# Factors Contributing to Higher Maternal Mortality: A Cross-Country Comparison

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## Abstract

When compared to other industrialized nations, the United States possesses higher numbers of maternal mortality. In 2023, the maternal mortality ratio (MMR) in the United States was 21 while the MMR in both Sweden and Italy was 5 (UNICEF). As industrialized nations, all three enjoy advanced economies and developed technological infrastructure. However, there is a need to explore why the MMR of the US is significantly lower than that of its counterparts. Ultimately, there are varying factors that contribute to this contrast and these factors influence the quality of perinatal care and the ways that patients interact with health services. A literature review of healthcare access (barriers), quality of reproductive healthcare, and gender equality (health services and maternity leave) was conducted.

## Introduction

- Maternal mortality (MM) refers to deaths during pregnancy or within 42 days of the conclusion of pregnancy from related health complications.
- Maternal mortality ratio (MMR) refers to the number of maternal deaths per 100,000 live births from any cause related to pregnancy.
- Healthcare access is the ability to obtain services relating to the prevention, diagnosis, treatment, and management of conditions that affect health.
- Reproductive healthcare focuses on physical, mental, and social wellness matters relating to the reproductive system across the lifespan, and includes issues of sexual and maternal health.
- Gender equality is the concept that everyone should have equal opportunities and rights without being discriminated against based on their gender.

## Purpose

To identify factors in healthcare access, quality of reproductive healthcare, and gender equality in health services that influence the maternal mortality ratio in the United States compared to Italy and Sweden.

## Methodology

- Two countries from the European Union (EU) were selected based on MMR compared to the United States as well as differences in healthcare access, reproductive healthcare, and gender equality.
- A Literature Review was conducted.
  - Utilized two Databases: NCBI and PubMed.
  - Utilized additional data and literature from the World Health Organization, Yale Medicine, Mayo Clinic, Cleveland Clinic, Mass General Brigham, Office of Disease Prevention and Health Promotion, UNICEF, United Nations Entity for Gender Equality and the Empowerment of Women, Institute for Women's Policy Research, Central Intelligence Agency, March of Dimes, World Economic Forum, European Commission, European External Action Service, European Observatory on Health Systems and Policies, European Parliamentary Forum for Sexual and Reproductive Rights, and Nordic Co-operation.
- **Key Terms**: maternal mortality, maternal mortality ratio, perinatal, healthcare access, reproductive health, gender equality.
- **Limiting Terms**: All research was based on publications made in the past twelve years (2012-2024), with no translations.

## Results

**Healthcare Access:**

**Sweden**

- Sweden provides a universal health system that is mainly tax-funded, nationally regulated, and locally administered.
- Healthcare is administered based on three key principles: human dignity, need & solidarity, cost & effectiveness (Commonwealth Fund, 2020).
  - The cost and effectiveness principle seeks a reasonable balance between costs in relation to improvement in health and quality of life.
- Healthcare initiatives include disparity-reduction strategies and other preventative approaches focusing on vulnerable groups.

**Italy**

- The National Health Service provides universal coverage.
- The central government sets fundamental principles and goals for the healthcare system and services included in the benefits package while regional governments are responsible for the organization and administration of services.
  - Healthcare services and outcomes can reflect economic and social inequalities between Italy's northern and southern regions.
- The central government requires a national benefits package to be offered to residents of every region.
  - Benefits include pharmaceuticals, primary care, inpatient care, preventative medicine, and maternity care among others.

**United States**

- Universal health insurance coverage is not offered, although a mix of public and private insurers is available.
  - Out-of-pocket medical costs may result in people delaying or forgoing health services.
  - Insufficient insurance coverage is a significant barrier to healthcare access, and results in health disparities.
- The passage of the Affordable Care Act (ACA) represents the most significant government effort in financing and regulating healthcare.
- There are tax-funded programs for uninsured, low-income, and vulnerable patients.
- Several federal agencies are responsible for monitoring and reducing disparities.
  - Disparities for people of color and poor and uninsured populations are present.

**Quality of Reproductive Healthcare:**

**Sweden**

- Maternity and youth clinics are available to the public, offering contraception and contraceptive counseling.
  - The model was established with the belief that more accessible contraception and education would lower the number of unplanned pregnancies.
- Contraception is offered free of charge for citizens under the age of 21.
- All citizens are entitled to free prenatal checks throughout their pregnancies.
- The sexual and reproductive health and rights of migrants are often not fully addressed.
  - Barriers include language, financial barriers, and lack of knowledge about the Swedish healthcare system.

**Italy**

- Access to contraception is regulated at the national level.
  - Regional governments are responsible for the organization and administration of these services.
- Family planning centers often lack resources and appropriate staffing numbers.
  - Few of these centers are connected to hospitals or specialized services and are not easily accessible outside of larger cities.
- Contraceptive counseling is accessible and affordable.

**United States**

- Implementation of laws restricting access to family planning and reproductive healthcare.
  - Includes the overturn of Roe v. Wade, no longer making the right to an abortion a constitutional right.
- Women of color (WOC) have disproportionate access to reproductive healthcare on both individual and systemic levels, resulting in higher numbers of maternal mortality.
  - Barriers include fewer neighborhood health services, less insurance coverage, and practitioner racial bias.

**Gender Equality:**

**Sweden**

- Sweden ranks 5th in the Global Gender Gap Index in closing its gender gap by 81.6% (World Economic Forum, 2024).
  - The score is based on four indexes: economic participation and opportunity, educational attainment, health and survival, and political empowerment.
- Parents are offered parental benefit which is paid, 480-day leave shared between both parents.
  - Shared parental leave promotes gender equality by allowing care responsibilities to be divided between both parents.
- Women can begin taking parental benefit 60 days prior to the expected birth.
  - At this time, the other parent can receive temporary parental leave for 10 days in connection to a child's birth.

**Italy**

- Italy ranks 87th in the Global Gender Gap Index in closing its gender gap by 70.3% (World Economic Forum, 2024).
  - The score is based on four indexes: economic participation and opportunity, educational attainment, health and survival, and political empowerment.
- Maternity leave for employed working mothers is required to last 20 weeks.
  - Paid paternity leave is mandatory and lasts for 10 days.
- Women are entitled to cash maternity allowance that is equal to 80% of pay for 5 months.
  - Paternity leave entitles employees to 100% of pay for 10 days.
  - Parents have the option to take reduced paid leave for up to 9 months.

**United States**

- The United States ranks 43rd in the Global Gender Gap Index in closing its gender gap by 74.7% (World Economic Forum, 2024).
  - The score is based on four indexes: economic participation and opportunity, educational attainment, health and survival, and political empowerment.
- The Family Medical Leave Act of 1993 (FMLA) allows eligible employees up to 12 weeks of job-protected, unpaid leave for family and medical reasons, including maternity leave.
  - Recovery generally takes 6-8 weeks but symptoms and changes that occur during the postpartum period can last over 8 weeks (Cleveland Clinic).
- Longer maternity leave may decrease rates of poor maternal mental and physical health reports (Whitney et al., 2024).
  - Maternity leave of 12 weeks or more offers the greatest health benefits for mothers and their infants (Whitney et al., 2024).
  - Nearly two-thirds of maternal deaths in the US occur during the postpartum period (Commonwealth Fund, 2024).
  - Approximately 20-40% of women develop postpartum mood disorders (PPMD) with pronounced, long-lasting symptoms within the first year after childbirth (Mass General Brigham).

## Discussion

This cross-country comparison of industrialized nations reveals three important global factors contributing to maternal mortality and reflects the individual MMRs of the countries reviewed.

- Compared to Sweden and Italy, the US has poorer healthcare access due in part to a mixed health system.
  - Mixed health systems may result in higher costs for patients making it harder for them to afford high-quality health services.
- The US possesses more conservative and restricted practices on family planning and reproductive healthcare.
  - Sweden makes family planning and reproductive healthcare resources more accessible through lower costs and greater public presence.
  - Italy favors reproductive education and counseling over government reimbursement for contraception.
- The EU states that "Each individual has the right to have full control over and decide freely and responsibly on matters affecting their sexuality and sexual and reproductive health"
  - The US does not have an official statement regarding reproductive rights nationwide.
- Almost every member of the EU offers at least 14 weeks of job-protected, paid maternity leave, during which employees receive at least two-thirds of their typical earnings (Gault et al., 2014).
  - The US is the only high-income country and one of eight countries in the world that does not require paid maternity leave (Gault et al., 2014).

## Final Thoughts

- Improving healthcare accessibility in the US entails expanding access to subsidies for those beyond the current eligibility requirements.
  - Includes those who face additional social barriers.
- Expanding reproductive rights in the US grants women with greater reproductive autonomy as well as increased choice and control in their medical care.
- Increasing the length of maternity leave in the US allows greater time for postpartum recovery and decreases negative mental and physical health outcomes.

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