

GDLab

**GENDER AND DIVERSITY
KNOWLEDGE INITIATIVE**

What are the gaps in health and education that women face throughout their lives?

In recent years, significant progress has been made toward implementing policies and programs to support gender equity in Latin America and the Caribbean. However, large disparities continue to exist between men and women in educational and health outcomes. In the region, girls perform better than boys in [soft skills and language](#) at an early age (between seven months and six years), and the school attendance gaps favor women at all levels (primary, secondary, and university). However, once in school, male students [tend to perform better in mathematics](#) in standardized tests compared to their female peers at age 15. This has important implications for women's decisions on their future educa-

tional and career paths. At the same time, a large proportion of women in the region still lack access to reproductive technology. Indeed, the maternal mortality rate remains high (67 deaths per 100,000 women in 2015 according to data from the Economic Commission for Latin America and the Caribbean [ECLAC]) and tends to correlate with both low income levels and [lack of prenatal care](#). Also, the rate of [teen motherhood \(15–19 years old\)](#) is very high, 20 points above the global average and more than 40 points above the rate in Organization for Economic Co-operation and Development (OECD) countries.

What do we know about gender gaps in education?

Girls go to school more. The evidence in our region shows that, [at all levels of education, girls go to school more than boys](#). For example, average secondary school attendance stands at 76% for girls and 73% for boys. This relative advantage also manifests in the likelihood of finishing school. In 2015, on average for the region, 78% of girls finished primary school (5 percentage points higher than for boys), and 55% completed secondary school (9 percentage points higher than for boys). The pattern also repeats for higher education, where attendance rates for women are 11 percentage points higher than for men. These data mean that, among

the younger generations, women have more years of schooling than men.

However, boys obtain better outcomes. These gaps are reversed when it comes to the results of standardized math tests for 15-year-old boys and girls. On average, for the countries of Latin America and the Caribbean, [boys score nine points higher than girls](#), a gap that is wider than in OECD countries. The consequences of this are educational segregation and barriers that limit professional progress in areas related to science, technology, engineering, and math-

ematics (STEM). For example, in Argentina, between 2010 and 2016, [only 33% of students studying for STEM careers were women](#).

The context is relevant. Behind these performance gaps in mathematics are stereotypes that manifest from very young ages, such as biases in assessing cognitive capacities (“[boys are good at science, and girls are good at humanities](#)”). However, the role of societal gender stereotypes can vary depending on context. A study conducted in Ecuador evaluated mathematics performance in boys and girls during the early years of primary school. Its findings show that boys perform better than girls, but the gender gap disappears [when looking at the scores of students whose mothers have a university degree](#). As the case of Ecuador shows, the high educational achievements of the mother can “protect” girls, preventing them from falling behind boys early on in their schooling.

The role of teachers and the school curriculum. The interaction between teachers and students can influence the educational gaps observed at a young age. The little evidence that is available for the region suggests that teacher effectiveness does not have a differentiated benefit for boys and girls. For example, consider a study of Ecuadorian students that analyzes the mathematics performance of both genders during the early years of primary school. The study uses measurements of the quality of interaction between teachers and students—such as emotional support, classroom organization, and teacher support—to assess whether these measures impact the educational gap favoring boys. The results indicate that the better the quality of the interaction, the better the scores in mathematics but [with no difference between girls and boys](#) and without necessarily closing the gender gap observed. Along these lines, in Peru, a program was implemented that uses an individualized

approach centered on the student—rather than the traditional vertical teaching model—to teach basic mathematics content to preschool boys and girls. The program requires holding a similar number of class sessions with a greater number of boys as classes with a greater number of girls; that classes include an equal number of girls and boys in their activities; and that the teachers give an equal amount of attention to all students, regardless of gender. According to the evaluation of the program, it [improved performance in mathematics](#), and no gap was observed between girls and boys, suggesting that individualized teaching methods are “balanced” in terms of gender.

The impact of decisions made by parents. Lack of information can influence the quality of the decisions made by mothers and fathers on the formal education of their children. For example, school choice can impact educational outcomes and, in the long term, career and health outcomes. One study conducted in Barbados analyzed potential discrepancies by sex resulting from parents’ secondary school preferences and their impact on outcomes for girls and boys. It found that attending the parents’ “preferred” school (better quality public school) does not improve the educational performance of girls or boys compared to students who do not attend the school preferred by their parents. However, [significant medium and long-term impacts](#) are observed, especially for women. Attending the school preferred by one’s parents is associated with more years of schooling for women, better pay, and lower rates of teen motherhood. These findings suggest that the information parents have can influence the gender gaps—first in terms of education, then later in the labor market—as a result of the decisions they make regarding their children’s formal education. From a public-policy point of view, providing information on the short- and medium-term causal effects of schools can contribute to closing the gaps.

How should the problem of teen motherhood be addressed?

No single formula for preventing teen pregnancy. An examination of the literature on the effectiveness of different public programs implemented in the region to prevent teen pregnancy reveals [a series of guidelines for addressing this issue](#). First, certain lines of action should be in place in

any prevention program. These include increasing access to prevention services and providing good-quality services; a focus on 10- to 19-year-olds, with special emphasis on 15- to 19-year-olds (the highest-incidence age group); focusing on the most vulnerable populations; coordinating the

various government sectors and agencies addressing the multiple causes of pregnancy at an early age; and establishing mechanisms enabling teens to actively participate in decisions affecting the programs that target them (for example, through new technologies that enable them to express their opinions).

Second, it is crucial to conduct a preliminary diagnostic of the problem to establish where and how to focus efforts as risk factors and determinants of pregnancy at a young

age may differ between countries and between population groups within a country. For example, when adolescent pregnancy emerges in populations facing poverty, one possible action is to increase family incomes through conditional cash transfers that facilitate access to educational, health, and social services as well as to labor markets. The diagnosis thus must consider the risk factors related to structural conditions, socioeconomic aspects, individual characteristics, family environment, and institutional context.

What role do prenatal checkups play?

Poor women are less likely to go for prenatal checkups. Poor women have a greater need for prenatal care because they may be exposed to enhanced risk, such as inadequate nutrition, lack of knowledge surrounding health, and low education. However, this population group is less likely to seek such care. A study analyzing the factors associated with prenatal care in poor women in Guatemala, Honduras, Mexico, Nicaragua, Panama, and El Salvador finds that, in general, single women, women with less education, teenagers, indigenous women, women not wanting to become pregnant, and women without exposure to mass media [were less likely to attend prenatal checkups](#). The positive correlation between prenatal care and exposure to mass media may indicate that health programs need to seek alternative means of communication—such as, for example, the use of community health agents—to reach women in high-risk groups. Geographical barriers also play an important role since, in many cases, women live in hard-to-access areas. It is therefore necessary to use other alternatives—such as mobile prenatal care units—to provide services to these women.

There is little evidence on the impact of prenatal care. The region has very little recent evidence on the effects of public programs seeking to get pregnant teens to participate in prenatal checkups or on the health indicators of their children. Available evidence tends to refer to pregnant women of all ages without focusing on the teenage segment of the population.

In rural parts of Guatemala, it has been demonstrated that reminding pregnant women that they must go for prenatal checkups increases the number of women who do so by between three and eight percentage points, especially among women who are pregnant for the first time or who are carrying high-risk pregnancies^[1]. Prenatal checkups can also have important impacts on children's health outcomes. For example, in Bolivia, despite the existence of public health insurance that covers the cost of medical care for pregnant women and children to the age of five, utilization of these health services is far below the regional average and goes hand in hand with high rates of maternal mortality and fetal death. Bolivia implemented the Juana Azurduy Cash Transfer with the aim of increasing the rate of prenatal checkups conducted. It consists of a universal cash transfer on the condition of going for prenatal and postpartum checkups as well as having childbirth under the care of qualified personnel. The program produced a [17% increase in early prenatal checkups](#) (first 20 weeks of the pregnancy) and increased the likelihood that women receive at least four prenatal checkups (16%). This led to a lower fetal death rate and increases in the survival rate for children of mothers exposed to the program. These impacts are obtained using a small cash transfer (an average amount equivalent to 1% of household consumption), which has important implications for public policy design. Given that the transfer did not produce significant increases in mothers' income and consumption, the mechanism behind the results seems to be the incentives generated by the conditionalities.

Are financial incentives useful for strengthening reproductive health systems?

In recent years, results-based financing models have been launched that offer financial incentives for meeting pre-established targets over a certain period of time. This type of arrangement is being put into practice in Mesoamerica (the state of Chiapas in Mexico, Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, and Panama) through the [Mesoamerican Health Initiative \(MHI\)](#), a public-private partnership whose objective is to strengthen reproductive, maternal, and newborn health-care systems. El Salvador is a good example of how these arrangements that include financial incentives can impact maternal health. The country implemented a reform of its health system that involved expanding services in the 98 poorest municipalities. The expansions were financed with government funding, lending from multilateral organizations, and the MHI. The MHI funding was allocated to 14 municipalities, for which target values were set for some indicators (linked to service quality and use and to health outcomes) that, when met, would trigger an incentive equivalent to 25% of the value of the financing obtained

by the country for use in healthcare. The [results-based funding improved the “incentivized” indicators](#), that is, the ones for which a target value had to be reached to receive the financial benefit. Compared to municipalities with access to conventional funding (for instance, through loans from multilateral organizations), the municipalities that received financial incentives saw an increase of 10 in the total number of family-planning appointments and an increase of 14 in the total number of checkups during the first month following giving birth. The number of prenatal care checkups increased in the municipalities with incentives, but the difference was not significant compared to the municipalities that received traditional financing. The relative improvements in the municipalities that received financial incentives are the result of the more rapid expansion of health facilities and the incorporation of better qualified doctors and nurses. This has important implications for public policy—the availability of health services and qualified staff can lead to significant improvements in maternal health indicators.

How can we move forward?

We need to expand our knowledge on effective interventions that, over the course of women’s lives, help eliminate contextual factors or gender stereotypes that inhibit their performance in the classroom when it comes to hard sciences such as mathematics as well as their involvement in STEM fields, which tend to offer greater returns in the labor market. It should be noted that in several countries in the region, boys are at a disadvantage in terms of access to secondary school and secondary school dropout rates. School attendance and school connection are essential factors for reducing violent behavior among young people. In this regard, we must move forward in gathering more evidence on effective programs that contribute to addressing school dropouts.

In terms of reducing teen pregnancy, the international evidence shows that comprehensive interventions are more

likely to succeed, and thus changes should be made on multiple levels (teenagers, services, social norms, economic restrictions). It is crucial to continue expanding knowledge on the design and adaptation of these programs in Latin America and the Caribbean so they can be effective. The region also needs rigorous studies to help in understanding which tools are effective for promoting more regular use of reproductive and maternal health services by women, with the subsequent improvement in health outcomes. Likewise, to achieve gender parity, work also must be done with men given their key role as agents of change. International evidence suggests that the constructive commitment of males to reproductive and maternal health services contributes to health decision-making processes that are shared between women and their partners, more responsible behavior, and better health outcomes. However, rigorous evidence in the region remains scarce.

Lastly, rigorous studies should be conducted to document the impacts of the COVID-19 health and economic crisis on health and education outcomes according to gender. Access to prenatal and maternal care can be affected by health crises as cases of infection increase, and priorities and resources

are diverted to address the pandemic. Additionally, closing schools and the measures of social distancing adopted by most of the region's governments to contain the pandemic can increase school dropout rates, with potential impacts on teen pregnancy rates, criminality, and mental health.

References

- [1] Busso, M., D. Romero, and D. Salcedo. 2017. Improving access to preventive maternal health care using reminders: Experimental evidence from Guatemala. *Economic Letters*, 161.



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