



The deVeber Institute
for Bioethics and Social Research

MATERNAL AND INFANT MORTALITY: A GLOBAL PERSPECTIVE

Complications: Abortion's Impact on Women Chapter 2, 3rd edition

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KEY POINTS

- Based on official statistics, four countries that have banned abortion in the past two decades (Poland, Chile, El Salvador, Nicaragua) as well as two countries that have significantly tightened their abortion laws (Hungary and Russia) have experienced remarkable improvements in maternal and infant health
- Countries where legal abortion has long been unavailable, or only recently become available (Chile, Ireland, Egypt, Uganda, Bangladesh, Afghanistan, Indonesia, Mexico, Malta) have done significantly better at maintaining or improving maternal and infant health than neighbouring countries where abortion is legal on request.
- The record of the U.S., the UK, South Africa, India, Cambodia and Nepal, where abortion is widely permitted, has been generally worse than nearby countries where there is legal protection for the unborn.
- The keys to reducing maternal and infant mortality include
 - Skilled attendance at birth
 - Improved education for women
 - Emergency obstetric care (including caesarean sections)
 - Transportation for emergency obstetric care
 - Community outreach
 - Improved referral systems

INTRODUCTION

Maternal mortality is generally defined as “the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the site or duration of pregnancy, from any cause related to or aggravated by the pregnancy or its management.”¹ World-wide maternal mortality has declined significantly over the past three decades or more, from an estimated 385 deaths per 100,000 live births in 1990 to 197 per 100,000 in 2023. This is a 49 per cent reduction.² The leading causes of maternal mortality are hemorrhage (bleeding) and hypertension (high blood pressure).³ Unsafe abortion is defined as “a procedure for terminating an unintended pregnancy carried out either by persons lacking the necessary skills or in an environment that does not conform to minimal medical standards, or both.”⁴ Unsafe abortion has been labelled as a significant contributor to maternal mortality worldwide. The World Health Organization (WHO) has estimated that every year between 60,000 and 75,000 maternal deaths are caused by

¹ World Health Organization, <http://www.who.int/healthinfo/statistics/indmaternalmortality/en/index.html>.

² World Health Organization. Fact Sheets. *Maternal Mortality*. 7 April 2025.

³ Khan KS, Wojdyla D, Say L, Gulmezoglu AM, Paul FA. WHO analysis of causes of maternal death: a systematic review. *The Lancet* 2006 April; 367(9516) p.1072.

⁴ Department of Reproductive Health and Research, World Health Organization. *Unsafe abortion: global and regional estimates of incidence of unsafe abortion and associated mortality in 2008*. 6th ed., World Health Organization, 2011; p. 2.

unsafe abortion, or about thirteen per cent of all maternal deaths worldwide. They have further estimated that five million additional women require medical care as a result of unsafe abortions.⁵ It would seem that legalized abortion would go a long way towards reducing the health burden of unsafe abortion, thereby reducing maternal mortality in general.⁶

However, the relationship between legality and safety is not so clear. Ninety-eight per cent of what WHO calls ‘unsafe abortions’ occur in developing countries, since industrialized countries tend to have more permissive abortion laws.⁷ One study attempts to link high MMR to countries with restrictive laws – nevertheless, the author also notes that “countries in any of the six categories that have a high mortality ratio due to unsafe abortion are likely to be those with the least effective and accessible health care services, making complications and deaths from unsafe abortion more likely.”⁸ In other words, the countries that have the most deaths from abortion also tend to be the countries that have worse health care in general, higher levels of maternal mortality and mortality in general, and lower incomes than countries with low levels of abortion-related death. What is surprising is that for many countries, the link between legal abortion and improved maternal mortality, even MMR related to abortion, is the reverse of what its advocates claim. Countries that have legalized abortion such as South Africa, India, Nepal, Cambodia and Guyana have not seen the predicted maternal health benefits. By contrast, several countries that disallow abortion, such as Chile, El Salvador, Nicaragua, Egypt, Bangladesh, Afghanistan, Indonesia, Mexico (until recently) and Uganda, have seen significant reductions in maternal mortality. The major factors involved are improvements in general maternal care, especially in emergency obstetric care (EmOC), the attendance of skilled health workers at birth, and advances in women’s status and education. Provision of safe, legal abortion has not been a factor in these countries’ success. Moreover, research on abortion that refers to high levels of unsafe abortions and subsequent deaths contains various limitations that undermine its conclusions. Estimates of abortion incidence and complications due to them can be very difficult to arrive at for some developing countries owing to a dearth of recorded data, and so researchers end up having to make assumptions and extrapolations from the little data they are able to collect. In addition, distinguishing complications due to spontaneous abortions from those due to induced abortions is extremely difficult, and some researchers make dubious assumptions which in turn affect their numbers.⁹

As we shall see, there is abundant evidence that legalized abortion is not a requirement for improving women’s health. Several countries have already adopted effective means of

⁵ Department of Reproductive Health and Research, World Health Organization 2008.

⁶ Singh S. Hospital admissions resulting from unsafe abortion: estimates from 13 developing countries. *The Lancet* 2006 November; 368(9550): 1887-92; Johnston HB, Gallo MF, Benson J. Reducing the costs to health systems of unsafe abortions: a comparison of four strategies. *Journal of Family Planning and Reproductive Health Care* 2007; 33(4): 250-257.

⁷ Dabash R, Rhoudi-Fahimi F. Abortion in the Middle East and North Africa. Population Reference Bureau, 2008; p. 1.

⁸ Berer M. Global Perspectives – National Laws and Unsafe Abortion: The Parameters of Change. *Reproductive Health Matters* 2004 November; 12(24 Supplement): 1-8, p. 4.

⁹ Prada, E. et al. *Abortion and Postabortion Care in Uganda: A Report from Health Care Professionals in Health Facilities*. Guttmacher Institute, 2005, p. 10. Berer 2004. See n. 8, pp. 1-8.

reducing maternal deaths and advancing maternal health, without adding abortion to the mix. Given the countless documented problems with the abortion procedure even where it is legal and supposedly “safe”, and given the evidence presented below that maternal health initiatives work best without an abortion component, the conclusion is inescapable: the case for including abortion in maternal health initiatives is unproven.

SOUTH AMERICA – THE CASE OF CHILE

Chile has become a focus for studies on maternal health. Compared to other countries in the Americas, it has one of the lowest rates of maternal mortality.¹⁰ Abortion was also completely illegal in Chile between 1989 and 2017.¹¹ In the half-century up to 2017, Chile experienced a major decrease in maternal health mortality, indicating that legalized abortion is not necessary to achieve a low maternal mortality ratio. Similar findings have been observed in two Central American countries that have recently made abortion illegal: El Salvador and Nicaragua.¹² Chile is a country that has undergone significant changes to its health care services following a reform in the 1980s. The government substantially increased the funding of services in order to achieve universal coverage and make health services more accessible to the public.¹³ These reforms, plus increased education for women, helped greatly reduce the maternal mortality ratio.¹⁴ Furthermore, Chile furnishes an excellent case study of the experience of maternal and abortion mortality after the complete banning of induced abortion.¹⁵ It is also instructive to compare Chile with other South American countries that allow abortion on request, such as Guyana.¹⁶

Chile and Guyana: A Statistical Comparison

In a similar span of time, Guyana and Chile have adopted very different abortion laws, providing two interesting case studies. Induced abortion was legal in Chile from 1931 to 1988, but only to save the life of the mother. In 1989, it was made illegal in all cases.¹⁷ In Guyana,

¹⁰ Ruiz-Rodríguez M, Wirtz VJ, Nigenda G. Organizational elements of health service related to a reduction in maternal mortality: The cases of Chile and Colombia. *Health Policy* 2009 November; 90(2-3): 149-155.

¹¹ Population Division of the United Nations Secretariat. *Abortion Policies: A Global Review – Chile*. United Nations Population Division Department of Economic and Social Affairs, 2002. Online edition: <http://www.un.org/esa/population/publications/abortion/index.htm>

¹² Leiva R. Illegal abortion and safety: the case of El Salvador. (Letter in response to “Transparency in the delivery of lawful abortion services” by Rebecca J. Cook) *Canadian Medical Association Journal* (February 3, 2009):http://www.cmaj.ca/content/180/3/272/reply#cmaj_el_53631?sid=e3298cf7-d9ea-4e90-9711-ec808ccf37ae; Mendieta W, Bohemer L, Cabrera RJ. Nicaragua and Abortions (Letter). *Washington Times*. Dec. 20, 2007.

¹³ Thomas J. Bossert, Ph.D., and Thomas Leisewitz. Innovation and Change in the Chilean Health System. *N Engl J Med* 2016; 374:1-5. January 7, 2016, DOI: 10.1056/NEJMp1514202. See also Population Division of the United Nations Secretariat. *Abortion Policies: A Global Review*. United Nations Population Division Department of Economic and Social Affairs, 2002. Online edition: <http://www.un.org/esa/population/publications/abortion/index.htm>.

¹⁴ Koch E, et al. *PLoS ONE* 2012 May; 7(5):e36613; Schuberg K. ‘Abortion Ban Does Not Mean More Maternal Deaths, Chilean Study Finds. *CNS News*. 25 July 2012. <http://cnsnews.com/news/article/abortion-ban-does-not-mean-more-maternal-deaths-chilean-study-finds>.

¹⁵ Leiva. See n. 12.

¹⁶ Koch et al. See n.14.

¹⁷ *Ibid*.

abortion was completely prohibited by the Criminal Law Act until 1995, when it was made legal on request.¹⁸ A study published in *The Lancet* provides estimates of MMRs between 1980 and 2008 for 181 countries, and plots their trends.¹⁹ Chile had 70 maternal deaths per 100,000 live births in 1980, falling to 21 deaths per 100,000 live births in 2008, a drop of 70 per cent.²⁰ It then remained stable until 2015, when the rate was recorded as 22 per 100,000 live births.²¹ Guyana, by contrast, had a much higher MMR of 216 per 100,000 live births, but it went even higher, reaching 229 per 100,000 live births in 2015.²² Thus, with a complete ban on abortion, Chile has been able to achieve and maintain a much lower MMR than Guyana, which continues to experience very serious maternal health problems. Chile can also be analyzed as a singular case of maternal and abortion mortality before and after the complete banning of abortion.²³ A recent study assessed time series of both maternal and abortion mortality ratios from 1960 to 2007.²⁴ The MMR was highest in 1961 (294 per 100,000 live births), and 34 per cent of maternal deaths were due to abortion. Over the entire period, however, the MMR decreased by 94 per cent, and abortion mortality decreased by 98 per cent (from 93 to less than two per 100,000 live births). Far from interrupting these decreases in maternal mortality, the complete banning of abortion in 1989, if anything, accelerated them.²⁵ After 1989, the MMR fell by over half. The abortion mortality ratio fell from 16.5 to 1.7 per 100,000 live births – a drop of almost 90 per cent. Therefore, it is clear that the complete ban on abortion in Chile presented no hindrance to steady improvements in maternal and infant health.

Discussion of Chile's Success

Chile has achieved striking success in improving maternal health. Furthermore, very little of what maternal mortality remains is due to abortion.²⁶ Out of the 44 maternal deaths in Chile in 2007, four were attributed to abortion. Of these four, two were due to ectopic pregnancy complications, and two were unspecified.²⁷ Thus, abortion has had little adverse impact on improving maternal mortality levels. Why has a relatively poor country like Chile achieved such a dramatic success in improving maternal health and reducing maternal mortality from induced abortion? Education is a critical factor. Researchers have observed "...a direct association between women's education levels and declining MMRs."²⁸ This finding was reaffirmed in a preliminary study by Koch on the impact of abortion legalization on maternal mortality.

¹⁸ Ibid.

¹⁹ Hogan MC, et al. Maternal Mortality for 181 countries 1980-2008: a systematic analysis of progress toward Millennium Development Goal 5." *The Lancet* 2010 April; 375(9726): 1609-1623.

²⁰ Ibid.

²¹ World Health Organization (WHO), Global Health Observatory (GHO), Country Views, data.2017.

²² Hogan et al., p. 1615 (see n. 19); WHO, Global Health Observatory, Country Views. 2017; *Maternal mortality in 1990-2015*. WHO, UNICEF, UNFPA, World Bank Group, and United Nations Population Division Maternal Mortality Estimation Inter-Agency Group: GUYANA.

²³ Koch. See n.14.

²⁴ Leiva. See n. 12.

²⁵ Ibid.

²⁶ Koch. See n.14.

²⁷ Ibid.

²⁸ Gonzalez R et al. Tackling Health Inequities in Chile: Maternal, Newborn, Infant, and Child Mortality Between 1990 and 2004." *American Journal of Public Health* 2009; 99(7): 1220-1226, p. 1225.

Increased education for women seems to have the greatest impact on maternal mortality reduction, with decreasing MMRs corresponding to women's increased years of education. Education was also associated with a decreasing fertility rate and an improving quality of health care facilities.²⁹ Other factors, such as improved care before delivery, delivery by trained birth attendants and emergency obstetric care, all play an important role in overall maternal health.³⁰ In the words of Ruiz-Rodriguez and colleagues, "...there is clear evidence that – when adjusting for country income level – provision of, and access to, maternal health care services, particularly emergency obstetric care, are associated with a reduction in maternal mortality."³¹ Ruiz-Rodriguez and colleagues also found that the quality of maternal care was directly influenced by the amount of training received by birth attendants and maternal care providers. In Chile, midwives must complete a four-year university degree, and by 2009, a health professional was present at over 90 per cent of births in the country.³² In addition to proper training for health providers, it is essential that these providers be available throughout the country, not just in urban clinics. By 1992, in Chile, "...the midwife was one of the professional health cadres that was most closely correlated with the geographic distribution of the population."³³ Therefore, geographic accessibility to services and having well-trained birth attendants are crucial factors in maintaining excellent maternal health in Chile. There is no better summary of the reasons for Chile's success in reducing maternal mortality than that provided by Koch, Thorp and colleagues:

Taken together, the Chilean natural experiment over the last fifty years suggests that the progress on maternal health in developing countries is a function of the following factors: an increase in the educational level of women, complementary nutrition for pregnant women and their children in the primary care network and schools, universal access to improved maternal health facilities (early prenatal care, delivery by skilled birth attendants, postnatal care, availability of emergency obstetric units and specialized obstetric care); changes in women's reproductive behaviour enabling them to control their own fertility; and improvements in the sanitary system - i.e. clean water supply and sanitary sewer access. Furthermore, it is confirmed that women's educational level appears to have an important modulating effect on other variables, especially promoting the utilization of maternal health facilities and modifying the reproductive behaviour. Consequently, we propose that these strategies outlined in different MDGs [Millennial Development Goals] and implemented in different countries may act synergistically and rapidly to decrease maternal deaths in the developing world.³⁴

Nowhere in their study do the authors suggest legalizing abortion as a way of further reducing maternal deaths.

²⁹ Leiva. See n. 12.

³⁰ Ibid.

³¹ Ruiz-Rodríguez et al. See n. 10, p. 150.

³² Ibid, p.150.

³³ Ibid, p.152.

³⁴ Koch, Thorp et al. See n. 14.

The example of Chile suggests that other poor countries are capable of similar improvements. Gonzalez and colleagues note that “the observed decreasing mortality trends suggest that increasing access to health care services among populations most in need can translate into significant reductions in maternal and child mortality.”³⁵

A few years ago, Chile slightly relaxed its absolute ban on abortion. In 2017, it decriminalized abortion on three grounds: (i) risk to the pregnant woman's life, (ii) fetal nonviability, and (iii) rape or incest. All abortions had to be performed by licensed physicians in facilities with high-risk obstetric units. At the same time, the right of conscientious objection to assisting at an abortion was extended to hospitals and other healthcare institutions as well as individual medical personnel. A high number of institutions and physicians claimed that right, and so it remains very difficult to obtain a legal abortion.³⁶

All attempts since then to loosen restrictions on abortion have failed, including a constitutional referendum in September 2022, which would have guaranteed easier access to abortion. By a large majority, the people of Chile made it clear that they did not want to make access to abortion any easier than it was.³⁷ It is too early to know what impact this will have on maternal and infant health.

EL SALVADOR AND NICARAGUA

In 1997, a new penal code was enacted in El Salvador that removed all grounds for induced abortion. Before the criminalization of abortion, the MMR was 155 per 100,000 live births. By 2006, it was 71 per 100,000 live births, a drop of more than 50 per cent.³⁸ By 2015, it was down to 54 per 100,000, just over one-third of what it had been less than 20 years earlier.³⁹ The descent has continued: by 2020, the most recent year for which statistics are available, it was down another 20% to 43.⁴⁰

A 2006 study carried out by the Ministry of Health in El Salvador determined that out of 2,468 maternal deaths, only six were connected to abortion. They could have been easily prevented by providing education and resources for the pregnant women in question.⁴¹

³⁵ Gonzalez et al. See n. 27, p. 1224.

³⁶ Daniel FM Suárez-Baquero et al. 'Failure of the Law to Grant Access to Legal Abortion in Chile'. *Health Equity*, 2024 Mar 20;8(1):189–197. doi: 10.1089/heq.2023.0050.

³⁷ Fuentes, Cristóbal (5 April 2022). "Ya hay fecha: plebiscito de salida para votar una nueva Constitución será el 4". *La Tercera*.

³⁸ Mendieta et al. See n. 12.

³⁹ WHO, 2017. See n. 21.

⁴⁰ El Salvador Maternal Mortality Rate 2020-2025. <https://www.macrotrends.net/global-metrics/countries/slv/el-salvador/maternal-mortality-rate#:~:text=El%20Salvador%20maternal%20mortality%20rate%20for%202020%20was%2043.00%2C%20a,a%207.14%25%20increase%20from%202016>. Accessed 22 Apr. 2025.

⁴¹ Mendieta et al. See n. 12.

The experience of Nicaragua has been similar. In November 2006, the government of Nicaragua passed an absolute ban on abortion. By 2015 maternal mortality had declined by 21 per cent.⁴² The majority of maternal deaths were caused by treatable conditions such as post-birth hemorrhaging.⁴³ The experiences of El Salvador and Nicaragua provide additional evidence that countries that ban abortion outright do not experience increased maternal mortality; on the contrary, improvements in maternal health continue to accelerate.

MEXICO

Until 2007, Mexico had one of the strictest abortion laws in the world. For all that, infant mortality declined steadily for almost half a century prior to that year. In 1963, it was 130 per 1000 live births. By 2007, it was down to 18.⁴⁴ Under the strict law maternal mortality also declined – by almost half between 1990 and 2005, when it fell by almost half, from 90 to 54 per 100,000 live births.⁴⁵ In 2007, each of the 32 Mexican states was granted the power to pass its own abortion legislation. Most states strictly limited abortion access, the notable exception being the state of Mexico City, which decriminalized abortion up to 12 weeks of gestation. A subsequent study in the *British Medical Journal* compared the abortion experience in the states with strict abortion laws with those with permissive laws.⁴⁶ Its astounding finding was that states with more restrictive abortion legislation experienced approximately twenty-five per cent lower MMR than more permissive states.⁴⁷ The induced abortion mortality ratio was almost 50 per cent lower. These findings contradict the common perception that more restrictive abortion legislation must increase maternal mortality since it necessarily increases the resort to illegal abortion, while more permissive laws must reduce the incidence of illegal abortion. Why is this not so? The authors noted that other factors, such as higher female literacy, skilled attendance at birth, clean water and sanitation, as well as lower rates of inter-partner violence “...appeared to have a more favourable distribution in these [the 18 less permissive] states” than in the permissive states. It would seem that in the restrictive jurisdictions, the authorities take more seriously the need to protect and promote the health of mothers and young children. The experience in the Mexican states with restricted access to abortion is thus similar to that of Chile.

⁴² In 2005, the year before abortion was banned, MMR was 190 per 100,000 live births. Ten years later (2015) it had dropped by 21% to 150 per 100,000 live births. Maternal mortality in 1990-2015 WHO, UNICEF, UNFPA, World Bank Group, and United Nations Population Division Maternal Mortality Estimation Inter-Agency Group: NICARAGUA.

⁴³ Mendieta et al. See n. 12.

⁴⁴ <http://www.indexmundi.com/facts/mexico/mortality-rate>.

⁴⁵ WHO. Maternal Mortality in 1990-2015: Mexico. http://www.who.int/gho/maternal_health/countries/mex.pdf?ua=1.

⁴⁶ Elard Koch et al. ‘Abortion legislation, maternal healthcare, fertility, female literacy, sanitation, violence against women and maternal deaths: a natural experiment in 32 Mexican states. *BMJ Open* 2015. doi:10.1136/bmjopen-2014-006013. <http://bmjopen.bmj.com.myaccess.library.utoronto.ca/content/5/2/e006013.long>.

⁴⁷ *Ibid.* (38.3 vs 49.6; $p < 0.001$).

Despite the patchy availability of induced abortion, the annual numbers rose to 1,040,000 by 2019, a much higher total than in the U.S., with its nearly three times greater population than Mexico.⁴⁸

Mexico's abortion law has been radically altered in recent years. In 2021, its Supreme Court ruled that criminalizing abortion was unconstitutional. Nevertheless, only 12 of the country's 32 states have since legalized abortion, and then only up to 12 weeks of pregnancy. In the other 20 abortion is still legal only in cases of rape or danger to the mother's life. There is no evidence to date that the decriminalization of abortion has led to an improvement in maternal or infant health in Mexico.

BANGLADESH

One of the very poorest, most densely populated countries in the world, Bangladesh also has one of the most restrictive abortion laws, allowing abortion only when the mother's life is at stake. Yet, between 1990 and 2024, it reduced its maternal mortality rate by seven times – from 569 to 85 per 100,000 live births.⁴⁹ It also reached and surpassed the Millennium Development Goals for reductions in infant mortality well ahead of time.⁵⁰ While wealthier women did benefit disproportionately from improvements in education, antenatal visits and skilled attendance at birth, the proportion of all women who were uneducated decreased by half between 1976-1980 and 2001-2005.⁵¹ Other improvements include the improvement of obstetric care and family planning,⁵² more community clinics, and upgrades in the training of medical personnel. In sum, '...the decline in maternal mortality coincided with government initiatives to shift provision of health services from home-based care to community clinics, and with major investment in health care that resulted in the upgrading of facilities that provide emergency obstetric care, training of

⁴⁸ Guttmacher Institute, Mexico country profile, 2022, <https://www.guttmacher.org/regions/latin-america-caribbean/mexico>. Jonathan Marc Bearak et al. 'Country-specific estimates of unintended pregnancy and abortion incidence: a global comparative analysis of levels in 2015–2019'. *BMJ Global Health*, vol. 7 (3), 23 Mar. 2022.

⁴⁹ Bangladesh: Maternal mortality ratio (per 100 000 live births).

https://dashboard.dghs.gov.bd/pages/dashboard_maternal_indicators.php

⁵⁰ Eyob Zere1, Yuki Suehiro, Aminul Arifeen, Loshan Moonesinghe, Sanchoy K Chanda and Joses M Kirigia. 'Equity in reproductive and maternal health services in Bangladesh'. *Int J Equity Health*. 2013 Nov 14. doi: 10.1186/1475-9276-12-90

<http://www.ncbi.nlm.nih.gov/myaccess.library.utoronto.ca/pmc/articles/PMC3842788/>

⁵¹ Mahbub Elahi Chowdhury, Roslin Botlero, Marge Koblinky, Sajal Kumar Saha, Greet Dieltiens, Carine Ronsmans. Determinants of reduction in maternal mortality in Matlab, Bangladesh: a 30-year cohort study. *The Lancet* 2007; 370: 1320–28.

http://journals2.scholarsportal.info/myaccess.library.utoronto.ca/pdf/01406736/v370i9595/1320_dorimmba3cs.xml

⁵² Janie Benson, Kathryn Andersen and Ghazaleh Samandari. 'Reductions in abortion-related mortality following policy reform: evidence from Romania, South Africa and Bangladesh'. *Reproductive Health*. 2011; 8: 39. Published online 2011 Dec 22 doi: 10.1186/1742-4755-8-39

<http://www.ncbi.nlm.nih.gov/myaccess.library.utoronto.ca/pmc/articles/PMC3287245/>

skilled birth attendants, and the strengthening of health education efforts.’⁵³ As the authors of an article in *The Lancet* have written:

Survey data from Bangladesh from 2001–10... show that maternal health is affected by factors both directly linked and indirectly linked to health services such as improved transportation, access to mobile telephone technology (and thus communication channels for information and social assistance), as well as education and socioeconomic status. An almost doubling in the proportion of girls with at least some secondary education is believed to be empowering, raising their potential to respond effectively to maternal complications and navigate the health-care system. The case of Bangladesh shows the need to look beyond the health-care systems when considering how to enact policies to reduce maternal mortality.⁵⁴

The record of this poor country on infant mortality is even more dramatic. According to the most recent UN figures, in 2023, Bangladesh experienced an infant mortality rate of 30.6. Compare this to the rate in 1990, when it was 146 per 1000. The nearly fivefold decline over the intervening 33 years has been continuous and uninterrupted.⁵⁵

All the research on Bangladesh points to a very clear conclusion: the impressive achievement of this very poor country in reducing maternal and infant mortality can be attributed to its concrete efforts to advance the education of its women and improve the health of its mothers and young children. It does not stem from any moves to widen access to abortion.

THE ACHIEVEMENTS OF EGYPT

Egypt provides another notable success story in the battle against maternal mortality. In a 1992-93 study, the country’s maternal mortality ratio was calculated at 174 for every 100,000 live births. Through a series of initiatives during the 1990s and later, the Egyptian government worked to improve maternal health care and women’s well-being. By 2023, the MMR had plunged by over 90 per cent, to 17 per 100,000 live births.⁵⁶

There was also a reduction in deaths due to induced abortion -- from the already low total of 13 (representing two per cent of maternal deaths) in 1992-93 to six (one per cent) in 2005, a

⁵³ P. Doskoch. Increased use of facilities helped reduce maternal mortality in Bangladesh. *International Perspectives on Sexual and Reproductive Health*. 40.4; Dec. 2014, p. 219. <http://www.guttmacher.org/>

⁵⁴ Leontine Alkema, Doris Chou, Daniel Hogan, Sanqian Zhang, Ann-Beth Moller, Alison Gemmill, Doris Ma Fat, Ties Boerma, Marleen Temmerman, Colin Mathers, Lale Say. Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. *The Lancet*. 387: 10017. 30 Jan-5 Feb. 2016. Pp. 462-474. Panel 2.

⁵⁵ Trends in under-five mortality rate in Bangladesh <https://data.unicef.org/country/bgd/>

⁵⁶ World Bank Group. Gender Data Portal. <https://genderdata.worldbank.org/en/economies/egypt-arab-rep>. Campbell O et al. National maternal mortality ratio in Egypt halved between 1992-93 and 2000.’ *Bulletin of the World Health Organization* 2005; 83 (6):462-471, p. 462.

decline of over 50 per cent, mirroring the overall decline in the country's maternal mortality ratio.⁵⁷

Egypt's improved infant mortality over the past 50 years has been similarly dramatic. From 168.7 infant deaths per 1000 live births in 1960, it fell by over 90 per cent to 16.1 deaths per 1000 live births in 2023.⁵⁸

Several factors contributed to both these declines. Crucially important was skilled attendance at birth. In addition, "the network of adequate essential obstetric care and primary health care facilities has been improved, and long distance to a hospital and lack of transportation are now less of a barrier to care."⁵⁹ These interventions had already begun in the mid-1980s, if not before, in Egypt. By the 1990s, the major avoidable factor causing maternal deaths was substandard care.⁶⁰

Again, maternal health service provision was crucial to this reduction and the increasing provision of skilled delivery. A real improvement in women's socioeconomic status and education during the previous twenty-five years has also been noted: "illiteracy among women aged fifteen and older declined thirteen percentage points; [the] gross enrolment ratio for basic and secondary education increased from 79 per cent in 1996 to 88 per cent in 2004; and enrolment in secondary education increased from 44.1 per cent in 1996 to 70.1 per cent in 2006."⁶¹

Abortion Law in Egypt

Abortion is illegal in Egypt except to preserve the life of the mother. Maternal mortality due to abortion is low and appears to have declined even faster than the general decline in MMR.⁶²

In brief, Egypt has succeeded in significantly reducing maternal mortality from abortion while maintaining a highly restrictive abortion law. The country's success stems from its advances in emergency obstetric care, attendance of skilled personnel during birth, and general improvements in women's education and wellbeing over half a century. Egypt is a stellar example of a poor country that has progressively bettered its women's health while remaining steadfast in its refusal to sanction induced abortion.

⁵⁷ Khadr Z. Monitoring socioeconomic equity in maternal health indicators in Egypt:1995-2005.' *International Journal for Equity in Health* 2009 November; 8(38).

⁵⁸ Infant Mortality Rate for Egypt 1960-2023. <https://fred.stlouisfed.org/series/SPDYNIMRTINEGY>.

⁵⁹ Campbell O et al. 'National maternal mortality ratio in Egypt halved between 1992-93 and 2000.' *Bulletin of the World Health Organization* 20005; 83 (6):462-471, p. 469.

⁶⁰ Khadr. See n. 58.

⁶¹ Ibid.

⁶² Yassin KM. Incidence and socioeconomic determinants of abortion in rural Upper Egypt. *Public Health* 2000; 114(4): 269-272, p. 270.

UGANDA

Uganda is one of the poorest countries in the world. As recently as 2006, only 40 per cent of births in Uganda were performed in a health facility, and postpartum care – critically important for maternal and child health – still leaves much to be desired.⁶³

Maternal mortality is among the highest in the world. Yet, in common with other poor countries that do not allow abortion, its MMR has fallen dramatically since 1990, from 687 to 153 in 2022, a drop of 78 per cent.⁶⁴

Uganda's progress in improving women's health is also reflected in its record in curbing its previously high infant mortality. Between 1950 and 2025, Uganda's infant mortality shrank from 155.7 to 36.7 deaths per live births, a decline of over 76 per cent.⁶⁵ Why has the rate tumbled so dramatically? Certainly not because of any increase in access to abortion. Induced abortion continues to be illegal in Uganda except to save the life of the mother. Uganda's declining infant mortality rate can be attributed to a combination of factors, including improved access to healthcare, increased education, especially for women, and better sanitation and water access.⁶⁶ Yet abortion in Uganda is illegal except to preserve the life or health of the mother.⁶⁷

We shall now examine one region within the country that has seen a large reduction in maternal mortality.

A Success Story: The District of Soroti

In 2001, the World Health Organization, in partnership with the local government, launched its "Making Pregnancy Safer" (MPS) initiative in Soroti, a very poor district with a maternal mortality rate much higher than the rest of the country.

The MPS initiative worked to implement an Emergency Obstetric Care (EmOC) referral system, placing ambulances at strategic locations to help with accessibility. In addition, they initiated extensive education efforts in the community, educating people to recognize warning signs of obstetric complications and the importance of EmOC care. This focus on EmOC and the implementation of the necessary referral system, "led to dramatic outcomes. Within five years, the MMR had plunged by more than 75 per cent."⁶⁸ All this was accomplished on a budget of US \$200,000.

⁶³ Uganda Bureau of Statistics (UBOS) and Macro International Inc. 2007. Uganda Demographic and Health Survey 2006. Calverton, Maryland, USA: UBOS and Macro International Inc., 2007; p. xxiv.

⁶⁴ Project, The Borgen (2022-01-11). "Maternal Mortality in Uganda".

⁶⁵ Uganda Infant Mortality Rate. https://www.macrotrends.net/global-metrics/countries/uga/uganda/infant-mortality-rate#google_vignette.

⁶⁶ [Uganda Ministry of Health. https://library.health.go.ug/sites/files/resources](https://library.health.go.ug/sites/files/resources). Accessed 4 April 2025..

⁶⁷ Population Division of the United Nations Secretariat, Abortion Policies: A Global Review – Uganda. United Nations Population Division Department of Economic and Social Affairs, 2002. Online edition: <http://www.un.org/esa/population/publications/abortion/index.htm>.

⁶⁸ World Health Organization. MPS: Making Pregnancy Safer – Implementing the MPS Initiative in Soroti district, Uganda. World Health Organization, 2010; p. 24.

The major lessons learned from such a success are twofold: the importance of Emergency Obstetrical Care and the involvement of the community. The Soroti district had a catch-phrase as the motto of their program: “for each mother, there must be a baby to go back with and for each baby, there must be a mother to go back home with.”⁶⁹

This success story is pertinent to the debate on abortion. All the gains in maternal health in Soroti were accomplished without legalizing abortion. Data from Latin America, Bangladesh and Egypt have already established that impressive gains in reducing maternal deaths from abortion have been achieved through improvements in the health system, without any legalization of abortion. Other factors that will improve maternal health in Uganda are an attack on poverty and malaria, which take a heavy toll, particularly on mothers, as well as better treatment of women suffering from complications after childbirth.⁷⁰ None of these measures requires the legalization of abortion.

SOUTH AFRICA AND THE LEGALIZATION OF ABORTION

Overview

In 1994, South Africa held its first fully democratic elections. One of the new regime’s early priorities was improving maternal and child health, resulting in the construction of more than 1300 primary health-care clinics, and the removal of user fees for many maternal and child health services.⁷¹ There has been an increase in deliveries in the presence of a skilled attendant; most women receive at least one antenatal visit by a health professional, and they have their babies at a health facility.⁷² Despite these improvements in the health system, maternal and child mortality not only remain high in South Africa, but have risen alarmingly since 1990. In that year, maternal mortality was 108 per 100,000 live births, but by 2015 it was up to 138 – a rise of almost 30 per cent.⁷³ It then shrank again, but in 2023/24 it shot back up to 100.6 per 100,000 live births, almost cancelling out the gains of the previous thirty-five years.⁷⁴

⁶⁹ Bulletin of the World Health Organization: Maternal Health care wins district vote in Uganda. World Health Organization. 24 July 2012. <http://www.who.int/bulletin/volumes/84/11/06-031106/en/index.html>.

⁷⁰ Government of Uganda: UNGASS Country Progress Report January 2008-December 2009. United Nations Development Programme, 2010; p. 45; Mbonye et al. See n.53, p.289; Lalonde AB et al. ‘The FIGO Save the Mothers Initiative: The Uganda-Canada collaboration.’ *International Journal of Gynaecology and Obstetrics* 2003 February; 80(2): 204-212, p. 210.

⁷¹ Chopra M et al. ‘Saving the lives of South Africa’s mothers, babies and children: can the health system deliver?’ *The Lancet* 2009 August; 374 (9692): 835-46.

⁷² *Ibid.*, p. 836.

⁷³ WHO. Maternal Mortality in 1990-2015: South Africa.

⁷⁴ Bomela, N.J. ‘Maternal mortality by socio-demographic characteristics and cause of death in South Africa: 2007–2015.’ *BMC Public Health* 20, 157 (2020). <https://doi.org/10.1186/s12889-020-8179-x>; DHIS, 11 Sept. 2024. Maternal mortality ratio in facilities in South Africa from April 2014 to March 2024.

Abortion Law in South Africa

Abortion law in South Africa has undergone two alterations.⁷⁵ Up to 1975, abortion was illegal except in the case of danger to the life of the mother. The Abortion and Sterilization Act of 1975 extended legal abortion to cover fetal abnormality, rape and incest, and the physical or mental health of the mother. In 1996, following intense debate, the South African parliament passed the Choice on Termination of Pregnancy Act, which permits abortion on request up to twelve weeks. From 13 to 20 weeks, abortion is permitted for the reasons specified under the 1975 Act, and also if “the continued pregnancy would significantly affect the social or economic circumstances of the woman.” After week twenty, abortion is permitted if two medical practitioners “are of the opinion that the continued pregnancy would endanger the woman’s life, would result in severe malformation of the foetus or would pose a risk of injury to the foetus.” All abortions must be performed in government-designated facilities, although up to the twelfth week, a midwife can perform the abortion. No spousal or parental consent is required, even for minors.

The 1996 Act gave South Africa the most permissive abortion law in Africa, and one of the most permissive in the world.⁷⁶

Maternal Mortality and Abortion in South Africa

According to a widespread belief, the legalization of abortion reduces the prevalence of unsafe abortion and thereby improves maternal health, while restricting access to abortion does the opposite.⁷⁷ There is only one problem: these assumptions and conclusions fly in the face of the well-documented facts.

The bitter reality is that the progress in reducing maternal mortality was *reversed* after abortion was legalized in 1996.⁷⁸ An extensive study by Fawcus and colleagues analyzed data on maternal deaths in the Cape Peninsula from 1953 until 2003. They found that there was “a sharp decline in the MMR starting in the 1950s and reaching its lowest level of 31.2 in the triennium 1987-1989. Since then, the MMR has risen again and markedly so since the late 1990s...”⁷⁹

There is no way of evading the reality that legalized abortion has led to few improvements in maternal health. The reason why the conventional wisdom is wrong is that the significance of other factors in improving maternal health is downplayed or overlooked.

⁷⁵ Population Division of the United Nations Secretariat. Abortion Policies: A Global Review – South Africa. United Nations Population Division Department of Economic and Social Affairs, 2002, <http://www.un.org/esa/population/publications/abortion/index.htm>.

⁷⁶ Buchmann E, Kunene B, Pattinson R. Legalized pregnancy termination and septic abortion mortality in South Africa. *International Journal of Gynaecology and Obstetrics* 2008 May; 101(2): 191-2

⁷⁷ Berer. See n.8, p. 4.

⁷⁸ WHO. Maternal Mortality in 1990-2015: South Africa.

⁷⁹ Fawcus SR et al. ‘A 50-year audit of maternal mortality in the Peninsula Maternal and Neonatal Service, Cape Town (1953-2002).’ *BJOG* 2005 September; 112(9): 1257-63, p.1260.

Improved Maternal Health: Other Factors

In South Africa, as elsewhere, the evidence indicates that overall improvements in health care and education are more significant to improving maternal health than legalized abortion. A study by Berer makes the following revealing admission: “Countries in any of the six categories that have a high mortality ratio due to unsafe abortion are likely to be those with the least effective and accessible health care services, making complications and deaths from unsafe abortion more likely.”⁸⁰

It has been shown, in South Africa and elsewhere, that decreasing maternal mortality depends on a variety of interdependent factors. One analysis of the most important factors in reducing MMR in sub-Saharan Africa found that skilled birth attendance was at the top of the list, with female literacy, health expenditure, Gross National Product, and a high life expectancy all holding a strong relationship with a lowered MMR.⁸¹ Yet despite a high-skilled birth attendance rate of 86 per cent, South Africa has witnessed almost no improvement in MMR over the past 35 years, indicating that skilled birth attendance by itself is not enough.⁸² Another study has also cited the development of midwifery in the home, the introduction of an ambulance service specifically for obstetric emergencies, and general improvements in the management of hypertensive disorders as contributing to the long-term decline in the MMR. The authors further note that developed countries have achieved declines in MMR thanks to the “ready availability of safe blood transfusions, antibiotics and oxytocics, as well as the improvement in general living standards...”⁸³ The evidence continues to accumulate that South Africa’s troubles in maternal health have to do with problems in the health care system.

To summarize, since the legalization of abortion in South Africa, complications resulting from abortions have not decreased. Illegal abortion seems to be just as widespread as it always was, judging by the persistence of complications from illegal abortions. Maternal mortality from all causes has continued to rise.

In sum, any touted gains in maternal mortality due to abortion are much less than claimed; moreover, complications from abortion remain high despite greater access to legal abortion. Thus, while the Union of South Africa has been presented as a poster child for the benefits of legal abortion in Africa, the country’s actual experience hardly inspires confidence in the supposed benefits of legal abortion for maternal health.⁸⁴ The fact is that South Africa’s

⁸⁰ Berer. See n. 8, p. 4.

⁸¹ Buor D, Bream K. ‘An Analysis of the Determinants of Maternal Mortality in Sub-Saharan Africa.’ *Journal of Women’s Health* 2004 October; 13(8): 926-38, p. 927.

⁸² Parkhurst JO et al. ‘Health systems factors influencing maternal health services: a four-country comparison.’ *Health Policy* 2005 August; 73(2): 127-138, p.131.

⁸³ Fawcus SR. ‘A 50-year audit of maternal mortality in the Peninsula Maternal and Neonatal Service, Cape Town (1953-2002)’. *BJOG* 2005 September; 112(9): 1257-63, p.1262.

⁸⁴ The experience of two other African countries appears to reinforce the conclusion that legalizing abortion does little to improve maternal health. Kenya and Ethiopia are among the poorest countries in the world. Kenya continues to have a restrictive abortion law. Despite a chaotic and impoverished health system maternal mortality is reported to have declined by close to one-third between 1989 and 2003. (Central Bureau of Statistics (CBS) [Kenya], Ministry of Health [Kenya], and ORC Macro. (2004). Kenya Demographic and Health Survey 2003, p. 237). In Ethiopia it has been difficult to discern trends in deaths from abortion, although one hospital experienced a

maternal mortality rate, unlike that of almost every other country in the world, has remained stubbornly high after the legalization of abortion.⁸⁵

SUMMARY: THE EXPERIENCE OF THE THIRD WORLD

Some thirty years ago, E. Papiernik carried out a sweeping historical survey of maternal mortality in industrialized countries from 1750 to the end of the last century.⁸⁶ What he found was that a decrease in maternal mortality coincided with an increase in modern cesarean sections and in the percentage of women giving birth in hospitals. From this, he deduced that progress in these two fronts holds out the best hope of realizing swift improvement in maternal mortality in the world's developing regions.

His argument is borne out by the analysis of this chapter. The factors that most strongly correlate with improvements in maternal mortality are the provision of emergency obstetric care (such as cesarean sections), skilled attendance at birth, and the education of women. Additional factors are community outreach and efforts to improve referral systems and transportation for emergency care.

Abortion is not a necessary component of any effort aimed at reducing maternal deaths. Chile, El Salvador, Nicaragua, until recently, some Mexican states, Bangladesh and Egypt have all witnessed impressive improvements in maternal health, including health after abortion, while maintaining stringent legal restrictions on abortion. While Uganda as a whole cannot boast the same success, efforts in the Soroti district prove that such success can be within the reach of even the poorest regions. All these examples show that the main factors affecting maternal mortality can and have been addressed without legalizing abortion. Incomplete data from Kenya and Ethiopia also appear to support this conclusion.

Further, it has been seen how South Africa's experience, hailed by many as an example of the positive effects of legalizing abortion, has hardly improved maternal mortality at all after the liberalization of its abortion law. Unlike Chile, which boasts ongoing improvements in maternal health after banning abortion, South Africa has gone in the opposite direction.

The leading causes of maternal death worldwide are hemorrhage and hypertension. The interventions required to improve maternal health are known and affordable. Proposing abortion as a solution for the developing world in its fight to reduce maternal mortality is not justified by the evidence, nor does it take into consideration the experience of those countries that have made significant gains in maternal health while declining to legalize induced abortion. Given that legalized abortion has had such an indifferent record, it would make far better sense to

significant increase in abortion fatality after abortion was legalized in 2005. (Gebrehiwot Y, and Liabsuetrakul T, 'Trends of abortion complications in a transition of abortion law revisions in Ethiopia', *Journal of Public Health*, vol. 31: 1 (2008): 81).

⁸⁵ For a detailed discussion of this subject see Angela Lanfranchi, Ian Gentles and Elizabeth Romg-Cassidy. *Complications: Abortion's Impact on Women*. 2nd edition. Toronto: The deVeber Institute for Bioethics and Social Research, 2018, pp. 34-42.

⁸⁶ Papiernik E. 'The role of emergency obstetric care in preventing maternal deaths: an historical perspective on European figures since 1751.' *International Journal of Gynecology and Obstetrics* 1995 October; 50(Supplement 2): S73-S77.

concentrate on those measures that have enjoyed proven success in reducing maternal mortality and improving maternal health.

EUROPEAN COMPARISONS

In Europe, there are three countries where induced abortion is not permitted: Ireland, Poland and Malta. Malta's maternal mortality rate shrank from 13 to 6 per 100,000 live births between 1990 and 2015, and then by another 50 per cent by 2020.⁸⁷ In human terms rather than percentages, this represents one death in 1990 and none from 2015 onward. Malta has a spotless record when it comes to maternal mortality.⁸⁸ Malta's infant mortality rate tumbled equally impressively, from 36.4 to 5.1 per 1000 live births between 1960 and 2015.⁸⁹ Ten years later, it had declined another 20 per cent, to 4.1 per thousand.⁹⁰

In 2023, Malta changed its abortion law very slightly: if the life of the pregnant woman is at risk, an abortion can occur after approval from a team of medical professionals and under specified conditions.⁹¹

Poland banned abortion in 1989, shortly after the fall of communism. Since that time, maternal mortality in that country has plunged by over four-fifths, infant mortality is down by almost two-thirds to 5.1, and the rate of premature births has dropped by well over a half.⁹² By 2015, Poland's maternal mortality was *more than thirty to eighty per cent lower* than its immediate neighbours, Hungary and Russia, where abortion was available on request, and rates of induced abortion remained very high.

⁸⁷ By 2020 Malta's MMR had shrunk to 3 per 100,000, a 50% decrease since 2015. Malta Maternal Mortality Rate 2000-2025. www.macrotrends.net. Retrieved 2025-04-07.

⁸⁸ WHO, *Maternal Mortality in 1990-2015: Malta*.

⁸⁹ World Bank, Infant Mortality Rate for Malta [SPDYNIMRTINMLT], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/SPDYNIMRTINMLT>, consulted Apr. 20, 2017.

⁹⁰ <https://www.macrotrends.net/global-metrics/countries/MLT/malta/infant-mortality-rate>. Consulted Apr. 29, 2025.

⁹¹ Criminal Code of Malta, Title VIII, Subtitle VII, Articles 241-243A.

⁹² In 1989 Poland's infant mortality rate was 19.1 per 1000 live births. By 2006 it had dropped to 6.0. Transformative Monitoring for Enhanced Equity (TransMonEE 2012 database), UNICEF Regional Office for CEECIS countries.

Table 2.1 **Maternal Mortality per 100,000 live births in Eastern Europe**

Year	Poland	Hungary	Russian Federation
1990	17	24	63
2015	3	17	25
2022	2	15	13

Sources: WHO. *Maternal Mortality in 1990-2015*. Maternal Death Rate in Russia 2020-2022. Statista. *Maternal mortality ratio Comparison - The World Factbook*. <https://www.cia.gov/the-world-factbook/field/maternal-mortality-ratio/country-comparison/>

The reduction in premature births is significant, since premature children are prone to all sorts of medical and social afflictions. The most serious of these is a higher chance of being born with cerebral palsy than full-term babies. In the late 1980s, around a hundred children per year were dying before the age of five from cerebral palsy in Poland. By 2006, the number was down to five or ten per year – a greater than 90 per cent drop.

In 2020-25, Poland's MMR continued to shrink, reaching 2.0 per 100,000, one of the lowest in the world.⁹³

Table 2.2 **Cerebral Palsy deaths in Poland, 1989-2006**

Years	CP deaths* (under 5 years old)	Live births	CP rates per 100,000 live births

⁹³ World Bank. <https://www.macrotrends.net/global-metrics/countries/pol/poland/maternal-mortality-rate>>Poland Maternal Mortality Rate 2000-2025. www.macrotrends.net. Retrieved 2025-04-08.

1989	93	564431	16.5
1995	47	433109	10.9
2000	17	378348	4.5
2005	9	364383	2.5
2006	9	374244	2.4

*** For years 1989-1996, the ICD-9 (code 343) was used;
Since 1997, the ICD-10 (code G80) has been implemented.**

Source: Poland Central Statistical Office, 2008

In the United States, by contrast, the preterm birthrate has jumped in recent years from 8.9 per cent to 12.2 per cent of all births, pointing to a corresponding increase in the incidence of

cerebral palsy.⁹⁴ Recently, the preterm birth rate declined 1% from 2021 to 2022, to 10.4%, following an increase of 4% from 2020 to 2021.⁹⁵ No Canadian figures are available.

A woman who has one or more induced abortions significantly increases her risk of subsequently bearing a pre-term baby, which in turn hugely increases the risk that that baby will be afflicted with cerebral palsy. (See chapter 14 (prematurity), p. xxx). Any measures that can reduce the incidence of cerebral palsy must be welcomed on both social and financial grounds.

Poland's successful battle against pediatric CP has continued virtually till the present. The number of cases more or less steadily declined from 2012 to 2022.

'In 2022, CP ... pediatric cases dropped by 21%.'

Why did Poland make such strides in cutting the incidence of cerebral palsy deaths? Certainly not by pumping a lot of extra money into its healthcare system. A major reason for Poland's impressively low rate of CP appears to be the steady increase in home enteral nutrition.

This apparently explains why, 'in the pediatric population, the incidence [of CP] decreased from 402 to 328 per 100,000 people in the years 2012–2022.'⁹⁶

Another contributing factor was undoubtedly the documented decline in the abortion rate.

Poland's infant mortality has also declined to the point that it is now lower than the U.S., six compared to seven per thousand.⁹⁷ In 2020-25 Polish infant mortality continued its steady downward trend, reaching 2.7 deaths per thousand live births in 2025, one of the very lowest in the world.⁹⁸

Interestingly, Poland's immediate neighbour, Russia, which until 2011 had abortion on request, continues to have a significantly higher rate of infant mortality.

Even after drastically tightening its abortion law in October 2011, Russia continued to experience a decline in maternal mortality. From then on, induced abortion was legal only during the first 12 weeks of pregnancy. Additional changes included a mandatory waiting period, allowance for physicians' conscientious objection to participating in abortion, and limiting the social indications for late-term abortions.⁹⁹

⁹⁴ Rooney B, Calhoun BC, Roche LE. 'Does Induced Abortion Account for Racial Disparity in Preterm Births, and Violate the Nuremberg Code?.' *Journal of American Physicians and Surgeons* 2008; 13(4): 102-104, p. 102; Kochanek KD, et al. 'Annual Summary of Vital Statistics': 2009. *Pediatrics* 2012 January. 129(2): 338-348.

⁹⁵ Centers for Disease Control and Prevention. *Preterm Birth*. Nov. 8, 2024. Accessed May 19, 2025.

⁹⁶ Maciej Zagierski et al. 'Home Enteral Nutrition in Patients with Cerebral Palsy in the Years 2012–2022: A Longitudinal Analysis of Data from the National Health Fund of Poland'. *Nutrients* 2024, 16(15), 2394; <https://doi.org/10.3390/nu16152394>. Accessed 15 Apr. 2025.

⁹⁷ UNICEF, *The State of the World's Children* (2009). Colorcraft of Virginia Inc, and Prographics Inc, 2010; pp. 9, 11.

⁹⁸ <https://www.macrotrends.net/global-metrics/countries/pol/poland/infant-mortality-rate>.

⁹⁹ Katie Marie Davies, 'Russia limits women's access to abortion, citing demographic changes'. 28 Nov. 2023.

In 2009, Russia reported 1.2 million abortions out of a population of 143 million people. By 2023, Russia had decreased its number of abortions to 467 thousand, a greater than 60 per cent reduction.¹⁰⁰ Maternal mortality also underwent a parallel decline. In 2000, Russia's MMR was 39.7 per 100,000 live births. By 2022, it was down to 13 deaths per 100,000 live births, a two-thirds reduction.¹⁰¹ It would appear that the reduced availability of legal abortion did nothing to impede the sharp fall in maternal mortality.

Hungary

Hungary has undergone a similar experience. Under communism, there were virtually no restrictions on abortion, and the country had one of the highest abortion rates in the world, rivalled only by the USSR (Russia) and Japan. Since the fall of communism in 1989, however, Hungary has steadily tightened its abortion law. In 1992, it adopted Act LXXIX on the protection of fetal life, which limited abortion in most cases to the first twelve weeks of pregnancy, but allowed it to be extended in some circumstances to 18, 20 or 24 weeks. In 2011, the government organized an anti-abortion campaign and in 2012 adopted a new constitution containing the statement that human life will be protected from conception.¹⁰² Since 2017, the government has pursued a pro-natalist policy, actively discouraging women from having abortions. In 2022, it passed more restrictions, for example, obliging women seeking an abortion to 'listen to the fetal heartbeat' before they can have the procedure. They also have to undergo counselling and a waiting period and obtain a certificate from a midwife. By contrast, women who have four or more children are rewarded with exemption from income tax for life.¹⁰³ From 2000 until 2020, Hungary's MMR remained almost unchanged at 15 per 100,000 live births – considerably lower than that of the U.S.¹⁰⁴ During the decade 2012-2022, infant mortality tumbled from 4.8 to 3.3 per thousand live births – a 31 per cent. drop. Steadily decreasing access to abortion has evidently been accompanied by a steadily diminishing infant mortality. As with the MMR, Hungary's infant mortality is considerably lower than that of the U.S.¹⁰⁵

Table 2.3 Infant mortality per 1000 births

<i>Year</i>	<i>Poland</i>	<i>U.S.A.</i>	<i>Russia</i>	<i>Hungary</i>
1990	16			
2000	8			

¹⁰⁰ Statista Research Dept. Abortion Count in Russia 2000-2024, Mar. 6, 2025. Accessed May 19, 2025.

¹⁰¹ Statista, Maternal Mortality Rate in Russia from 2000 to 2022.

<https://www.statista.com/statistics/1089661/russia-maternal-death-rate/> Accessed May 19, 2025.

1. ¹⁰² Nick Thorpe (18 April 2011). "Hungary: Parliament votes for new constitution". BBC News Online.

¹⁰³ "Hungary decrees tighter abortion rules". *BBC News*. 13 September 2022.

¹⁰⁴ WHO, UNICEF, UNFPA, World Bank Group, and UNDESA/Population Division. Trends in Maternal Mortality 2000 to 2020. Geneva, World Health Organization, 2023

¹⁰⁵ In 2022, the US infant mortality rate was 5.6 deaths per 1,000.

Centers for Disease Control and Prevention (.gov)

<https://www.cdc.gov/maternal-infant-health/infant->

2008	6	7	10	6
2022	4	6	4	3

(Sources: Infant Mortality Rate for Poland. World Bank via Fred.

<https://fred.stlouisfed.org/series/SPDYNIMRTINPOL#:~:text=Observations,Next%20Release%20Date:%20Not%20Available>. Accessed May 20, 2025. Infant Mortality Rate for the Russian Federation. World Bank via Fred. <https://fred.stlouisfed.org/series/SPDYNIMRTINRUS>.

Accessed May 20, 2025. Hungary Infant Mortality Rate 1950-2025 | MacroTrends.

[https://tradingeconomics.com/hungary/mortality-rate-infant-per-1-000-live-births-wb-data.html#:~:text=Mortality%20rate%2C%20infant%20\(per%201%2C000%20live%20births\),development%20indicators%2C%20compiled%20from%20officially%20recognized%20sources.&text=Infant%20mortal](https://tradingeconomics.com/hungary/mortality-rate-infant-per-1-000-live-births-wb-data.html#:~:text=Mortality%20rate%2C%20infant%20(per%201%2C000%20live%20births),development%20indicators%2C%20compiled%20from%20officially%20recognized%20sources.&text=Infant%20mortal).

ity%20rate%20is%20the%20number%20of,1%2C000%20live%20births%20in%20a%20given%20year. Accessed May 20 2025. Infant Mortality. CDC Maternal Infant Health.

<https://www.cdc.gov/maternal-infant-health/infant-...> Accessed May 20, 2025.

UNICEF, [unicef.org/infobycountry/poland_statistics.html](https://www.unicef.org/infobycountry/poland_statistics.html) (2 March 2010); Globalis, UN Common Database/UNICEF (2002), UNICEF, *The State of the World's Children* (2009), Table one).

Ireland

Since its founding (1922), the Republic of Ireland for many years did not allowed induced abortion. Yet it maintained one of the lowest maternal and infant mortality rates anywhere – much lower than its much richer next-door neighbour Britain, for example. The referendum passed in 1918 called for the repeal of the near-total constitutional ban on abortion. In response, the government passed a law allowing abortion on request for the first twelve weeks after gestation, and post-twelve weeks to save the life of the mother, or in case of congenital deformity. The law also allows conscientious objection by medical staff and imposes a three-day waiting period after the abortion is approved and before it is carried out.¹⁰⁶

After the partial legalization of abortion, Ireland's infant mortality continued to decline, though at a slower pace. In 2022, it was down to 2.7 per 1000 live births.¹⁰⁷ Maternal mortality remained at 5.0 per 100,000 live births, the same as it had been in the last year before the

¹⁰⁶ Luke Field, 'The abortion referendum of 2018 and a timeline of abortion politics in Ireland to date'. *Irish Political Studies*, vol. 33 (2018), pp. 608-28. <https://doi.org/10.1080/07907184.2018.1500461>. 'Five years after Ireland's historic abortion referendum, access to care is still 'patchy'', Niamh Kennedy and Emily Blumenthal, CNN, May 25, 2023. <https://www.cnn.com/2023/05/25/europe/ireland-abortion-referendum-5-years-intl-cmd/index.html#:~:text=Members%20of%20the%20public%20celebrate,Amendment%20of%20the%20Irish%20Constitution.&text=In%202018%2C%20the%20Irish%20public,bans%20in%20the%20European%20Union>.

¹⁰⁷Statista: Ireland: Infant mortality rate from 2012 to 2022.

widening of the law. There is no evidence that easier access to abortion has done anything to improve maternal mortality, which nonetheless remains much lower than Britain's.¹⁰⁸

Ireland, until its referendum in May 2018, did not allow induced abortion. Unlike Poland, it never allowed it. Therefore, it is not possible to compare Ireland's experience before and after banning abortion. It is striking, however, that Ireland continues to have among the lowest rates of maternal and infant mortality in the world, despite being one of the poorer countries in the developed world. Indeed, its next-door neighbour, the United Kingdom, a richer country where abortion is available upon request (except in Northern Ireland), has a worse record on both counts. Maternal mortality is 35 per cent higher, while infant mortality is nineteen per cent higher than in the Republic of Ireland.

Table 2.4 Ireland and the United Kingdom: maternal mortality per 100,000 live births; infant mortality per 1000 live births

	Year	Maternal Mortality	Year	Infant Mortality
<i>Ireland</i>	2013-15	6.5	2017	3.6
	2022	0.0	2022	2.7
<i>U.K.</i>	2013-15	8.8	2017	4.3
	2022	13.6	2022	4.0

Sources: MDE [Maternal Death Enquiry]. *Confidential Maternal Death Enquiry in Ireland. Report for 2013-2015*. December 2017., p. 18; CIA. *World Fact Book*. 2018. Infant Mortality.

Statista: Ireland: Infant mortality rate from 2012 to 2022.

Ireland Maternal Mortality Rate 2000-2025. <https://www.macrotrends.net/global-metrics/countries/IRL/ireland/maternal-mortality-rate#:~:text=Ireland%20maternal%20mortality%20rate%20for,a%2016.67%25%20decline%20from%202017>. Accessed April 10, 2025.

¹⁰⁸ Ireland Maternal Mortality Rate 2000-2025. <https://www.macrotrends.net/global-metrics/countries/IRL/ireland/maternal-mortality-rate#:~:text=Ireland%20maternal%20mortality%20rate%20for,a%2016.67%25%20decline%20from%202017>. Accessed April 10, 2025.

Maternal mortality 2020-2022 | MBRRACE-UK – NPEU.

https://www.google.com/search?q=uk+maternal+mortality+rate&rlz=1C1CHZN_enCA1051CA1051&oq=UK+maternal+mortality+rate&gs_lcrp=EgZjaHJvbWUqBwgAEAAyGAAQyBwgAEAAyGAAQyBwgBEAAyGAAQyCAgCEAAyFhgeMggIAxAAAGBYHjIICAQQABgWGB4yCAgFEAAyFhgeMggIBhAAAGBYHjIICAQABgWGB4yCAgIEAAyFhgeMggICRAAGBYHjIBCjExMDM0ajBqMTW0AgiwAgHxBfc_QJhmsVGc8QX3P0CYZrFRnA&sourceid=chrome&ie=UTF-8

Maternal mortality 2020-2022 | MBRRACE-UK – NPEU.

https://www.google.com/search?q=uk+maternal+mortality+rate&rlz=1C1CHZN_enCA1051CA1051&oq=UK+maternal+mortality+rate&gs_lcrp=EgZjaHJvbWUqBwgAEAAyQAQyBwgAEAAyQAQyBwgBEAAyQAQyCAgCEAAyFhgeMggIAxAAGBYHjIICAQQABgWGB4yCAgFEAAyFhgeMggIBhAAGBYHjIICAcQABgWGB4yCAgIEAAyFhgeMggICRAAGBYHtIB CjExMDM0ajBqMTWoAgiwAgHxBfc_QJhmsVGc8QX3P0CYZrFRnA&sourceid=chrome&ie=UTF-8. Accessed May 20, 2025.

CONCLUSION

Wherever we look – Latin America, Asia, Africa, Europe – we find next-to-no evidence to support the proposition that legalizing abortion leads to improved maternal and infant health. On the contrary, we find that those countries which have never permitted abortion, or which have banned it in the past three decades, have a consistently better record in caring for mothers and newborns. This finding is contrary to what people have been led to expect. How are we to explain it? Countries that do not permit abortion seem to devote greater effort to protecting and improving the health of their mothers and infants. This is clearly evident in Chile, parts of Mexico (until recently), Bangladesh, Poland and Ireland, and it may be true of other countries as well, such as El Salvador, Nicaragua, Egypt and Uganda. What is beyond dispute is that countries that have made strides in improving the education of women, in emergency obstetric care (such as caesarean sections), in skilled attendance at birth, as well as community outreach, improved referral systems and transportation for emergency care – most notably Chile, Bangladesh, Uganda and Egypt -- have been rewarded with greatly improved maternal and infant health. Can it be an accident that these are also countries where abortion is either not permitted or almost legally unavailable?