



Uncategorized

# A ground-breaking abortion study from Chile



by [Elard Koch](#)

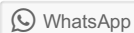
May 8, 2012 / ⌚ 7 mins



Print



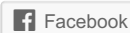
Email



WhatsApp



Twitter



Facebook

---

*A groundbreaking study of abortion in Chile published last week in the [scientific journal PLoS One](#) found that illegal abortion is not associated with maternal mortality. At a time when access to legal abortion is deemed absolutely necessary for women's health, this shatters long-standing assumptions. In this exclusive interview, [Dr Elard S. Koch](#) (pictured below), the lead author of the study, defends his findings.*

**MercatorNet:** Chile is not   
*alone in restricting abortion. Poland, Malta and Ireland also have very restrictive rules and a low maternal mortality rates. But this has been known for years. Has no one studied it before?*

**Elard Koch:** The Chilean study is the first in-depth analysis of a large time series, year by year, of maternal deaths and their determinants, including years of education, per capita income, total fertility rate, birth order, clean water supply, sanitation, and childbirth delivery by skilled attendants, and

including simultaneously different historical policies.

In this sense, it is a unique natural experiment conducted in a developing country. Thus, a first difference between the data from Chile and data from Poland, Malta and Ireland is that, in the case of Chile, there is a rigorous analysis controlled by multiple confounders. It is not a matter of circumstantial or anecdotal evidence, but a matter of scientific data representing real, vital events whose methodology has been published for the first time in a peer-reviewed scientific journal.

A second consideration relates to the degree of abortion prohibition in the different countries. Taking into account the countries in your question: in Chile, all types of abortion were prohibited in 1989. In Malta, abortion is banned in all cases but it is not prosecuted when pregnancy threatens the life of the mother. In Ireland, abortion is illegal except in cases of substantial risk to the mother, including the threat of suicide. Finally, in Poland, abortion is prohibited except in the case of danger to the mother's health, when the pregnancy is the result of a criminal act, or when the foetus is seriously malformed.

It is worth noting that since most European countries allow elective abortion, it may be easier for women from Malta, Ireland, and Poland to travel for an abortion and this may be acting as a confounder which is difficult to control.

In contrast, due to abortion prohibitions in most Latin American countries, it is unlikely that a significant number of abortions can be performed by Chilean women abroad.

In addition, for Poland maternal mortality rates were already low at the time of passing restrictive abortion laws, possibly due to public policies similar to those promoting the decrease of maternal mortality in Chile. To test this hypothesis, analysis of maternal mortality data from this country is required, possibly in a similar manner to the one published for Chilean data.

Finally, the evolution of maternal mortality in Poland, Malta, and Ireland is yet to be analyzed in depth in the formal biomedical literature. In fact, such analysis was also lacking for Chile before our publication.

**MercatorNet:** *Chile's National Women's Service (Sernam), estimates that at least 10 percent of maternal deaths are caused by complications from attempted abortions. Abortion is the fourth most common cause of maternal death in Chile. Your comment?*

**Elard Koch:** This constitutes a harmful misinformation spread by Sernam. Indeed, according to the tenth revision of the International Codes of Disease (ICD), in 2008 5 deaths were attributed to codes O00-O07 out of 41 total maternal deaths (codes O00-O99) – 12% of maternal deaths. Knowledge of and familiarity with the ICD-10 revision quickly orientates interpretation and correct translation. Maternal mortality comprises codes O00 to O99. Codes O00-O08 are labelled “pregnancy with abortive outcome”. In Spanish this should be translated as “Embarazo con desenlace abortivo”, and not “Embarazo terminado en aborto” (literally: pregnancy ended in abortion) as the Chilean Ministry of Health depicts.

To declare that abortion is present in all these pregnancies is misleading, because it is then interpreted as induced abortion and actually means that “10 percent of maternal deaths are caused by complications from attempted abortions”.

In fact, of the 5 cases that took place in 2008, 3 were ectopic pregnancies and 2 were actually unspecified abortions, presumably attributable to clandestine abortion. Thus, a more precise statement should be that 2 out of 41 cases were attributable to complications of abortion. This means 4.87% and not more than 10% of the total maternal deaths registered that year.

Moreover, due to the very low maternal mortality exhibited by Chile, it is inappropriate to use percentages to refer those

causes that only have 1 or 2 cases. The risk of maternal death by abortion in Chile was 1 in 2,000,000 women at fertile age in 2008 and 1 in 4,000,000 women at fertile age in 2009.

In other words and from an epidemiological perspective, when the numerators are very low, the proportions and rates are very unstable for comparison purposes because 1 or 2 cases make a big change in the proportion or rates.

As discussed in our article, according to the most recent report published by Chilean National Institute of Statistics, the maternal mortality ratio for 2009 was 16.9 per 100,000 live births (43 deaths) and the figures for indirect causes (codes O99, O98), gestational hypertension and eclampsia (codes O14, O15), abortion (code O06), and other direct obstetric causes were 18 (41.9%), 11 (25.6%), 1 (2.3%) and 13 (30.2%) respectively.

**MercatorNet:** *Some critics argue that the decline is mostly attributed to women's increasing use of misoprostol and mifepristone, which are far safer than other clandestine methods. What will eventually be the effect of widespread use of RU-486 and other do-it-yourself abortion drugs?*

**Elard Koch:** Explaining the decrease of maternal mortality ratio in Chile as a result of using drugs such as misoprostol, mifepristone or RU-486 is speculation unsupported by our epidemiological data. As a scientist, I am concerned about actual empirical data supporting any causal assumption. It is a matter of scientific facts supported by real vital data. Clearly, no study currently exists which seriously supports a decline in maternal mortality associated with the use of abortifacient drugs such as misoprostol or mifeprestone in Chile.

Therefore, this is just a speculative assumption. Indeed, our study shows that global maternal mortality ratio – as well as mortality by abortion – steadily decreased from 1965-1967. This was before the development and

commercialization of the abovementioned drugs with abortifacient effects.

In fact, these drugs were introduced in the Chilean black market in the late 1990s, making it extremely unlikely that their introduction had any important influence on overall rates of maternal mortality, which were already significantly reduced at that time.

In addition, and as discussed in our article, the methods used to conduct clandestine abortions at present may have lower rates of severe complications than the methods used in the 1960s, mainly based on highly invasive self-conducted procedures. Therefore, the practically null abortion mortality observed in Chile nowadays can be explained by both a reduced number of clandestine abortions and a lower rate of severe abortion-related complications. This phenomenon also seems to be related to joint-effects between increasing educational levels and changes in the reproductive behaviour of Chilean women, an observation that requires further research.

We also discuss the fact that the practically null abortion mortality observed does not imply that there are no illegal or clandestine abortions in Chile nowadays.

Rather, the current abortion mortality ratio and recent epidemiologic studies of abortion rates in this country suggest that clandestine abortion may have been reduced in parallel with maternal mortality and may have currently reached a steady state based on stable ratios between live births and hospitalizations by abortion.

It is to be expected that any major increase in the magnitude of clandestine abortions will necessarily be followed by an increase in abortion hospitalizations. But our analysis shows that Chile exhibits a steady decrease in abortion-related hospitalizations over the last four decades, suggesting a decrease in clandestine abortions. In consequence, by observing the current Chilean registry of hospitalization for any kind of abortion, we can monitor possible changes in the

trend of clandestine abortions, whatever the method used.

**MercatorNet:** *In hindsight, was the 1989 ban justified? Did it save lives?*

**Elard Koch:** In Chile, therapeutic abortion was prohibited in 1989 since it was considered unnecessary for protecting the life of the mother and her baby. From the perspective of the Chilean medical practice, the exceptional cases in which the life of the mother is at risk are regarded as a medical ethics problem to be solved by applying the principle of double effect and the concept of indirect abortion.

Thus, in Chile, exceptional problems that require medical intervention to save the life of the mother are considered a decision of medical ethics and not a legal issue. Therefore, any kind of directly provoked abortion was prohibited in 1989, in agreement with Article 19 of the Chilean Constitution which protects the life of the unborn.

The second question — does it save lives? — is very complex and important. We can address this important issue from different perspectives.

*First*, from a public health view, restrictive laws are hypothesized to cause a dissuasive effect on the population, similar to restrictions on tobacco or alcohol consumption. We observed that reduction of maternal mortality in Chile was paralleled by the number of hospitalizations attributable to complications of clandestine abortions. While over 50% of all abortion-related hospitalizations were attributable to complications of clandestine abortions during the 1960s, this proportion decreased rapidly in the following decades.

Indeed, only 12-19% of all hospitalization from abortion can be attributable to clandestine abortions between 2001 and 2008. These data suggest that over time, restrictive laws may have a restraining effect on the practice of abortion and promote its decrease. In fact, Chile exhibits today one of the

lowest abortion-related maternal deaths in the world, with a 92.3% decrease since 1989 and a 99.1% accumulated decrease over 50 years.

*Second*, from the perspective of human life, especially if a developing country is looking to simultaneously protect the life of the mother and the unborn child, a plausible hypothesis after the Chilean study is that abortion restriction may be effective when is combined with adequately-implemented public policies to increase educational levels of women and to improve access to maternal health facilities. A restrictive law may discourage practice, which is suggested by the decrease of hospitalizations due to clandestine abortions estimated in Chile.

*Third*, from the perspective of protecting human life from the very beginning, obviously, abortion restriction saves many lives, in contrast to countries where elective – on demand – abortion is allowed, because in these countries all the unborn lose their lives.

*Finally*, it is necessary to remark that our study confirms that abortion prohibition is not related to overall rates of maternal mortality. In other words, making abortion illegal does not increase maternal deaths: it is a matter of scientific fact in our study.

Nevertheless, although our study definitively ruled out any deleterious influence of abortion prohibition on the maternal mortality trend, it cannot be immediately concluded that solely making abortion illegal is a direct causal factor for decreasing maternal mortality by itself.

The reduction in the maternal mortality trend in Chile is controlled by other factors, especially the educational level of women that positively influences other key variables, such as access to maternal health facilities, sanitary services and reproductive behaviour.

*Elard S. Koch is an epidemiologist from the Department of Family*

Medicine, Faculty of Medicine, University of Chile.



## Elard Koch

---

**Elard Koch** is an epidemiologist from the Department of Family Medicine, Faculty of Medicine, University of Chile. [More by Elard Koch](#)

[Interested in republishing?](#)

---

**Republish** this article for free, online or in print, under a [Creative Commons](#) licence. Most, but not all articles on *MercatorNet* are Creative Commons.

Tagged: [abortion](#) [Chile](#)

## Recent Posts

---

### Unclean! Unclean!

Jun 2, 2020

### Vaccines trials give hope but should be handled with caution



Jun 2, 2020

## How has our understanding of Covid-19 changed?

Jun 2, 2020

## Millennials getting a raw deal

Jun 2, 2020

## Interrogating the transgender agenda

Jun 1, 2020

## Smartphones increasingly impact modern relationships

Jun 1, 2020

## Working from home: winners, losers, and making lemonade

Jun 1, 2020

# MERCATORNET

### Selected topics

demography

religion

bioethics

coronavirus

groupthink

religion

sex & society

### About Mercatornet

What we stand for

Mercator who?

Our people

Write for us

Copyright and syndication

### Contact us

MercatorNet

c/- New Media Foundation

Level 1, Unit 7, 11 Lord Street

Botany Australia 2019

editor@mercatornet.com

Support human dignity

Donate Today

The MercatorNet newsletter

Your email address

Sign up

---

© 2020 New Media Foundation

[Privacy Policy](#)