

Access to abortion, neonatal health and sex selection in Nepal

Improving women's access to abortion can have a positive effect on children's health, but it might also lead to greater sex selection. *Christine Valente* looks at the experience of Nepal.

Abortion liberalisation took place at the beginning of the 1970s in the United States. The impact of this reform on the health of the next generation has attracted substantial interest, with research finding evidence that, for example, the liberalisation led to higher birth weights and improved neo-natal and infant survival.

A 1981 study by two US economists, Michael Grossman and Steven Jacobowitz, concluded that 'the increase in the legal abortion rate [was] the single most important factor in reductions in both white and non-white neo-natal mortality rates' between 1964 and 1977, dominating not only the other public policies considered in their analysis, but also improvement in maternal schooling and poverty reduction.

The extent to which the correlation between abortion and neo-natal mortality highlighted in this and other early studies can be interpreted as a true causal link is unclear, and the findings of more recent studies are mixed. But the debate started in the context of developed countries such as the United States raises the question of whether improved access to abortion may contribute significantly to better child health in the developing world, where over nine million children still die under the age of five every year.

Most of these deaths occur in sub-Saharan Africa and South Asia, where abortion is generally not legal and safe abortion is only

available at high expense. It is particularly important to shed light on the potential role of abortion reform in decreasing neo-natal mortality, as the incidence of deaths in the first four weeks of life now constitutes over a third of all child deaths.

There are two main channels through which reducing the psychological or financial cost of abortion can affect average child health. The first is a 'behavioural' channel, through which parents can terminate a pregnancy if it is untimely or has other characteristics that parents find undesirable and through which parents can choose to substitute investments in child health for quantity of children.

The establishment of legal abortion centres in Nepal does not seem to have led to more sex-selective terminations

There is a considerable body of economic research on whether and how parents make a trade-off between, on the one hand, having more children and, on the other hand, investing more in the health and education of each child.

The second channel through which a reduction in the cost of abortion can affect average child health is through a 'parental selection' effect. This occurs if a change in the cost of abortion disproportionately reduces the birth rate among parents who have systematically worse or systematically better child outcomes.

The first of these two effects is unambiguously positive for the health of children effectively born, but the direction of the second effect is unclear, implying that the overall effect of abortion is also unclear. Previous studies have not been able to distinguish comprehensively between these two channels, and there is no evidence for developing countries, where the need to find solutions to improve child health is particularly acute.

My research uses data from a recent change in the Nepalese abortion regime to shed light on the consequences of improving access to legal abortion for neo-natal mortality and related gender issues. More specifically, I examine the impact of providing affordable, legal abortion facilities in the high-fertility, high-mortality context of Nepal, on pregnancy outcomes, pre-natal and peri-natal health inputs, neo-natal mortality and sex selection.

The strategy for identifying a causal effect relies on variation across time and space in access to legal abortion centres in Nepal to identify the effect of these centres on

pregnancy outcomes and neo-natal mortality. This was made possible by combining existing individual pregnancies data and new data on dates of opening and latitude and longitude coordinates of the new legal abortion facilities.

The approach taken was to estimate the change in the likelihood for each outcome of interest (for example, neo-natal mortality) to be realised, between pregnancies occurring before a legal abortion facility became available nearby and pregnancies occurring afterwards, holding constant a number of potential confounding factors.

Confounding factors controlled for in the study include pregnancy-specific demographic characteristics, such as maternal age at conception and pregnancy order, changes over time common to all pregnancies irrespective of whether or not they occurred near a legal abortion centre and any characteristic of the location where the pregnancy takes place and of the mother that remains unchanged over time.

Consistent with the prediction that proximity to a legal abortion centre reduces the cost of abortion, the results show that a pregnancy is less likely to result in a live birth when it

so that gender-specific concerns arise with respect to abortion liberalisation. The main concern is that abortion liberalisation may increase sex-selective abortions.

may contribute to preventing sex selection if some women substitute early, gender-blind legal abortions for illegal ones taking place at a later gestational stage.

Improved access to early abortions in a regulated environment may actually reduce sex selection

occurs closer to a legal abortion centre. But there is no evidence that improved access to abortion reduces neo-natal mortality. Similarly, improved access to abortion does not appear to increase parental investment in pre- and peri-natal care, such as the number and timing of pre-natal checks and assistance by trained staff at delivery.

Many countries facing high fertility and high child mortality, and where abortion reform may have the largest effects, are also characterised by a degree of son preference,

In Nepal, however, during the period covered by my data, legal abortion centres were only authorised to carry out first-trimester abortions, and there is evidence that this restriction was largely implemented in practice. Sex-detection technology that is reliable under 12 weeks of gestation is costly and not widely available in Nepal, so that access to these legal abortion centres is unlikely to increase the number of sex-selective abortions.

In fact, these first-trimester abortion centres

The results of my research do not support the hypothesis that legal abortion centres in Nepal have led to more sex-selective terminations. If anything, this study provides some suggestive evidence that improved access to early abortions in a regulated environment may actually reduce sex selection.

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http://www.sheffield.ac.uk/economics/research/serps/articles/2011_006.html

Discrimination begins in the womb: evidence of sex-selective pre-natal investment

Even if mothers who are expecting a girl decide to go through with their pregnancies, do they invest less in pre-natal healthcare? Prashant Bharadwaj looks at evidence from a number of Asian countries.

Sex-based discrimination has been studied extensively in the context of 'son preference' in South and South East Asia. Sex-selective abortions and differential care given to boys and girls after birth have resulted in an estimated 30 to 70 million 'missing' women in India and China alone. While economic growth might be expected to erode such discrimination, son preference (as evidenced by skewed sex ratios at birth and after) has been persistent despite high growth rates in these countries.

A number of studies have examined the role of sex-selective abortions and post-birth discrimination strategies, including differences in vaccination rates, allocation of household resources, breastfeeding behaviour and parental time allocation. One potential area of discrimination that has not been examined is whether parents invest less in pre-natal care when pregnant with a girl, while still carrying the girl to term.

Pre-natal discrimination may have sizeable consequences since care during pregnancy is an essential component of the overall health of the child. We know from previous research that in utero events and childhood endowments affect later life health, IQ and labour market outcomes. Maternal inputs during pregnancy can also affect important

immediate outcomes, such as neo-natal survival and birth weight.

In India, attending pre-natal care is correlated with a 27% decrease in the probability of neo-natal mortality. Tetanus shots during pregnancy play a particularly important role in neo-natal survival: about 38% of child deaths (under five years) occur in the neo-natal stage; and neo-natal tetanus is the leading cause of neo-natal deaths, resulting in nearly 200,000 neo-natal deaths per year in South and South East Asia.

Our research examines the extent of sex-selective pre-natal care in a number of countries in South and South East Asia, particularly India. We find significant differences in the pre-natal healthcare

Women make different choices about pre-natal healthcare when they are pregnant with boys compared with when they are pregnant with girls