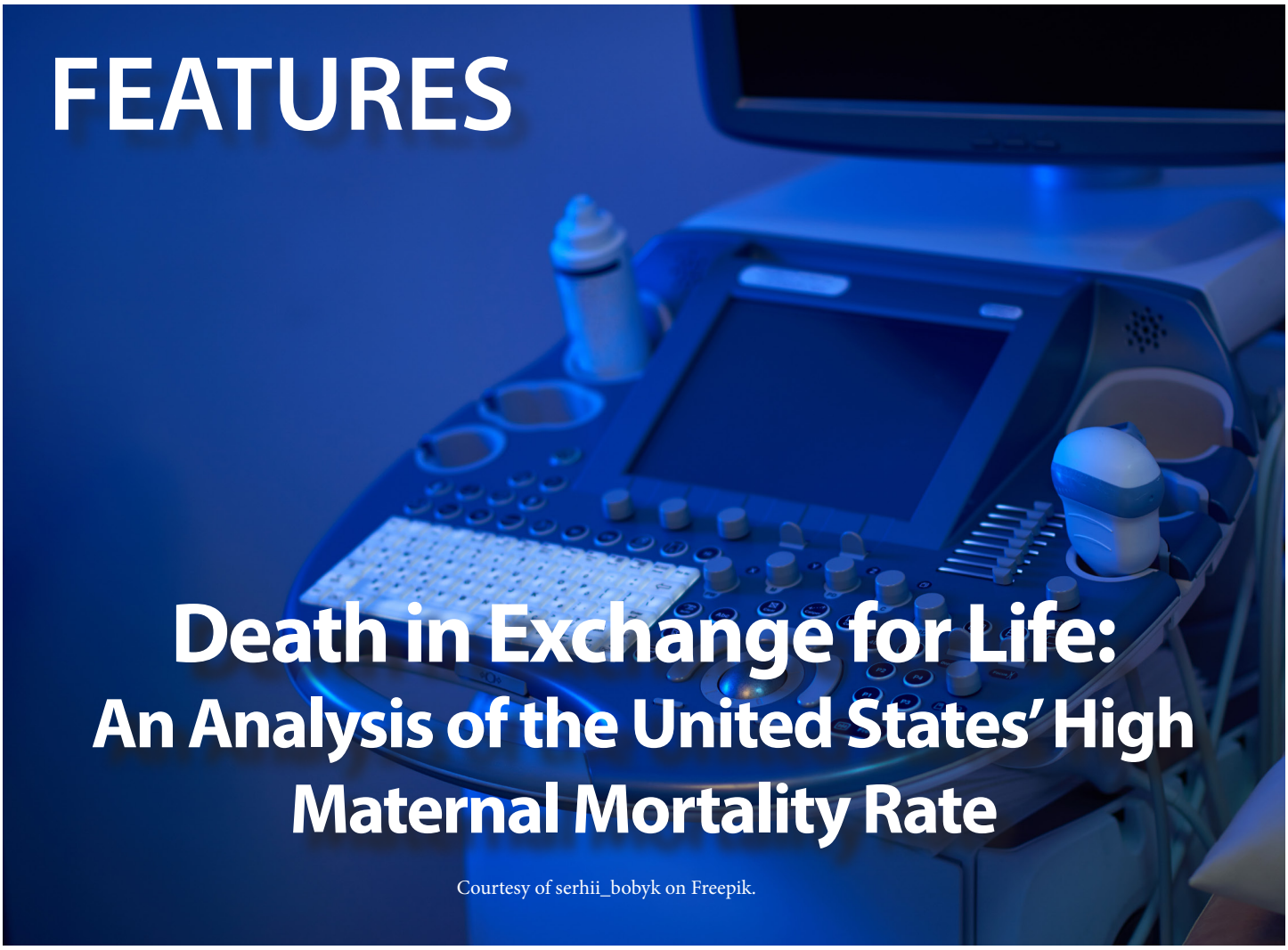

FEATURES

Death in Exchange for Life: An Analysis of the United States' High Maternal Mortality Rate

Courtesy of serhii_bobyk on Freepik.

Lara Rahman '28

Introduction

Every day, expectant mothers in the United States face the daunting reality of a high rate of maternal mortality. These maternal deaths can be attributed to induced abortion, miscarriage, embolism, obstetrical bleeding, hypertensive disorders, sepsis, and more (Say et al., 2014). The unfortunate truth is that many of these deaths are preventable and may not have occurred elsewhere in the world.

The World Health Organization (n.d.) defines maternal mortality as deaths "related to or aggravated by pregnancy or its management (excluding accidental or incidental causes)." From the 1930s to 1970s, maternal mortality rates in high-income countries decreased rapidly, largely due to advances in healthcare (Center for Disease Control, 1999). For example, the clinical introduction of antibiotics, such as penicillin and sulfonamides, and aseptic techniques in the 1940s successfully prevented and treated many infections associated with childbirth. Another critical advancement was the widespread practice of the Cesarean section (C-section), a procedure that offers a surgical alternative in situations where traditional childbirth poses risks. In the U.S., the overall rate of C-sections increased from 2.5% to 5.1% of births between 1932 and 1963. Moreover, C-sections are safer for not only mothers but also babies; the mortality rate for newborns decreased from 9.8% to 2.9% during these same three decades (Antoine & Young, 2020).

However, while the trend of decreased maternal mortality has persisted in other high-income countries, the U.S. has recently observed a rise in its rate; the current maternal mortality rate is comparable to that of the 1970s (**Fig. 1**). In 2022, the U.S. recorded 22 maternal deaths for every 100,000 live births—more than double the rate in most other high-income countries (Hoyert, 2024). A 2020 analysis conducted by the Commonwealth Fund found that half of the ten high-income countries they

Figure 1. Annual maternal mortality rates for the U.S., Canada, United Kingdom, and France according to data from the World Health Organization (Our World in Data, 2024).

studied had a maternal mortality rate of fewer than five maternal deaths per 100,000 live births. The healthcare system of the United States—a global leader in medical innovation—differs from those of peer countries in various ways that contribute to divergent outcomes in maternal mortality, including healthcare access, midwife assistance, and maternal leave.

Healthcare Access

Most high-income countries manage healthcare access through a system known as universal healthcare. In these systems, most patients are guaranteed equal access to quality healthcare services with minimal financial strain or out-of-pocket payments. However, the U.S. takes a different approach as the only high-income country without near-universal healthcare coverage (Gunja et al., 2023). Instead, health insurance is predominantly provided through private employers or public programs funded by the state and federal governments, such as Medicaid and Medicare (Tikkanen, 2023). A patient's income and age level will largely determine the public coverage programs for which they are eligible. With this multi-payer structure comes a higher probability of patients in the United States having to pay out-of-pocket for their medical care (Gunja et al., 2023). These out-of-pocket payments contribute to the finding that U.S. adults with lower to average incomes are more likely to have cost-related issues accessing healthcare than their counterparts in peer countries (Tikkanen, 2023). Throughout pregnancy, out-of-pocket costs could deter lower-income patients from seeking adequate maternal care, increasing their risk of adverse events (Gunja et al., 2024). Furthermore, under a model in which healthcare workers are paid by insurance companies, healthcare workers may choose to reject a patient with Medicaid due to the program's lower reimbursement rates (Decker 2012). This practice further restricts healthcare access for some lower-income patients and leaves many disadvantaged mothers at risk of complications.

Another aspect of the U.S. healthcare system that differs from other countries is access to abortion. Abortion access can safeguard a mother's life and lower the maternal mortality rate when carrying a pregnancy to term poses serious health risks. In Canada, the United Kingdom, and many European nations, abortion is legalized within specific term limits. For example, in the United Kingdom, abortion is available up to 23

weeks and six days into pregnancy (MSI Reproductive Choices, n.d.). This means that an expectant mother can choose—often due to a physician's recommendation—to undergo a medically safe abortion. Contrastingly, in many U.S. states, abortion is heavily restricted and even criminalized, regardless of the mother's health risks. For example, Chapter 170A of the Texas Health & Safety Code (n.d.) currently mandates that physicians who perform an abortion be subjected to a civil penalty of at least $100,000 in addition to the possibility of a first- or second-degree felony charge. Structural designs such as these contribute to the difficulties expectant mothers face in accessing healthcare in the U.S.

Midwives

Another factor affecting the U.S.'s maternal mortality rate is the maternal care workforce, the size and capability of which frequently determine how much time and attention each expectant mother will receive. Due to the global shortage of maternal care providers, many high-income countries have turned to midwives to fill the gap in care that pregnant women face (Commonwealth Fund, 2023). Midwives, who are trained to manage lower-risk, non-surgical pregnancies, are a common alternative to obstetrician-gynecologists (OB-GYNs), who typically focus on higher-risk pregnancies and surgical procedures. Together, they help more women give birth in safe environments by implementing safe birthing practices, ultimately decreasing the maternal mortality rate.

The U.S., Canada, and Korea are the few high-income countries whose maternal care workforces do not primarily consist of midwives **(Fig 2)**. In the U.S. specifically, this can be attributed to three primary factors: federal laws that limit midwife scope of practice, differing opinions between physicians and midwives, and the late 19th-century shift from community-based to hospital-based care (Niles & Zephyrin, 2023). Due to the small number of midwives in the U.S., most insurance plans do not cover their services; as a result, the ratio of licensed healthcare professionals to mothers in need of aid is exceptionally low at only 16 providers per 1,000 live births. A smaller maternal care workforce can make it more difficult for mothers to receive the care they require for safe, low-risk pregnancies.

Maternal Leave

While the factors influencing maternal mortality rate primarily concern the period before and during pregnancy, maternal leave after birth also plays a crucial role (Jou et al., 2018). In 2019, the WORLD Policy Analysis Center calculated an average length of 29 weeks of paid leave among the countries with a national paid maternity leave **(Fig. 3)**. However, seven countries worldwide do not mandate paid maternity leave: the U.S., Palau, the Marshall Islands, Micronesia, Papua New Guinea, Nauru, and Tonga (Miller, 2021).

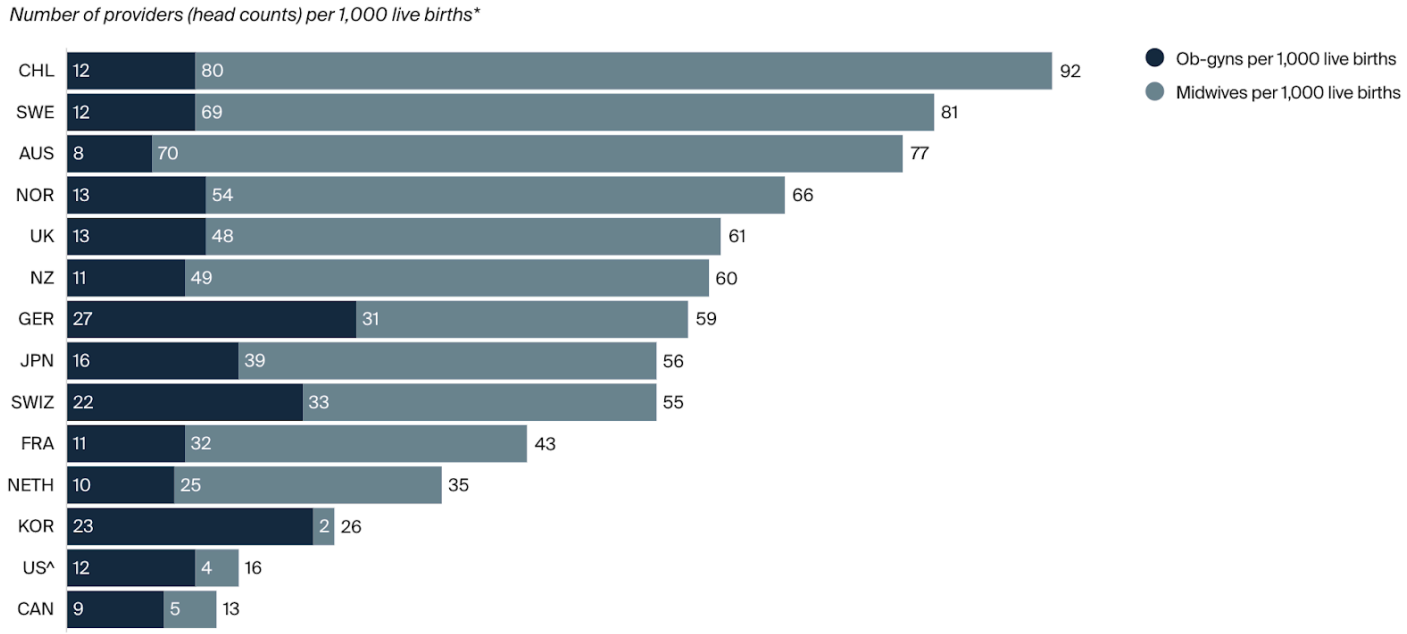

Figure 2. 2023 ratio of OB-GYNS to midwives in the maternal care workforce for various high-income countries (The Commonwealth Fund, 2024).

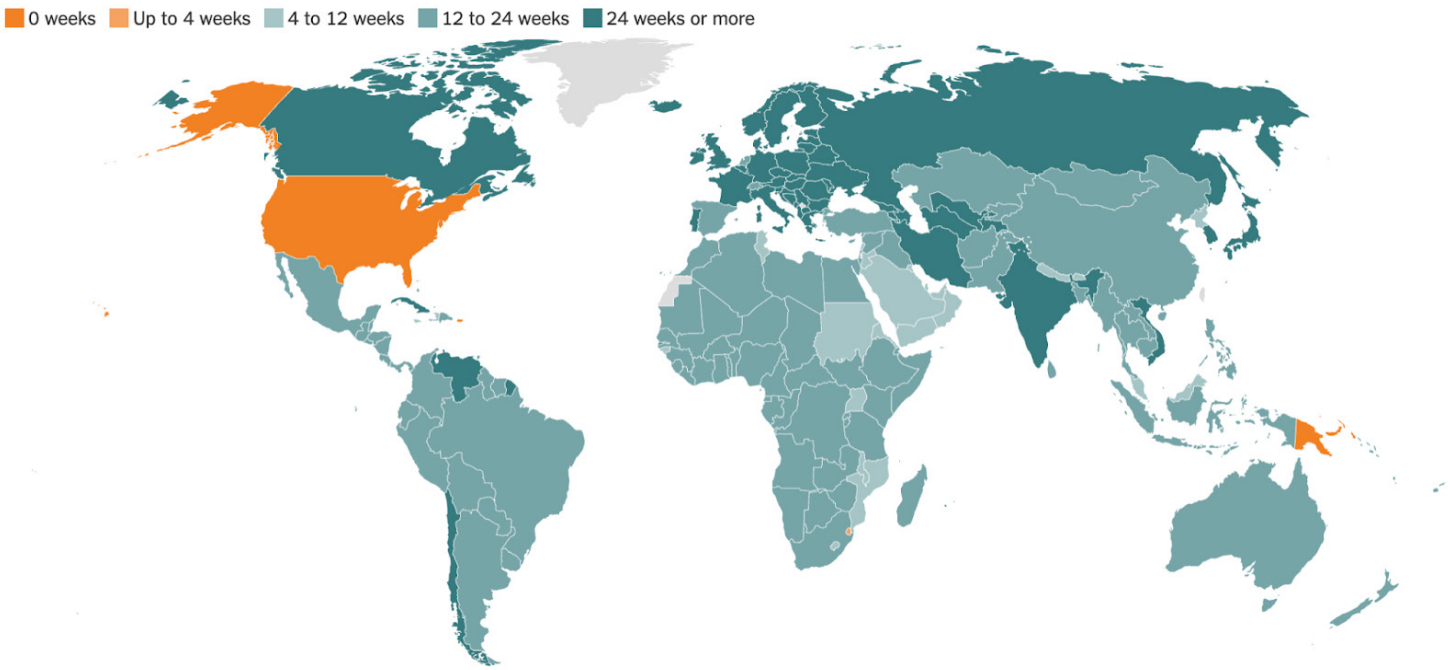

Figure 3. Worldwide paid leave for mothers (New York Times, 2021).

The absence of guaranteed maternity leave has multiple potential impacts on mothers; for example, many mothers return to work earlier than is healthy due to financial and career burdens. Maternal mortality includes deaths that occur up to 42 days after giving birth (World Health Organization, n.d.), some of which are caused by mental or physical overextension. This ultimately impacts mothers from disadvantaged backgrounds the most, compounding their already challenging circumstances; for instance, lower-income mothers may feel obligated to return to work early in an attempt to establish financial stability for their newborns, thereby placing their own health at further risk.

Conclusion

Most high-income countries have succeeded in maintaining low maternal mortality rates through policies expanding healthcare access, midwives, and maternal leave. If the U.S. were to implement similar policies, its maternal mortality rate may decrease once again.

For example, the Netherlands offers a child-raising assistance program called kraamzorg, which operates through the Dutch national healthcare insurance program (ACCESS NL, n.d.). Kraamzorg provides in-home support for individuals who assist with baby care, household tasks, and health monitoring for both mother and child. Mothers are eligible for up to 49 hours of the program over ten days immediately after giving birth. Kraamzorg alleviates many newfound stressors (e.g., childcare and home cleanliness) and may decrease maternal mortality rates by advising healthy lifestyle habits and assisting with tasks that could burden a postpartum body.

Another potential policy model for the U.S. is Australia's Mother Baby Units (MBUs). Though offered only by select hospitals, stays in MBUs are covered under Australian national healthcare. In these hospital units, from late pregnancy until the baby takes their first steps, specialized care is offered for mothers with mental health concerns. Mothers participate in various treatments including individual counseling, group therapy, and nursing care (Department of Health, Western Australia, 2024). This approach of recognizing and addressing maternal mental health may have the potential to significantly reduce maternal mortality in the U.S.

Continued research on the causes and factors of the maternal mortality rate is key to creating more effective policies in the U.S. By addressing root causes, investigators and policymakers can develop lasting solutions, decreasing the maternal mortality rate to its previous low. Without policy changes, the maternal mortality rate may continue to increase, and pregnancy will remain a dangerous process in the U.S., a reality with wide-reaching impacts on countless families and communities. Motherhood is considered one of the most beautiful journeys on Earth—it should not also come with deadly consequences.

References

Abortion and your Rights. MSI Reproductive Choices UK. www.msichoices.org.uk/abortion/considering-an-abortion/abortion-and-your-rights/.

Antoine, Clarel, Bruce K. Young (2020). Cesarean section one hundred years 1920–2020: the Good, the Bad and the Ugly. Journal of Perinatal Medicine. www.degruyter.com/document/doi/10.1515/jpm-2020-0305/html?lang=en.

Dattani, Saloni (2024). The Rise in Reported Maternal Mortality Rates in the US is Largely due to a Change in Measurement. Our World in Data. www.ourworldindata.org/rise-us-maternal-mortality-rates-measurement.

Decker, Samdra (2012). In 2011 Nearly One-Third Of Physicians Said They Would Not Accept New Medicaid Patients, But Rising Fees May Help. Health Affairs. www.healthaffairs.org/doi/10.1377/hlthaff.2012.0294.

Department of Health, Western Australia (2024). Mother Baby Unit. www.kemh.health.wa.gov.au/Womens-Health/Mental-Health/Mother-baby-unit

Gunja et al. (2024). Insights into the U.S. Maternal Mortality Crisis: An International Comparison. The Commonwealth Fund. www.commonwealthfund.org/publications/issue-briefs/2024/jun/insights-us-maternal-mortality-crisis-international-comparison.

Gunja, Munira et al. (2023). The Cost of Not Getting Care: Income Disparities in the Affordability of Health Services Across High-Income Countries. The Commonwealth Fund. www.commonwealthfund.org/publications/surveys/2023/nov/cost-not-getting-care-income-disparities-affordability-health#:~:text=Roughly%20one%20in%20five%20adults,to%20accessing%20mental%20health%20care.

Hoyert, Donna. (2024). Maternal Mortality Rates in the United States, 2022. Center for Disease Control. www.cdc.gov/nchs/data/hestat/maternal-mortality/2022/maternal-mortality-rates-2022.pdf.

Jou, Judy et al. (2016). Paid Maternity Leave in the United States: Associations with Maternal and Infant Health." Maternal and Child Health Journal. Vol. 22, 216-225. www.pubmed.ncbi.nlm.nih.gov/29098488/.

"Kraamzorg (postnatal maternity care) in the Netherlands." ACCESS NL. www.access-nl.org/healthcare-netherlands/having-a-baby/kraamzorg-postnatal-care/what-is-kraamzorg/.

Maternal deaths. World Health Organization. www.who.int/data/gho/indicator-metadata-registry/imr-details/4622.

Miller, Claire (2021). The World 'Has Found a Way to Do This': The U.S. Lags on Paid Leave. The New York Times. www.nytimes.com/2021/10/25/upshot/paid-leave-democrats.html.

Niles, P. Mimi, and Laurie C. Zephyrin (2023). "How Expanding the Role of Midwives in U.S. Health Care Could Help Address the Maternal Health Crisis." The Commonwealth Fund. www.commonwealthfund.org/publications/issue-briefs/2023/may/expanding-role-midwives-address-maternal-health-crisis.

Say, Lale, et al. (2014). Global Causes of Maternal Death: a WHO Systematic Analysis. The Lancet. 2(6). www.thelancet.com/journals/langlo/article/PIIS2214-109X(14)70227-X/fulltext.

Tikkanen, Rossa et al. (2020). International Health Care System Profiles: United States. The Commonwealth Fund. www.commonwealthfund.org/international-health-policy-center/countries/united-states.

Tikkanen, Rossa et al. (2020). Maternal Mortality and Maternity Care in the United States Compared to 10 Other Developed Countries. The Commonwealth Fund. www.commonwealthfund.org/publications/issue-briefs/2020/nov/maternal-mortality-maternity-care-us-compared-10-countries.

(1999). Achievements in Public Health, 1900-1999: Healthier Mothers and Babies. Center for Disease Control. www.cdc.gov/mmwr/preview/mmwrhtml/mm4838a2.htm.

(2023). Universal health coverage (UHC). World Health Organization. www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc)#:~:text=Universal%20health%20coverage%20(UHC)%20means,Goals%20(SDGs)%20in%202015.

(2023). European Abortion Laws: A Comparative Overview. Center for Reproductive Rights. reproductiverights.org/wp-content/uploads/2020/12/European-abortion-law-a-comparative-review.pdf.

Texas Health & Safety Code § 170A (2023). Retrieved from https://statutes.capitol.texas.gov/Docs/HS/htm/HS.170A.htm.