborns?

# DANGEROUS PATTERNS

Infants of short gestation and/or low birth weight - usually a consequence of maternal illness - are at very high risk for death, particularly during the first seven days following birth.

**WHAT ARE  
TODAY'S MOST  
EFFECTIVE  
STRATEGIES TO  
IMPROVE  
MOTHER-  
NEWBORN  
HEALTH?**



# TWO POWERFUL INTERVENTIONS TO IMPROVE MOTHER-NEWBORN HEALTH

- Reduce family size
- Provide for quality obstetric care at time of delivery





**MOST INDIVIDUALS WOULD CHOOSE TO  
REDUCE THEIR FAMILY SIZE.**

# WHAT ARE THE BENEFIT OF REDUCED FAMILY SIZE?



# BENEFITS OF REDUCED FAMILY SIZE

- Decreased risks associated with repeated pregnancies
- Increased health and nutritional status of the mother and children
- Increased educational and economic opportunities for the mothers and children

# HOW CAN FAMILY SIZE BE REDUCED?



# REDUCING FAMILY SIZE

- Offering education and employment opportunities
- Postponing marriage and plans for reproduction
- Use of effective contraception



# WHAT ARE COMMON BARRIERS TO USE OF CONTRACEPTION?



# CONTRACEPTION BARRIERS

- Lack of knowledge
- Unavailability
- Concerns about adverse health impacts
- Opposition from family and community



## QUESTION

The BEST method of contraception is:

- A. Oral contraceptives
- B. IUD
- C. Depo-Provera
- D. Condoms
- E. None of these

# ANSWER

The BEST method of contraception is:

- A. Oral contraceptives
- B. IUD
- C. Depo-Provera
- D. Condoms
- E. None of these

# CONTRACEPTION CAN BE READILY INTEGRATED WITH WHAT OTHER WOMEN'S HEALTH SERVICES?



# INTEGRATING CONTRACEPTION AND OTHER WOMEN'S HEALTH SERVICES

- Nutrition counseling
- Trauma prevention counseling
- Pregnancy testing
- Sexually transmitted infection screening
- Cervical and breast cervical cancer screening
- Sterilization services

# TWO POWERFUL INTERVENTIONS TO IMPROVE REPRODUCTIVE HEALTH

- Reduce family size
- Provide for quality obstetric care at time of delivery



# PROVIDE QUALITY OBSTETRIC CARE

*What are the most essential elements  
of quality obstetrical care?*



# PROVIDE QUALITY OBSTETRIC CARE

- Monitored labor
- Labor-induction & augmentation capability
- Recognition of common complications
- Treatment for shock, hemorrhage, sepsis, anemia, and HTN
- Manual procedures, including breech, shoulder dystocia, twins, & vacuum extraction
- Anesthesia and surgical delivery capability
- Resuscitation for neonates

*What is the **one** leading  
cause of maternal death?*

# WHAT ARE THE POTENTIAL CAUSES OF POST-PARTUM HEMORRHAGE?



# POTENTIAL CAUSES OF POST-PARTUM HEMORRHAGE

- Tone: Uterine atony
- Tear: Laceration of cervix, vagina, perineum
- Tissue: Retained placenta
- Thrombin: Coagulopathy (rare)

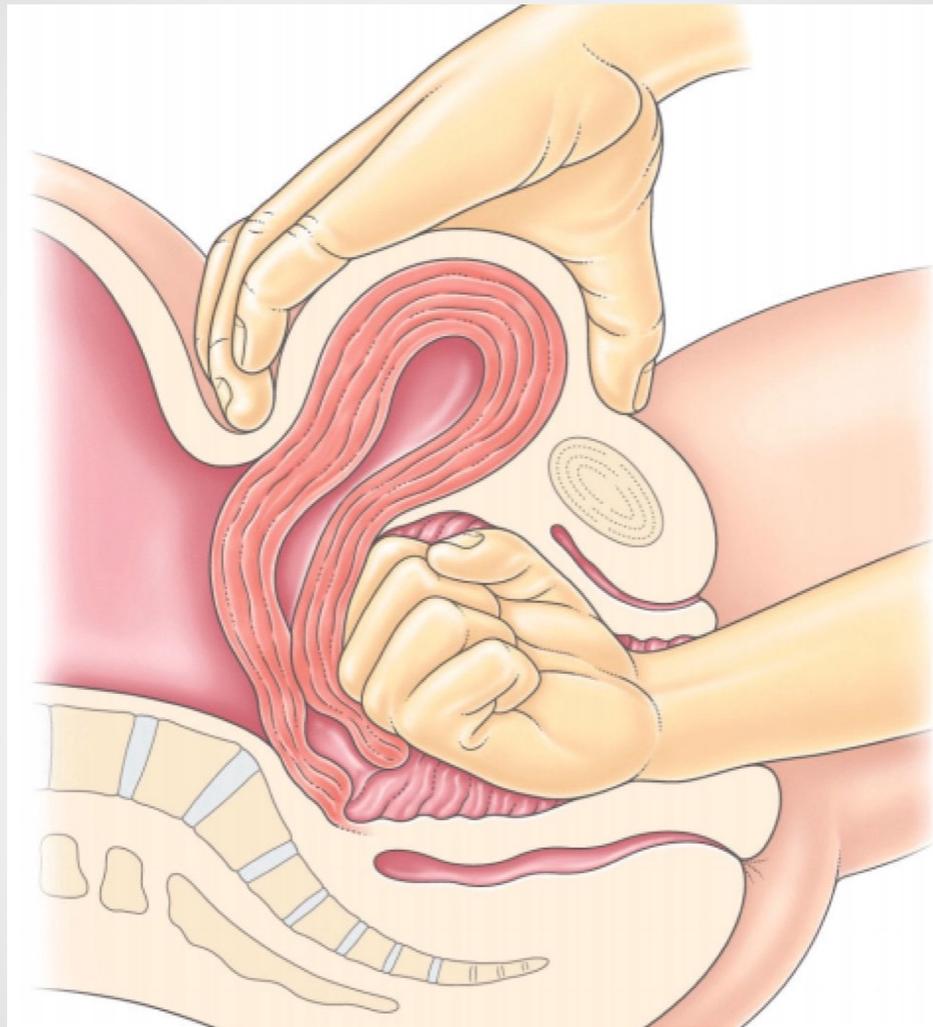
# WHAT ARE THE STEPS TO EVALUATE POST-PARTUM HEMORRHAGE?



# STEPS TO EVALUATE POST-PARTUM HEMORRHAGE

- Palpate uterine fundus for atony
- Inspect the vagina, cervix and perineum for lacerations, and for uterine inversion
- Sweep the uterine cavity for retained tissue
- Evaluate for blood clotting

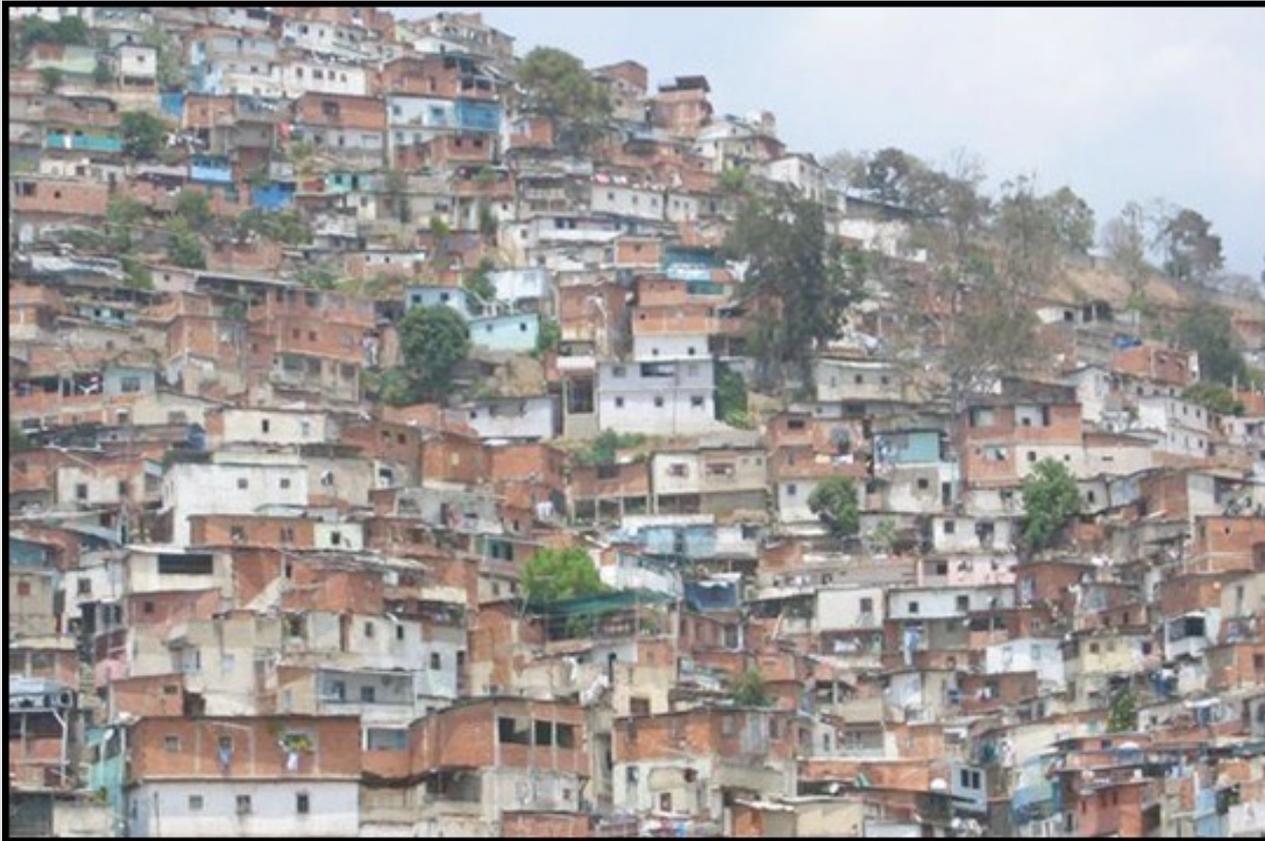
*What is the single most  
emergency treatment  
for uterine atony?*



*What medications for useful  
to treating uterine atony?*

# MEDICATIONS FOR UTERINE ATONY

- Oxytocin 10 units IM or IV infusion
- Misoprostal (Cytotec) 800 mcg rectally
- Methylergonovine (Methergine) 0.2 mg IM (caution in HTN, seizures)
- Tranexamic acid (TXA)



Where have you shared your skill & insight?

# QUESTION

In chronological order, the steps to manage post partum hemorrhage are:

- A. Repair laceration, check and give medication for uterine atony, explore the uterus for retained placenta
- B. Check and give medicine for uterine atony, repair laceration, explore the uterus for retained placenta
- C. Check for uterine atony and treat, inspect for laceration, explore for retained placenta, repair laceration
- D. Explore the uterus for retained placenta and inversion, repair laceration, check for and treat atony.

# ANSWER

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- C. Check for uterine atony and treat, inspect for laceration, explore for retained placenta, repair laceration
- D. Explore the uterus for retained placenta and inversion, repair laceration, check for and treat atony.

# NEWBORN DEATHS

Some one million babies die each year from failure to breathe immediately after delivery, chiefly in low-resource locations.

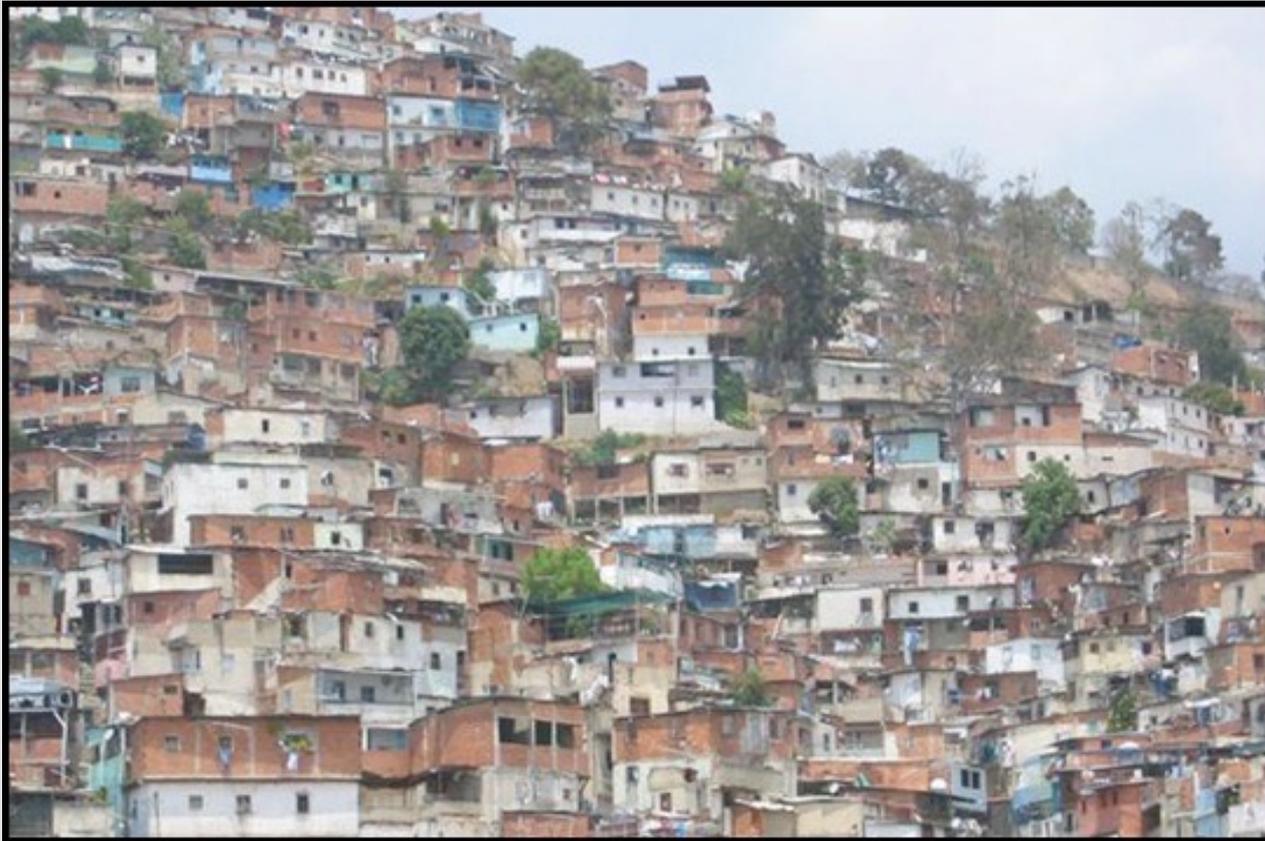


# HELPING BABIES BREATHE

- A neonatal resuscitation program designed for low-resource birthing centers.
- Trains skilled birth attendants to give excellent care within "The Golden Minute."
- Emphasizes newborn assessment, warmth, drying, suctioning, ventilation, and transport.
- HBB training opportunities at [inmed.us](https://www.inmed.us)

# INMED HELPING BABIES BREATHE





Where have you shared your skill & insight?

***EQUIP YOURSELF TO BETTER  
SERVE FORGOTTEN PEOPLE***



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