



WHO SYSTEMATIC REVIEW ON MATERNAL  
MORBIDITY AND MORTALITY

**INDUCED ABORTION**

Issues on the gathering and analysis of data

**LAURA GIL, MD**

**OB GYN**

**TUTOR: Dr Regina Kulier, MD MSc**

**WHO/GFMER/IAMANEH**

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# MATERNAL MORTALITY

## DEFINITION:

- 42 days and 1 year postpartum or
- Regardless of the cause of death

## METHODS:

- National Statistics
- RAMOS
  
- Sisterhood methods
- Surveys
- Verbal Autopsy

- Estimates,
- Large sample size
- Wide confidence intervals

# WHO Systematic Review On the Epidemiological Evidence For Maternal Morbidity and Mortality 1997-2002

- Search for the best data
- All sources, with different methods
- Calculate global accurate data

# MATERIALS AND METHODS

- **Systematic Search**
  - **Electronic data bases,**
  - **Regional WHO databases**
  - **Ministries of health**
  - **Internet search**
  - **Hand and reference search**
  - **Personal contacts**
- **Critical Appraisal**
- **Extraction of data into formularies**

# MATERIALS AND METHODS

- **Data quality assessment**  
Estimate Vs actual count, definition, confirmation
- **General information**  
Country, Study period
- **Characteristics of the study**  
Type of design, sampling, data source, unit of measurement, demographic characteristics, place of abortion.
- **Specific quality data**  
Gestational age, legal status, safe Vs unsafe

# RESULTS

137 Articles  
regarding induced abortion

58% Medium quality

37% From developing Countries

**TO BE PUBLISHED**



# RESEARCH ON ABORTION EPIDEMIOLOGY

- LEGAL AND MORAL  
ISSUES

- UNDERREPORTING  
Official registration  
Survey

# RESEARCH ON ABORTION

## Approaches:

- Illegal abortion provider survey
- Complications statistics
- Mortality statistics
- Self-reporting techniques
- Experts' estimates



# MEASUREMENT

- **ABORTION RATE**

# abortions/1000 women aged 15-44

- **ABORTION RATIO**

# abortions/100 known pregnancies

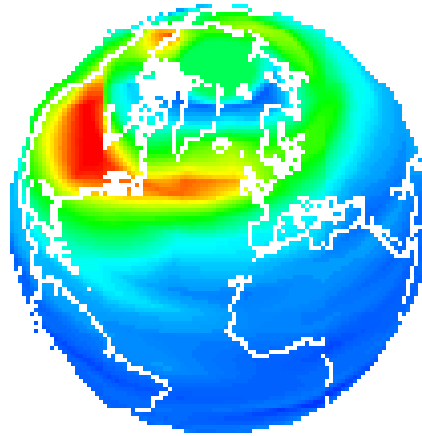
- **TOTAL FIRST ABORTION RATE  
(TFAR)**

Proportion of women who experience an induced abortion during their total reproductive life

# ABORTION INCIDENCE AROUND THE WORLD - QUICK FACTS

## RATE:

35 per 100.000  
women aged  
14-45



## RATIO:

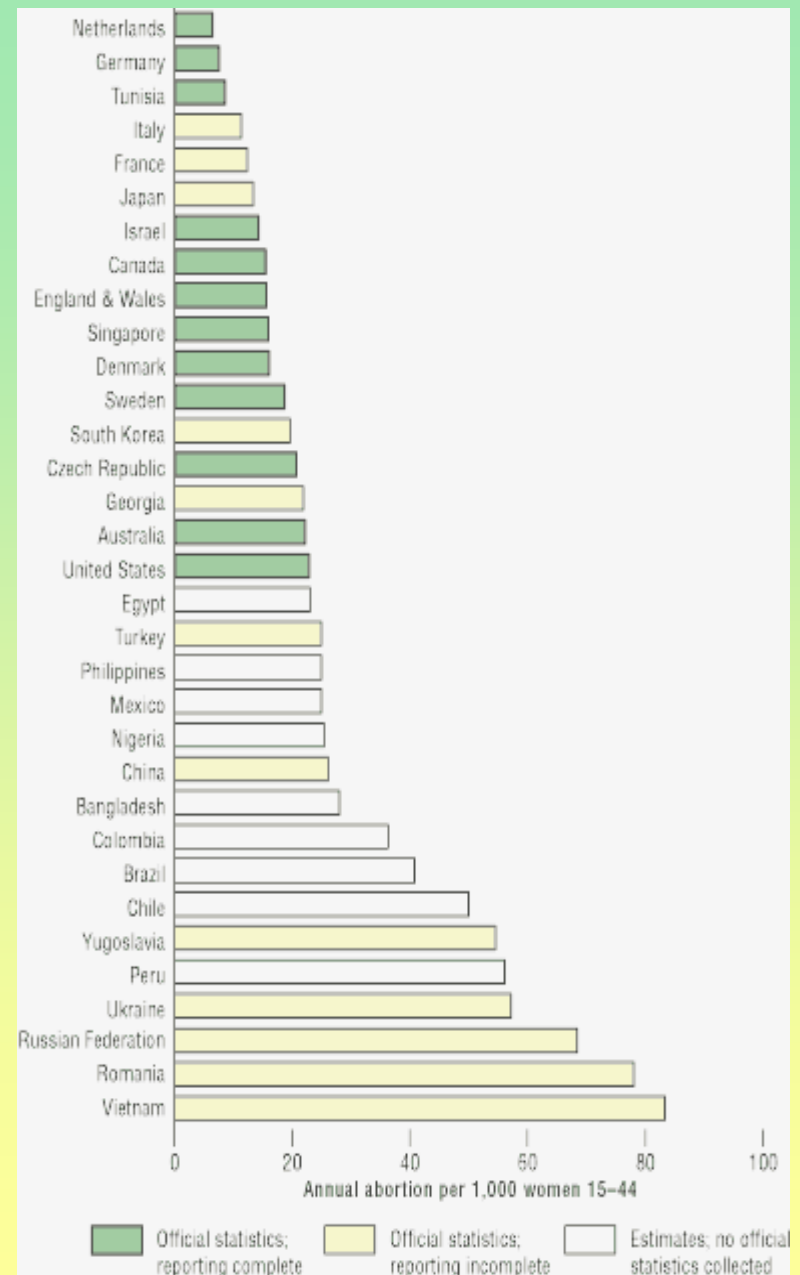
26%  
of all known  
pregnancies

LOWEST RATE  
Western Europe  
11

HIGHEST RATES  
Eastern Europe 90  
Cuba 77  
Vietnam 83

# FUTURE RESEARCH

- **WHY ARE THERE WIDE VARIATIONS ON THE INDUCED ABORTION RATE BETWEEN COUNTRIES?**



# LEGAL STATUS

**Not closely correlated with abortion rate**

• South America :

**37**

• Developing countries:

**34**



**North America:**

**22**

• Developed Countries:

**39**

• Romania case:

**No increase in birthrate after change in legislation  
in 1966**

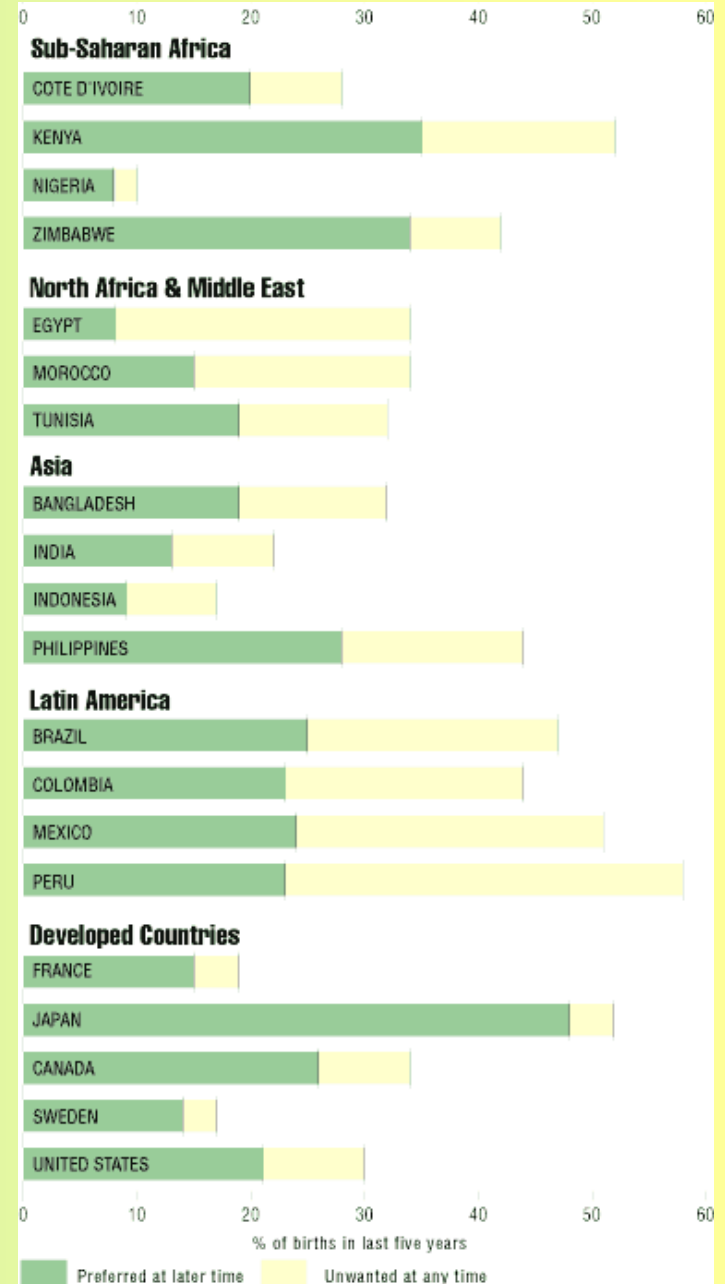
# **FERTILITY RATE AND CONTRACEPTION AVAILABILITY**

- **Increased availability of contraceptive methods result in lower abortion rates**
  - Bulgaria
- **Increased use of modern methods result in lower abortion rates**
  - China
- **Rapid decrease in fertility rates result in increased abortion rates**
  - Cuba, Denmark, Netherlands, USA

# FREQUENCY OF UNWANTED PREGNANCY

38-50%

50% End up in abortion





# Why is Mortality Rate Due to Abortion so Dispair?

ABORTION RELATED DEATHS	
Region	Deaths per 100,000 abortions
Developing	330
Africa	680
South and East Asia	283
Latin America	119
Developed	0.2- 1.2



**What can be done to  
reduce the incidence of  
induced abortion?**

**Increase a contraception to  
reduce unwanted  
pregnancy**

**And to reduce the  
mortality rate from  
induced abortion?**

**Reduce unsafe abortions**



# CONCLUSIONS

- There are multiple techniques to assess MMR, a systematic review will provide **reliable data**.
- Epidemiological research on induced abortion poses special challenges. The determinant factors for the wide range of abortion rates around the world are mainly those related to **unwanted pregnancy**.
- **Unsafe abortion and unmet needs for contraception** are critical issues in the reduction of induced-abortion-related maternal mortality rate.