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Health Inequalities in Latin American and the Caribbean: Child, Adolescent, Reproductive, Metabolic Syndrome and Mental Health*

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1 Introduction

Our health constitutes a fundamental aspect of our well-being. It is also a key factor in determining our contribution to market and non-market output. Health inequality refers to the unequal realization of health outcomes between different groups in the population. Systematic disparities in health outcomes and in access to health resources not only undermine basic principles of fairness and social justice but also contributes towards perpetuating poverty and disadvantage.

In this chapter, we start by presenting evidence on how the burden of disease in Latin America and the Caribbean (LAC) has changed during the last 30 years. Consistent with the fall in fertility and population aging, the region has shifted from a burden of disease dominated by maternal, neonatal, and communicable disease in the 1990s to one dominated by cardiovascular disease, cancers, diabetes, and increasingly by mental health disorders.

Given how the epidemiological profile of the region has evolved, it is of great interest to study health inequalities across different health domains using a homogeneous methodology. To our knowledge, this chapter constitutes the first attempt to report on and compare health inequalities on a broad set of health domains (maternal care and child health, reproductive health, noncommunicable diseases and mental health) and across three key dimensions: socio-economic status, urban/rural residence, and sex.

The poorest in the region are burdened by worst access to maternal care and higher levels of infant mortality and stunting. Despite being knowledgeable about contraceptive methods, young women in Latin America and the Caribbean have very high levels of teenage pregnancy with a steep socio-economic gradient. Noncommunicable diseases also affect the poor disproportionately in many countries. Finally, mental health is a growing source of lost days of healthy living among women and the poor.

Overall, our results highlight that despite the epidemiological transition which is underway, socio-economic health disparities in the LAC region are still more important on early childhood and teenagerhood than in adulthood, at least as it pertains to the outcomes analyzed in this chapter. At the same time, we show that while socio-economic

inequalities in child health are smaller in the richest countries, the contrary happens with inequalities in some adult outcomes.

While unequal access to critical health care inputs (i.e. inexpensive medical treatments to manage hypertension) as well as financial resources may explain the existence of certain socioeconomics gradients in health outcomes, these explanations are not enough for those observed for outcomes (i.e. stunting, obesity or unwanted pregnancy) for which access to information, social norms, behavioral factors, living conditions, and the environment play a major role. Although the analysis of the determinants behind these inequalities is beyond the scope of this chapter, we provide a broad menu of policies that address the multiple factors that affect health production – e.g., access to and quality of health care, information, habits, financial resources, and living conditions-- which may contribute to reducing the socioeconomics gradients in health.

The accompanying chapter (Bancalari et al., 2023) on health systems and health inequalities expands on the relationship between the architecture of health care systems and the health inequalities reported in this chapter. It shows that these inequalities are only partially explained by quality differences in the fragmented health care systems that prevail in most countries --which are divided in contributory and non-contributory systems-- or the specific health model they adopt (Beveridge versus Bismarckian type models), providing support for the importance that other determinants have in the production of health.

2 Epidemiological profile

Over the last 30 years LAC has experienced drastic changes in its epidemiological profile, with an increase in the burden of non-communicable diseases (NCDs) and improvements in communicable diseases (CDs) along with health problems associated to poor maternal, newborn, and child health (MNCH). Nowadays, LAC has a triple burden of diseases.

While NCDs represent the largest percentage of death and disease, high rates of CDs, MNCH complications, and injuries still persist. According to the data from the Global Burden of Disease, Global Health Data Exchange (GHDx), the percentage of disability-adjusted life years (DALYs) caused by CDs and MNCH dropped by 20 percentage points (ppts) between 1990 and 2019 (Figure 1).[1] In 1990, the incidence of CDs and MNCH was close to 40% for countries like Guatemala, Bolivia, and Haiti. Maternal and neonatal disorders were the leading cause for years of healthy life lost in the region, dropping to the eight place in 2019 (Tables A1 and A2). In countries like Bolivia, Dominican Republic, and Haiti, however, maternal and neonatal disorders are still one of the top two causes of years of healthy life lost (Table A4).

Many CDs and MNCH are easily preventable, but they persist in the region due to low income, lack of access to healthcare, low quality of health services, and poor water, sanitation infrastructure, and hygiene practices (Attanasio et al. 2004; Paxson and Schady 2010; Rocha and Soares, 2010; Bancalari and Martinez, 2018; Herrera-Almanza and Rosales- Rueda, 2020). Deaths and hospitalizations due to CDs can be prevented with greater access and quality of primary care, which the most vulnerable populations generally lack access to (Bancalari et al., 2022).

LAC has made considerable progress in antenatal care coverage and vaccine-preventable diseases. Yet, undernourishment continues to be a significant problem, despite improvements. New challenges emerge on the opposite side of the nutritional spectrum: mother and child overweight. Obesity in pregnant women increases the risk of adverse maternal and neonatal outcomes, including the risk of fetal or neonatal death, congenital

[1] DALYs represent the loss of the equivalent of one year of full health.

malformations, gestational diabetes, hypertensive disorders during pregnancy, and delivery complications, among others (Aune et al., 2014; Cnattingius and Villamor, 2016; Pers- son et al., 2017). Obesity puts children's health and development at risk. Particularly in the context of COVID-19, overweight children are at greater risk of hospitalization, the need for intensive care, and mechanical ventilation. Many countries in the region are now facing a challenging double burden of malnutrition –i.e. a mix of childhood overweight and stunting together with micronutrient deficiencies.

NCDs represent a large and growing burden. While in 1990 around half of the healthy life lost was due to NCDs, in 2019 the burden increased to almost 80%, closer to the level of high-income countries in North America, Europe, and East Asia (Figure 1). By 2019, the burden of disease in the region is led by cardiovascular diseases, neoplasms, and diabetes, while in 1990 it was led by maternal and neonatal disorders, cardiovascular diseases, respiratory infections and tuberculosis, in this order (Table A1 and A2). With a shift in the importance of NCDs, the ranking of DALYs by cause in the region is starting to look more alike to that of Europe and Central Asia and North America, and less like that of Sub-Saharan Africa.

Leading metabolic risk factors for mortality and morbidity in the region are all drivers of NCDs: high body-mass index, glucose levels, blood pressure, and levels of fat in the blood. The burden on NCDs varies across and within countries in LAC, and it is driven by behavioral risk factors associated with nutritional practices, lifestyle (i.e. sedentarism), as well as ethnic/racial and demographic composition (Webber et al. 2012).

Figure 3 highlights three main points. First, while the percentage of DALYs caused by NCDs is positively associated with GDP per capita, it is not associated with income inequality measured by the Gini index. Secondly, due to increases in life expectancy and changes in demographic composition, more people are susceptible to NCDs in the later stages of their lives. As such, the percentage of years of healthy life lost due to NCDs is positively associated with the percentage of the elderly population. The disease burden of NCDs is about 80% in countries with more than 15% of its population being aged above 65 like Barbados, Cuba, and Uruguay.

Finally, the percentage of DALYs due to NCDs is greater in countries with high health expenditures. Some facts may explain this, for example, the healthcare costs associated with the treatment of NCDs and their complications are high, and countries where the burden of NCDs is high also have an aging population with greater demands for healthcare. In the region, healthcare is financed through a mix of financing arrangements including government spending and compulsory health insurance, as well as voluntary health insurance and household's out-of-pocket payments (see our accompanying chapter, Bancalari et al 2023). An interesting case is Cuba, a country aligned to the Beveridge healthcare model where all citizens are guaranteed access to healthcare. Cuba's health expenditure is over 10% of its GDP, above the average of Beveridge nations like Australia, Canada, and the UK and it has a disease burden caused by NCDs very close to these advanced economies (Figure 3, Panels C and D).

Injuries are persistently causing mortality and morbidity in the region, especially among the young. Homicide rates are almost five times the average for OECD countries (World Bank, 2020). Self-harm and interpersonal violence, particularly among the youth, are among the top three causes for DALYs in El Salvador, Guatemala, Honduras, Colombia, and Venezuela (Table A2).

Despite gains, the region is still far from the health outcomes of people living in the countries of the OECD, while its burden of disease is starting to look more like those countries. The next section will show that socio-economic gradients, spatial inequalities, and gender gaps in health outcomes are marked in the region.

3 Inequalities across the life cycle

In this section, we describe inequalities in health in LAC on selected indicators that are key across the life cycle, and in particular on (i) maternal and child health, (ii) reproductive health, (iii) non-communicable diseases, and (iv) mental health. See Tables B1 and B2 in the appendix for more information about the construction of indicators, age range and data sources.

We study inequalities for all countries with available data from 2008 onwards. We use Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys

(MICS) to report inequalities in maternal and child health as well as reproductive health. To study inequalities in non-communicable diseases and mental health we use a wide range of national health surveys, including the WHO STEPwise approach to NCD risk factor surveillance (STEPS), which uses standardized questions and protocols for collecting key biological risk factors across countries, including physical and biochemical measures.

While the DHS, MICS surveys are very similar in sampling strategies and questionnaire design (both between themselves and across countries) and are available for a wide range of countries, the national health surveys are not as widely available, use different data collection instruments, often sample different age ranges, and hence require substantive harmonization efforts.

We look at inequalities in three dimensions: by socio-economic status, by place of residence (i.e., urban vs. rural), and by gender. To measure socio-economic gradients, we use both education and a household level proxy wealth indicator.[2] We use education of the parents or respondent, stratified in five categories: (i) no education or incomplete primary, (ii) complete primary, (iii) incomplete secondary, (iv) complete secondary and (v) tertiary. With respect to household wealth, we use a variable available in the DHS and MICS datasets that captures the quintiles of the first principal component of a set of assets which are correlated with overall household wealth.[3] When using STEPS and the national health surveys, we create income quintiles (when available). All estimates presented were calculated from the original microdata using sampling weights and other survey design features to estimate standard errors.

We first present two equiplot graphs for each health indicator, one by educational attainment, and the other by wealth quintiles. Equiplots present indicators stratified by groups given by the dimension of inequality under consideration, offering a visual aid of both the level in each group and the distance between groups, which represents absolute inequality. We sort country-survey observations by the prevalence of each indicator and present the joint statistical significance of the difference across groups.

[2] A high correlation between parental and children's education would imply a high correlation in health outcomes throughout the life cycle (Fernandez et al. 2023).
[3] see https://dhsprogram.com/topics/wealth-index/Wealth-Index-Construction.cfm

To quantify the degree of socio-economic inequality, we report ratios comparing the health or health care of those in the with complete primary education or less (but without any secondary education), with those with complete secondary education or more, as well as ratios comparing the first and fifth quintile of our proxy household wealth variable[4] We also report ratios of the health and health care of individuals living in rural vs. urban areas (inequality by place of residence) and between men and women (gender inequality).

Appendix B presents more details about data and measurement. Table B1 presents in detail the children and women indicators, and Table B2 the adult indicators. Table B3 explains the educational attainment that we use for each indicator when studying inequalities by educational level.

3.1 Maternal and child health

A healthy start in life has positive long-lasting consequences in educational attainment and wages, including in Lower- and Middle-Income Countries (Currie and Vogl, 2013). The region has made great progress in maternal and child health indicators, driven largely by the expansion in health coverage to informal households through non-contributory systems in recent decades (Cotlear et al., 2014; Bernal et al., 2017; Berlinski et al., 2020). Like in advanced economies, the expansion of social health insurance has proven to be a key input in the production of child health (Currie, 2000).

We analyze data from up to eight countries using DHS and 16 countries using MICS. We use the latest round available for each country, spanning 2008–2019.[5] Information was obtained on women aged 12–49 years and on children aged less than 5 years. We expand the analysis of Sanhueza et al. (2021), who study inequalities in maternal, child and reproductive health between 2011 and 2016 in LAC using DHS and MICS, by focusing on a broader set of countries and years, and by reporting educational gradients across five categories in the equiplots (instead of three: none, primary and secondary or higher).

[4] In the health economics literature, it is standard to quantify the degree of inequality by means of the concentration index (Kakwani, 1977, 1980; Wagstaff et al., 1989; Kakwani, 1997; O'Donnell et al., 2008). However, in this chapter, we prefer to use the ratios to simplify comparisons with other chapters of the Latin American and Caribbean Inequality Review.

[5] Despite this broad coverage, we cannot report on Brazil nor Chile as there is no recent DHS nor MICS surveys.

We first focus on two indicators of maternal healthcare: antenatal care with four or more visits (ANC 4+ visits); and quality antenatal care, defined as having at least one antenatal care visit in which blood pressure was measured and urine and blood samples were taken (World Health Organization, 2016). We focus on the last live births. The survey data includes women aged 12-49 years old. The DHS sample is restricted to live births taking place during the five years preceding the interview, while the MICS sample to the last two years. To make them comparable, we restrict the analysis to reports from the two years prior the interview.

On average, there is broad coverage for ANC 4+ visits (86%) and quality antenatal care (92%), see Tables 1 and 2 respectively. Yet, there are still significant disparities across and within countries in the region. Haiti (2017) presents the lowest coverage of ANC 4+ visits (63%), and also the greatest disparities by socio-economic status. The highest educated women (with complete secondary or tertiary) and richest are more than twice likely to attend 4+ ANC visits than the lowest educated women (no education or some primary) and poorest. Peru (2016), Costa Rica (2018) and Mexico (2015) present the highest coverage of ANC 4+ visits (above 94%) and also relatively low inequality across the higher-educated categories.

In terms of ANC quality, Bolivia (2008) and Guatemala (2015) have the lowest coverage (around 60%), while Barbados (2012) and Cuba (2019) have the highest (99%). When comparing the lowest with the highest educated women, coverage is half as much in Bolivia (2008) for ANC quality (Tables 2).

Across the LAC region, women without education and poorer women have much lower coverage of ANC 4+ visits and ANC quality, with gaps across groups of over 10 ppts in countries like Haiti (2017) and Bolivia (2008). In general, the top three education categories and the top three wealth categories tend to have similar level of the indicators, though this is more evident for quality antenatal care. Depending on the country, the gradient is largest between the lowest or the two lowest categories and the rest. For instance, in Panama, Colombia, Paraguay and Mexico there is a large difference between the lowest education category and the rest, while in Guyana, Bolivia, and Honduras the two bottom ones are relatively close, with a larger difference with the rest (Figures 4 and 5).

Rural areas tend to have lower coverage of ANC 4+ visits and ANC quality. Bolivia (2008) has the largest pro-rich and pro-urban inequalities in ANC 4+ visits (0.5 and 0.7 ratios, respectively, in Table 1) and ANC quality (0.3 and 0.4 ratios, respectively, in Table 2).

In parallel, child health improved dramatically in recent decades, but challenges lie ahead. Child survival and its physical development are determined largely by both household wealth and access to public infrastructure and services in the region (Attanasio et al., 2004). Studies in Argentina and Mexico reveal how expansion to sewerage and piped-water and water disinfection in urban areas reduced childhood diarrheal disease mortality (Bhalotra, et al., 2021; Galiani et al., 2005), but recent evidence in Peru shows how the exact same outcome increases during the construction phase (Bancalari, 2022). A study in Mexico further reveals that a large-scale program to replace dirt floors with cement floor decreased the incidence of parasitic infections, diarrhea, anemia and improved children's cognitive development (Cattaneo et al., 2009). National campaigns to promote handwashing with soap have also been deployed in the region, but without observable improvements in the health of children under the age of 5 years in a study in Peru (Galiani et al., 2016). In Colombia, a study finds that a pre-school nursery program in rural areas increased children's nutritional status (Attanasio et al., 2013). Several studies in the region have concluded that conditional cash transfer programs improve children's health (Gertler 2004; Barham 2011; Rasella et al. 2013; Attanasio et al., 2015; Amarante et al., 2016; Celhay et al., 2021) and their cognitive development (Macours et al, 2012). Studies in Colombia, Mexico and Peru further reveal that access to non-contributory insurance improved children's health (Camacho and Conover 2013, Miller et al., 2013; Celhay et al., 2019; Bernal et al. 2022). Relatedly, the expansion of primary care in Brazil also led to a reduction in neonatal and post-neonatal mortality (Bhalotra et al., 2019).

We focus on three sentinel indicators for the continuum of maternal- newborn-child health: (i) infant mortality, measured as not surviving the first year of life among children born during the five years preceding the survey (multiplied by 1,000 to be comparable with traditional infant mortality rates); (ii) stunting, measured as height- for-age being below -2 standard deviation units from the median of the WHO's reference group, and (iii) child overweight, measured as weight-for-height being above 2 standard deviations

from the median of the WHO's reference group. Data on child anthropometrics is available for children below 5 years old.

Infant mortality is still prevalent in LAC, as high as 56 deaths per 1,000 infants in Haiti (2017), see Table 3. The average infant mortality across country-survey observations in our sample (25 deaths per 1,000 infants) is five times the OECD average.
Infant mortality is consistently higher for infants with parents in lower educational categories, with marked gaps across educational groups in Guyana (2009), Bolivia (2008), and Haiti (2017, Figure 6, Panel A). In these countries, the infant mortality of the lowest educated parents is more than three times that of the highest educated. Also, in Bolivia (2008) and Haiti (2017), Colombia (2015) and Guatemala (2015), there is a very large difference between the lowest and second lowest educational category.

Likewise, infant mortality is higher for households in the lowest wealth quintiles. The highest level and widest gaps across wealth quintiles are observed in Bolivia (2008), mostly below the median of the wealth distribution (Figure 6, Panel B). Due to the low number of infant deaths, the wealth gradients are only statistically significant for five out of 11 countries in the analysis. Unlike evidence from advanced economies (Kennedy-Moulton et al., 2022), we find that infant mortality varies monotonically with wealth in countries where wealth gradients are jointly significant. The greatest wealth inequality is observed in Paraguay (2016), where infant mortality is 20 times higher for the poorest (first and second quintiles are at the same level) than the richest (the IMR is very close to zero for the latter group) (Table 3).

In general, there are no large disparities in infant mortality by place of residence and gender among LAC countries. The greatest pro-urban inequality is observed in Guyana (2014) where infant mortality is five times higher in rural areas. Only in Bolivia (2008) we find a significant pro-female inequality (Table 3).

We next focus on the double burden of malnutrition in the region: stunting and over-weight. While stunting is the result of chronic or recurrent undernutrition, overweight is caused by overfeeding, the consumption of unhealthy food (i.e. processed, high in sugar, fat, or salt), and lack of physical activity (United Nations Children's Fund, 2022). Early-life nutritional status is a key determinant of adult health, cognitive development, and

productivity (Case and Paxson, 2008, 2010). For those that survive, a poor disease environment and low caloric intake put them at risk of impaired growth and development (Deaton, 2007; Bozzoli et al., 2009). Income gradients observed in adult health have antecedents in childhood, and part of the intergenerational transmission of socioeconomic status works through the impact of parents' long-run average income on children's health (Case et al., 2002). Impoverished children receive fewer household- and community-level inputs in the developmental process (e.g., nutrition, health, education, and responsive stimulation) than non-poor children (Attanasio et al., 2023).

Stunting is high in the region (15% on average in our study sample, almost 10 ppts higher than the OECD average), with the highest prevalence in Guatemala (46%). This country also has marked gaps across educational and wealth categories, gaps as large as 10 ppts across groups (Figure 7). Child stunting is strikingly high among the least educated and poorest in LAC, and inequalities tend to be greater in countries with higher prevalence. Inequalities across the lowest and highest educated are particularly high in Paraguay (2016) and Peru (2016) where the percentage of children of the lowest educated that are stunted is three and half times the percentage of the highest educated. As in previous indicators, the top categories tend to have quite similar values, with most of the inequality existing between the lowest, second-lowest and the rest (Figure 7).

Peru (2016) also has the greatest pro-urban disparities, with stunting in the rural areas being three times that of the urban areas. Interestingly, stunting tends to be more prevalent in boys than girls in LAC countries, with the greatest disparity found in Trinidad and Tobago (2011) where the prevalence among boys is almost half than among girls (Table 4).

Child overweight is an increasing challenge in the region, although still not as important as stunting (in our sample, 7% of children are overweight vs. 15% that are stunted). The average overweight rate in our sample is close to the OECD average, but this co-exists with undernourishment in the LAC region.

Of the indicators analyzed so far, child overweight is the only one in which the inequality is pro-poor since child overweight is more prevalent among children of highly educated parents and those of the richest households (see Figure 8). The gaps are, however, not as

marked as with stunting. The highest educational gap in child overweight is observed in Honduras (2019, 0.35) and Peru (2016, 0.33), favoring the lowest educated parents, while the opposite is the case for Cuba (2019, 1.27), which has the highest gap favoring the highest educated parents (see Table 5). Child overweight is consistently higher in the richest compared to the poorest households, with the greatest wealth inequality observed in Peru (2016, 0.19). Urban areas face this threat much more than rural areas, and the disparity is highest in Peru (2016), where overweight in the rural areas is a third of that in the urban areas. Overweight also tends to affect more boys than girls. We observe significant gender gaps in Haiti (2017), Cuba (2019), Colombia (2010) and Peru (2016).

3.2 Reproductive health

We focus on four health outcomes linked to reproductive health: (i) teenage pregnancy; (ii) unwanted pregnancy; (iii) unmet need for contraceptives (for spacing or limiting); and (iv) women's obesity. While the first indicators focus on family planning, the latter is of broader concern for women's health, including reproductive health. Data on reproductive health was available for up to seven countries in DHS and 14 countries in MICS.

The prevalence of teenage pregnancy is alarmingly high in the LAC region. With 60 live births per 1,000 among women aged 15 to 19, the region has the second-highest regional prevalence rate, surpassed only by Sub-Saharan Africa (World Bank, 2020). Teenage pregnancy exacerbates the gender gap in education, labor force participation and earnings as women are exposed earlier on to the child penalty, as highlighted by the LACIR Chapter on gender inequalities (Berniell et al., 2023).

During the last decade there has been considerable debate about the role of family planning programs in reducing fertility and improving living standards of women in the region. A study of one of the world's oldest and largest family planning interventions in Colombia – Profamilia – find that it explains less than 10% of Colombia's fertility decline during its demographic transition (Miller, 2009). However, this study highlights how postponing first-birth produced important socio-economic gains, allowing young women to advance their education and to work more to live independently. Likewise, a study in Argentina shows that policies that encourage adolescent contraceptive

autonomy reduced birth rates among females aged 15 to 19 (Roig 2023).

We measure teenage pregnancy as whether the women had their first child when younger than 20 years old. Because educational attainment can be affected by becoming a teenage mother, teenage pregnancy is expressed as a percentage based on women who are above 25 years old during the interview (and up to 49 years old), when the typical educational stage has ended. On average in our sample, 40% of women had their first child while still teenagers, ranging from 51% in Honduras (2019) to below 30% in Cuba (2019) and Argentina (2011).

Within countries, teenage pregnancy is the lowest amongst those with tertiary education, with wide gaps in all countries, as large as 20 ppts (Figure 9, Panel A). Teenage pregnancy of the lowest educated is around five times that of the highest educated (tertiary) in Suriname (2018). Although educational gaps are wider, gaps by wealth quintiles are also marked (Figure 9, Panel B). Particularly in Peru (2016), teenage pregnancy amongst the poorest is more than four times that of the richest (Table 6). Unlike previous indicators, there are sizeable differences amongst the rates of the top three education and wealth categories (Figure 9).

Teenage pregnancy is higher in rural than in urban areas in all countries, with the greatest spatial disparity observed in Peru (2016) (Table 6). Women living in rural areas face greater barriers to contraceptive use, as will be discussed below.

Contraceptive knowledge among adolescents

Teenage pregnancy persists even when knowledge about modern contraceptive methods is high in the region. In our sample, an average 93% of adolescents aged 15-17 (ages in which we have data for the parents' educational attainment) know about concealing modern contraceptive methods (i.e., pills, IUD, injectables or implants, excluding condoms). Concealing methods are less known compared to condoms, but they are an important option for women when social, moral and religious values generate greater barriers to adoption (Roig 2023). Given the high level of knowledge, younger generations might have lower teenage pregnancy rates in the future, but inequalities across parents' educational attainment and wealth are still present. Inequalities are greater in countries with lower knowledge overall (Figure 10 and Table BOX). In Bolivia (2008), where 84% of adolescents know about these concealing contraceptive methods, knowledge is 1.20 times higher among teenagers from the highest educated parents than those from the lowest educated, and 1.6 times higher among richest than poorest. For Bolivia (2008) and Guatemala (2015) the greatest disparities are observed at the bottom of the educational and wealth distributions.

Unwanted pregnancies have long-lasting effects on women's lives, perpetuating and re-producing gender imbalances, but it has received little attention from policymakers and shows insignificant improvements in the region (Greene, 2019). We focus on the last pregnancy (or two last pregnancies if woman was pregnant at the moment of the interview). The DHS and MICS sample are restricted to pregnancies taking place during the two years preceding the interview. Similar to teenage pregnancies, we restrict the analysis to women aged 25-49 years old, when the typical educational stage has ended. In our sample, on average, 22% of women did not want their last pregnancy, ranging from 10% in El Salvador (2014) to 45% in Bolivia (2015). Inequalities are more visible in countries with a higher prevalence of unwanted pregnancies (Figure 11).

Unwanted pregnancies are more common among less educated women and poorer women, and disparities marked across the lowest and middle points of the educational and wealth distributions. Several countries (i.e. Bolivia, 2008; Colombia, 2015; Haiti 2017; Mexico 2015, and Peru, 2016) present marked inequalities across most educational groups. The highest inequalities are observed in Haiti (2017), where the percentage of women with unwanted pregnancies amongst the lowest educated is five times that of the

highest educated. Wealth gradients are also marked, particularly in Guyana (2014), where the percentage of the poorest women with un- wanted pregnancies is 4.8 times as much as that of the richest women. Pro-urban inequalities are statistically significant in seven out of the 15 studied countries, with the largest disparity in Bolivia (2008) where unwanted pregnancies are almost twice more frequent among women living in rural areas than those in urban areas (Table 7). However, there are several countries in which the inequalities between urban and rural areas appear to be small.

Unmet need measures how well a country's health system and social conditions support the ability of women to materialize their stated preference to delay or limit births (Machiyama et al., 2017). Women with unmet needs are those who are fecund and sexually active (aged 15-49 years old) and married or in a consensual union, but are not using any method of contraception, and report not wanting any more children or wanting to delay the next child. The concept of unmet need points to the gap between women's reproductive intentions and their contraceptive behavior.

In our sample, on average, 12% of married women (or in a union) have unmet needs for modern contraception in the LAC countries we study. Disparities by socio-economic status tend to be higher in countries with a higher prevalence of unmet need for family planning (Figure 12). The country with the highest prevalence of unmet need is Haiti (2017), where approximately 25% of women have unmet needs and where the gap between the lowest educated and those with complete secondary is almost 10 ppts. The widest socio-economic and pro-urban gaps are present in Bolivia (2008), where the lowest educated is 2.6 times more likely to have unmet needs in contraceptive use than the highest educated, the poorest 4.5 times more than the richest, and the rural women twice as much than the urban (Table 8). In general, though, the inequality on unmet need for contraceptives is smaller than on teenage and unwanted pregnancies.

Finally, we focus on a risk factor for reproductive health that is gaining importance in the region: obesity, which also has marked implications for women's health which go beyond reproductive health. Obesity can be accompanied by several neuroendocrine and ovarian dysfunctions and increased risk during pregnancy. Evidence shows that obesity may lead to pregnancy loss and low live birth rates in women (Incedal Irgat and Bakirhan, 2022).

On average in our sample almost 20% of women between 12 and 49 years old are obese, with the highest prevalence in Honduras (2012, 22%) and the lowest in Haiti (2017, 11%). Socio-economic gradients don't always go in the same direction. In general, lower educated women suffer more from obesity, but the opposite is the case for the poorest women (Figure 13). In countries like Haiti (2017), Guatemala (2015), and Honduras (2012), women from some of the most educated groups are more likely to be overweight, perhaps because they can afford high calorie foods and expensive calories (e.g., fatty and sugary products). The greatest inequalities are observed in Haiti, where the highest educated women are 1.5 times more likely to be obese than the lowest educated, and the richest are 6 times more likely to be obese than the poorest. Women's obesity tends to be higher in urban areas, except in Colombia (2010, see Table 9).

3.3 Non-communicable diseases

NCDs generate a high burden of morbidity and mortality throughout the world (World Health Organization, 2019). Demographic composition and genetic, environmental, and behavioral factors are associated with the incidence of these diseases. Many patients affected by these diseases are economically active adults, generating a social impact through disability and premature deaths (Strong et al., 2005).

Since the year 2000, there is a large volume of evidence showing that the higher mortality burden associated with NCDs disproportionately affects low and middle-income countries or populations with low socioeconomic levels in high-income countries (Ezati et al., 2018; Niessen et al., 2018). For this reason, the UN included NCDs in the Sustainable Development Goals (SDGs), target 3.4: "by 2030 [to] reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being".

The epidemiological profile of the LAC region has been transforming towards an increase in NCDs. This epidemiological transformation has been accompanied by a socio-economic transformation that has led to increases in food availability, reduced physical activity, and a replacement of traditional diets with a higher intake of carbohydrates, fats, and sugars (Fraser, 2005; Popkin, 2012; Lin et al., 2020; Aguilar et al., 2021). These disparities, together with the fact that safety nets against income shocks are limited in the region, have implications for income inequality (Berlinski et al., 2020).

Although the leading causes of mortality from NCDs are related to cardiovascular diseases, cancer, and chronic respiratory diseases, which account for approximately 80% of all premature deaths from NCDs (Lin et al., 2020; Watkins et al., 2022), there are no widely available standardized national health surveys to identify the prevalence of these diseases in the region.

Hence, we study inequalities by education and wealth in the prevalence of four well-known metabolic risk factors for cardiovascular diseases[6]: (i) obesity; (ii) high cholesterol;(iii) hypertension; and (iv) diabetes. We also study detection and treatment of these risk factors, which hinges on the capacity of health systems.

We use information from STEPS and national health surveys that identified these risk factors with standardized clinical measurements: body mass index for obesity, blood pressure for hypertension, and analysis of blood samples for diabetes and hypercholesterolemia. We also draw on follow-up questions about whether the respondent was aware or not of its condition and whether it was treated or not. A large effort was required to harmonize different health surveys. We use up to five country-rounds of the WHO surveys STEPS, and seven national health surveys. Even with this extensive effort, unfortunately, we have a limited sample of countries with all the required measurements.

The surveys used vary in the age range of the sample (see Figure B2 for more information about the age range). To take this into account, for each survey, we report the prevalence of the risk factors by group (socio-economic, urban/rural, or male/female) standardized at age 60. We do this by estimating a Logit model for each survey in which the dependent variable is a binary indicator for the risk factor, and the independent variables include a second order polynomial in age and dummy variables for the groups for which the inequality is being studied. In the tables and equiplots, we report the prevalence of the risk factor for each group for an individual of 60 years of age.

Obesity at age 60 is the least prevalent is Colombia (2015) and the most prevalence in the Bahamas (2011) (Table 10). The most educated sub-populations have a lower prevalence of obesity than the least educated in countries such as Argentina (2018), Chile

[4] Examples of cardiovascular diseases include ischaemic heart disease, ischaemic stroke, hemorrhagic stroke.

(2019), Uruguay (2013) and Mexico (2018), while Peru (2016) and Guyana (2016) exhibit the opposite inequality (i.e. higher prevalence of obesity among the most educated). In the remaining countries in Table 10 the obesity-education ratio gradient is not statistically different from one.

Wealth is only available for 7 out of the 12 countries. The wealth ratio gradient is only statistically significant in Peru (2016) and Argentina (2018) with opposite results. In Peru (2016) the least well off are much less likely to be obese (ratio of 0.2) while in Argentina the poorest are 1.3 times more likely to be obese than the richest. Wealth inequality in obesity in Argentina, a relatively richer country in Latin America, exhibits a similar pattern than that of England (2020-2021), where the prevalence of overweight and obesity in the most deprived decile is 1.1 times that of the least deprived decile (Case and Kraftman, 2022).

The prevalence of obesity is greatly affected by healthy lifestyle habits, such as a healthy diet and physical activity (Cawley, 2015). More educated populations are likely to have healthier behaviors. Yet, countries in the analysis (Brazil (2016), Colombia (2015), Costa Rica (2010), Mexico (2018) and Peru (2016)) show a lower prevalence of obesity in rural areas compared to urban areas, with the exception of Chile where it is the other way around. This may be related to more physical activity through work and the lower availability of processed and `junk' food in the rural areas of these countries. Finally, it is observed that women have a higher prevalence of obesity than men, roughly double in Guyana (2016), Barbados (2007) and Colombia (2015) (see Table 10).

The high prevalence of hypertension, its easy diagnosis, and its treatment with relatively affordable drugs, make it one of the main risk factors of NCDs and its control a priority worldwide. The prevalence of hypertension is higher amongst the lowest educated than the highest educated in countries such as Bahamas (2011), Chile (2019), Brazil (2016), Uruguay (2013), Costa Rica (2010), Argentina (2018), and Mexico (2018). Peru (2016) shows an inverse relationship, consistent with the gradient found in obesity.

The relationship between the prevalence of hypertension and sex is not homogeneous in LAC. In some countries, women have a higher prevalence of hypertension (Brazil (2016), Colombia (2015) and Costa Rica (2010)), and for others, the prevalence is higher

in men (Argentina (2018), Ecuador (2018), Mexico (2018), Peru (2016) and Uruguay (2013)). Location (urban/rural) is not available for several of the national surveys that collect data on hypertension, but there is a tendency for the prevalence of hypertension to be higher in urban areas.

In contrast, very marked differences are observed in all the countries evaluated between men and women, in relation to the diagnosis of hypertension (percentage of individuals who suffer from hypertension but who are not aware of it) and its treatment. The female/male ratio of the percentage of individuals who are unaware of their hypertension or who are not treated for this disease shows a value less than 1 for almost all countries, with Barbados (2007) having the lowest value and Argentina (2018) having the highest one (Table 12). This difference can be explained by a greater propensity for women to use of health services. Rural areas show a higher proportion of underdiagnosis, or lack of treatment in Colombia (2015), Costa Rica (2010), Mexico (2018) and Peru (2016), which can be explained by lower healthcare access in these areas. Most health systems in LAC have better access to health services for populations with formal jobs (see our accompanying chapter, Bancalari et al 2023). In rural areas, there is a lower proportion of the population with formal jobs compared to urban areas. Additionally, the supply of health services in rural areas is generally lower or of worse quality compared to urban areas.

With respect to socio-economic differences in those who are unaware of their hypertension or untreated for it, results for several countries are not statistically different across education or wealth groups, partly because these indicators use a subset of the sample, only those who suffer from hypertension. When the results are statistically significant, they show poorer outcomes for the less educated or less well-off, except for Argentina and Bahamas for the hypertension unaware indicator.

The number of countries that we are able to analyze for high cholesterol and diabetes is smaller than for obesity and hypertension because a blood test is required to make the diagnosis of these conditions. Only eight countries had this information (Table 13). Unlike hypertension, the prevalence of high cholesterol tends to be higher amongst the most educated or amongst the richest, and significantly so in Argentina (2018), Ecuador (2018) and Mexico (2018). Women have a higher prevalence of high cholesterol (Table 13, Panel A), however, as in hypertension, it is observed that women have a lower

proportion of underdiagnosis or lack of treatment. In Argentina (2018) and Ecuador (2018), the percentage of untreated high cholesterol is higher amongst the lowest educated or poorest, but the contrary in Costa Rica (2010) and Guayana (2016). With respect to urban/rural inequalities, while in Mexico (2018) the prevalence of high cholesterol is higher in urban areas, in Colombia (2015) it is higher in rural areas. In terms of diagnosis and treatment, rural areas always have worse indicators.

In the case of diabetes, it is observed that the prevalence is higher amongst the least educated or poorest in Argentina (2018), Barbados (2007), Colombia (2015), and Mexico (2018) (Figure 19, Table 14 Panel A). Likewise, women seem to have a higher prevalence of diabetes, although the difference is only statistically significant in Mexico (2018), Guyana (2016) and Chile (2019). With respect to underdiagnosis or lack of treatment, the smaller sample prevent us from reaching clear conclusions (Table 14 Panel B and C). Yet, it seems that while prevalence is higher among females, its detection and treatment for those with diabetes is lower for females than men.

3.4 Mental health

Mental illness encompasses a wide range of disorders that affect a person's mood, thinking, behavior, and overall functioning. These disorders can be caused by a combination of biological, psychological, and environmental factors and can impact daily life activities and relationships. Examples include depression, anxiety, bipolar disorder, schizophrenia and eating disorders.

The disease burden from mental illness has changed in the last 30 years. Mental disorders now rank 6^{th} in the region for DALYs while in 1990 it was only ranking 9^{th} (see Tables A1 and A2). Mental health disorders rank higher in Europe and Central Asia and North America (4^{th}), and lower in poorer regions like South Asia and Sub-Saharan Africa (9^{th} and 11^{th}, respectively). This reflects not only the growing incidence of mental disorders but also an increased recognition of the importance of mental health and greater investment in mental health services and research that comes with development. Nevertheless, many countries still have significant gaps in their mental health systems, particularly in low- and middle-income countries, and access to evidence-based care remains a challenge for many people with mental illness.

The systematic measurement and reporting of mental illness are, unfortunately, rather poor in the region. We use information from mental health scales (generally different across countries, see Table C1) that screen for depression in five LAC countries: Brazil (2019), Chile (2016), Colombia (2015), Costa Rica (2009), and Paraguay (2015). We use the threshold appropriate for each scale to build a binary variable of elevated depressive symptoms (see Appendix C for more details).

As in the case of NCDs, our estimates of the prevalence of depression are standardized at age 60, through a Logit model with a quadratic polynomial in age. We do so to consider the difference in the age range of the sample across countries, and also due to the fact that depression (similarly to happiness) exhibits a U-shaped pattern with age for both males and females in Brazil (2019), Colombia (2015), Costa Rica (2009), and Paraguay (2015), and an inverted U-shaped pattern in Chile (2016, Figure 22).

Across the five countries analyzed, we consistently observe a higher prevalence of depressive symptoms among less educated individuals (Table 15). The greatest educational disparity is observed in Costa Rica (2009), where the lowest educated are twice as much likely to have depression than the highest educated. In all countries, depression is higher for females, with the greatest pro-male gap observed in Paraguay (2015). These findings are consistent with those of Case and Kraftman (2022), who find that depression is systematically higher for women and that it is twice more prevalent for those living in the most deprived areas compared to those in the least deprived areas.
The rural-urban inequality on depression is less marked than in the socio-economic or gender dimension, with higher depression on the urban parts of Brazil (2019) and Paraguay (2015).

4 Correlates of health inequality and GDP per capita

The LAC region is going through an epidemiological transition so that its disease profile is looking much more like that of advanced economies, but still carries many of the challenges of LMICs. There is, however, heterogeneity among the region in the disease burden as well as inequalities within countries. Many countries are now facing a challenging double burden of child malnutrition (a mix of overweight and stunting)

together with marked inequalities in metabolic risk factors for NCDs and mental health.

Poorer countries are facing greater pro-high-educated inequalities in child stunting. In countries like Haiti (2017), Honduras (2019), and Bolivia (2008), the poorest countries in our analysis, the prevalence of stunting among the children of the least educated parents are approximately three times that of the children of the most educated parents, while there is no inequality in richer countries like Trinidad and Tobago (2011) and Costa Rica (2018). There is a (clearly linear) negative correlation between GDP per capita and pro-high educated inequality in stunting, with only a few outliers (i.e. Peru (2016) and Paraguay (2016)) in the middle of the GDP per capita range, but with very high inequality (Figure 23, Panel A).

At the same time, pro-low-educated inequalities in child overweight are more marked in poorer countries: children of more educated parents tend to suffer more from overweight than those of less educated parents, but the difference decreases with GDP per capita (Figure 23, Panel B). Again, there is no significant inequality in richer countries like Trinidad and Tobago (2011) and Costa Rica (2018), while there are marked gaps in low- (e.g. Honduras (2019)) and middle-income countries (Colombia (2010) and Peru (2016)). The positive correlation between pro-high-educated inequality and GDP per capita for child overweight is less marked than the negative correlation for stunting.

On the contrary, richer countries are facing greater inequalities in NCDs. There is a positive correlation between GDP per capita and pro-high educated inequalities in hypertension and obesity. In high-income countries like Chile (2019) and Argentina (2018), the least educated suffer more from hypertension and obesity than the most educated. Peru (2016) is again an outlier, as the prevalence of hypertension and obesity is higher among the more educated (Figure 24).

These correlations hide meaningful heterogeneity by gender. The gradient of the relationship between pro-high educated inequality and GDP per capita is steeper for men than women for hypertension. Furthermore, some countries exhibit pro-low educated inequalities in obesity and hypertension for men, while inequalities are always pro-high educated for women. In middle-income countries like Brazil (2016) and Ecuador (2018), it is the least educated men the ones that suffer more from hypertension and obesity, while

the opposite is the case for women (see Figure 25).[7]

5 Conclusions

This chapter is, to our knowledge, the first attempt to comprehensively describe health inequalities, using a homogeneous methodology, in the LAC region across different key health domains: (i) maternal and child health, (ii) reproductive health, (iii) metabolic risk factors for cardiovascular disease, and (iv) mental health. This allows us to compare inequalities across different health domains, which is of great importance for the region given that its epidemiological profile is now closer to that of high-income countries, but still faces important challenges common to LMICs such as high levels of child stunting. The chapter not only analyze several health domains, but also looks at inequalities across several dimensions: (i) socio-economic (by education and a wealth proxy), gender, and residence (urban vs. rural).

Inequalities in child health, and in particular stunting, are still very sizeable, especially in the poorest countries. Children (younger than 5 years old) of more educated parents and those living in urban areas have better health indicators, except for child overweight, which is lower in children from less educated parents and in rural areas. With respect to sex, girls are less likely to be stunted than boys, and also less likely to be overweight. Inequalities on teenage pregnancy as well as unwanted pregnancy are as severe as the inequalities on stunting, if not more. However, they are distributed quite differently. While the inequality on stunting is driven by the lower tail of the socioeconomic spectrum, the inequalities on teenage pregnancy and unwanted pregnancy are more uniformly spread out.

With respect to inequality of some of the inputs associated with child and reproductive health (antenatal care and unmet need for contraceptives), they tend to exhibit less inequality than the outcomes, consistent with a complex health production function that depend on a variety of inputs, including parental information, resources, and the wider

[5] We find no or a very low correlation between health inequalities and the Gini index (Figures C1, C2 and C3), which highlights how different aspects of inequality are not reflected in a single measurement of income inequality. We only find a marked negative correlation between pro-high educated inequalities in women obesity and Gini, suggesting that in countries with higher income disparities, there is lower disparity in obesity across women of different educational attainment.

environment.

Regarding NCDs, we pay particular attention to hypertension which is a well-known metabolic risk factor of cardiovascular disease, and for which we have a large number of countries. As expected, we find that the prevalence of hypertension is larger for the least educated/ least well-off groups in most countries for which we have data. A similar pattern can be found for diabetes, but not all the NCDs exhibit this same pattern: we find that high cholesterol tends to be more common amongst the highest educated or richest groups. Among the countries in our study, we find heterogeneity in the direction of the inequality in adult obesity across socio-economic groups.

When it comes to urban/rural differences in NCDs, obesity is more common in urban areas. This gradient does not show so consistently for hypertension, high cholesterol, and diabetes for which the differences are not statistically significant for many of the countries. However, when they are, it is also the case that rural areas exhibit better outcomes.

With respect to NCDs and gender differences, the gradient of the inequality is condition specific. In most countries for which we have data, the prevalence of obesity and high cholesterol tends to be higher amongst women. However, the picture is not so clear for diabetes in which most results are not statistically significant, nor in hypertension, which is higher amongst women in 3 countries, and higher amongst men in other 5 countries.

Our analysis above has indicated some nuances in the inequality on the prevalence of NCDs. However, the results on inequality of diagnosis and treatment are more straightforward. The percentage of undiagnosed cases of hypertension and high cholesterol, as well as of untreated cases, tends to be higher amongst the least educated/least well off, rural areas, and males. For diabetes, the ratios also go in this direction, but the results are not statistically significant due to smaller sample sizes.

Another adult key domain that we have analyzed is depression, which we consistently find higher among the less educated in the five countries that we have analyzed. In general, women are also more affected by depression. When differences between urban and rural areas are statistically significant, they exhibit better mental health in rural areas.

A strength of our study is that we report inequalities on health outcomes across different stages of the life cycle, ultimately allowing a comparison amongst those. Focusing on hypertension, the NCD for which we have most countries, the ratio of prevalence between the lowest and highest educated is around 1.10-1.15, whilst for stunting, teenage pregnancies and unwanted pregnancies tend to be in the 2-3 range. The equiplots also show much larger spreads for stunting, teenage pregnancies, and unwanted pregnancies than for hypertension. With regards to depression, the ratios of lowest to highest educated are around 1.3, larger than hypertension but much smaller than the 2-3 range which corresponds to stunting, teenage pregnancies, and unwanted pregnancies.

The above discussion highlights that, despite its evolution on the epidemiological transition, socio-economic health disparities in the LAC region are still more important in child and reproductive health than in conditions suffered by adults, at least as it pertains to obesity, hypertension, and depression.

There is probably an even more striking difference between inequalities in child and adult health that our analysis has uncovered: socio-economic inequalities in child health are smaller in the richest countries, while the contrary happens with inequalities in hypertension and adult obesity. It is indeed likely that the less well-off are more affected by dietary and lifestyle changes associated with urbanization and development. If so, we would expect the importance of inequalities on metabolic risk factors to only increase over time.

Confronting existing and future health challenges will require interventions in the health sector designed to improve information and facilitate access to quality and affordable care, as well as other policies that improve the lives of people experiencing poverty. A non-exhaustive set of policies includes:

1. Universal access to health care: Access to health is guaranteed by most constitutions of the region. However, provision and access are usually fragmented in ways that are associated with employment, education, place of residence and gender. Several studies have shown that expansion of health care in the LAC region, including through increasing health insurance coverage and access to primary

health facilities, has led to improvements in health, increased use of health care and reduction of catastrophic health expenditures.[8]

2. Health promotion and disease prevention programs: These programs are centered on promoting healthy behaviors (e.g., safe sex, tobacco, and alcohol control, lower salt-intake, physical exercise, healthy food), adoption of contraceptives, introduction of food labelling for improved nutrition, and stimulating screening for metabolic risk factors and appropriate management of the chronic disease. Particular emphasis should be put on understanding the circumstances of the targeted populations (i.e., one size does not fit all) and the cultural adjustment that is required.

3. Improving housing: Improving access to safe water, sanitation, completing public projects on time and ensuring that households continuously use and connect to these facilities. Addressing these issues can go a long way towards reducing environmental factors that contribute to the spread of diseases and that affect deferentially the rich and the poor. This is particularly daring in places where there is substantial residential segregation.

4. Addressing economic determinants: Providing a safety net that allows families to smooth consumption in the presence of income shocks and promoting work/training and care opportunities for the poor can also contribute towards reducing the social and economic determinants of health inequality.

5. Providing support for mental health: Initiating awareness campaigns and fostering comprehension of mental health issues represents a crucial initial stride. Moreover, it is imperative to augment access to professional support, enhance service quality and include mental health in insurance coverage. The integration of mental health into public healthcare systems and social protection programs is pivotal for mitigating the prevailing disparities. Elevating the prioritization of mental health on the policy agenda is paramount, as it significantly contributes to the holistic well-being and productivity of the population, thus nurturing more

[6] See (Miller et al., 2013; Camacho and Conover, 2013; Pfutze, 2014; Bernal et al., 2017; Bhalotra et al.,2019; Conti and Ginja, 2023; Balsa and Triunfo, 2021; Bancalari et al., 2022); although there are also exceptions (King et al., 2009; Spenkuch, 2012).

inclusive and prosperous societies within the region.

6. Improve the data available to take decisions based on evidence. Thanks to the Demographic and Health Surveys, as well as the Multiple Indicator Cluster Surveys, the LAC region, has reasonably good coverage of maternal and child health data. However, survey data on metabolic risk factors, non-communicable diseases, and mental health is much more scarce, which limits the capacity of the region to plan and take decisions based on evidence.

Addressing health inequality is not only a moral imperative but is also a fundamental building block of more inclusive and prosperous societies in the region.

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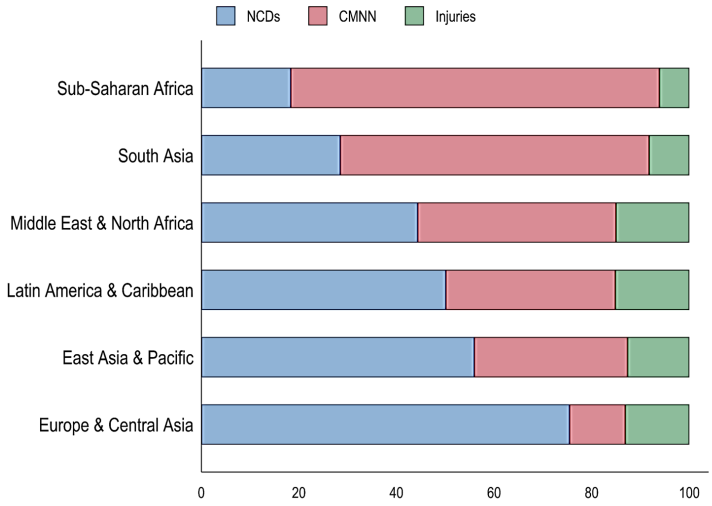
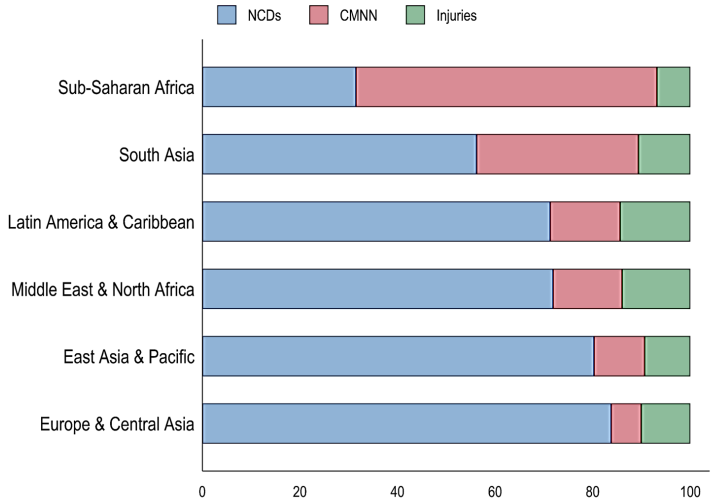
5 Exhibits

Figure 1: DALYs by cause, regions

A. 1990



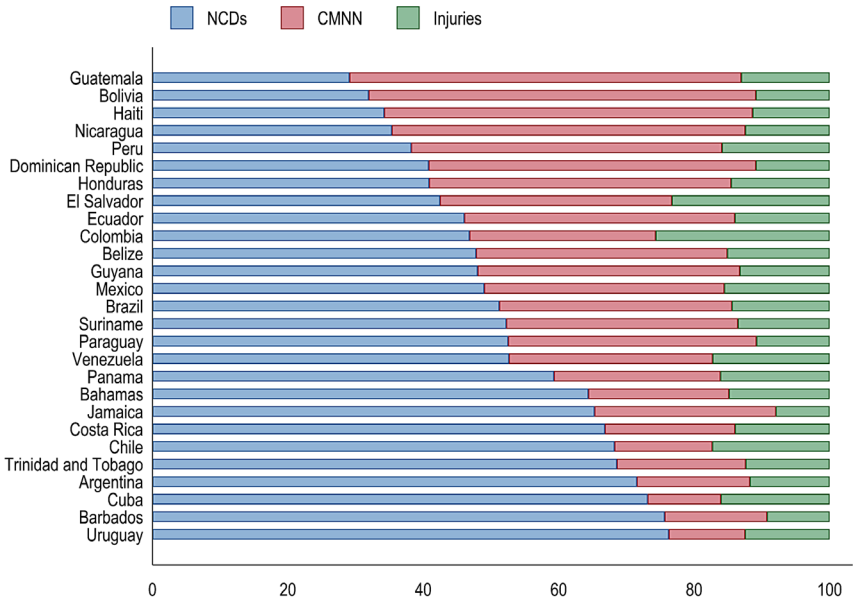
B. 2019



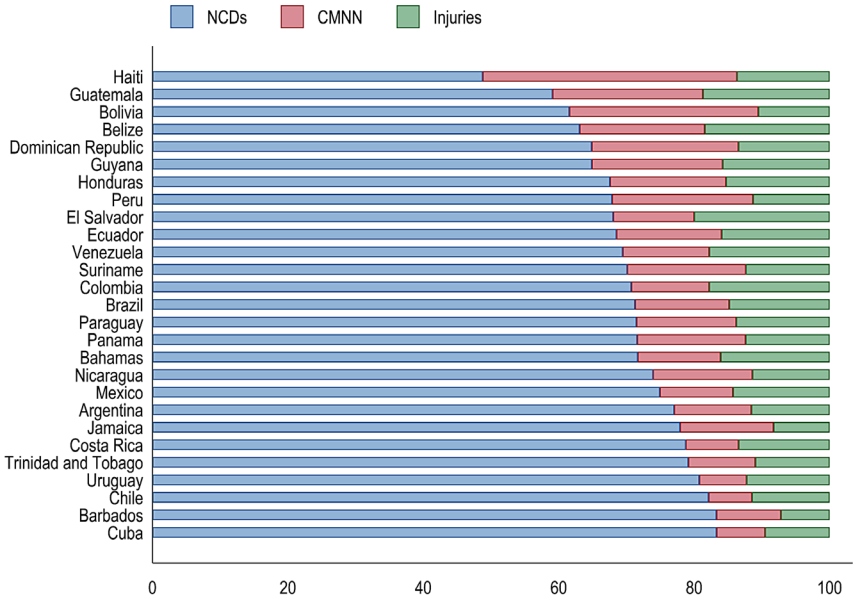
Note. DALYS, disability-adjusted life years; NCDs, percentage of DALYs caused by non-communicable diseases; CMNN, percentage of DALYs caused by communicable, maternal and neo-natal diseases; Injuries, percentage of DALYs caused by injuries, including self-harm and interpersonal violence, transport injuries and unintentional injuries. Data from the Global Burden of Disease - Global Health Data Exchange (GHDx) for the years 1990 (Panel A) and 2019 (Panel B) for the World Bank's regions.

Figure 2: DALYs by cause, LAC

A. 1990

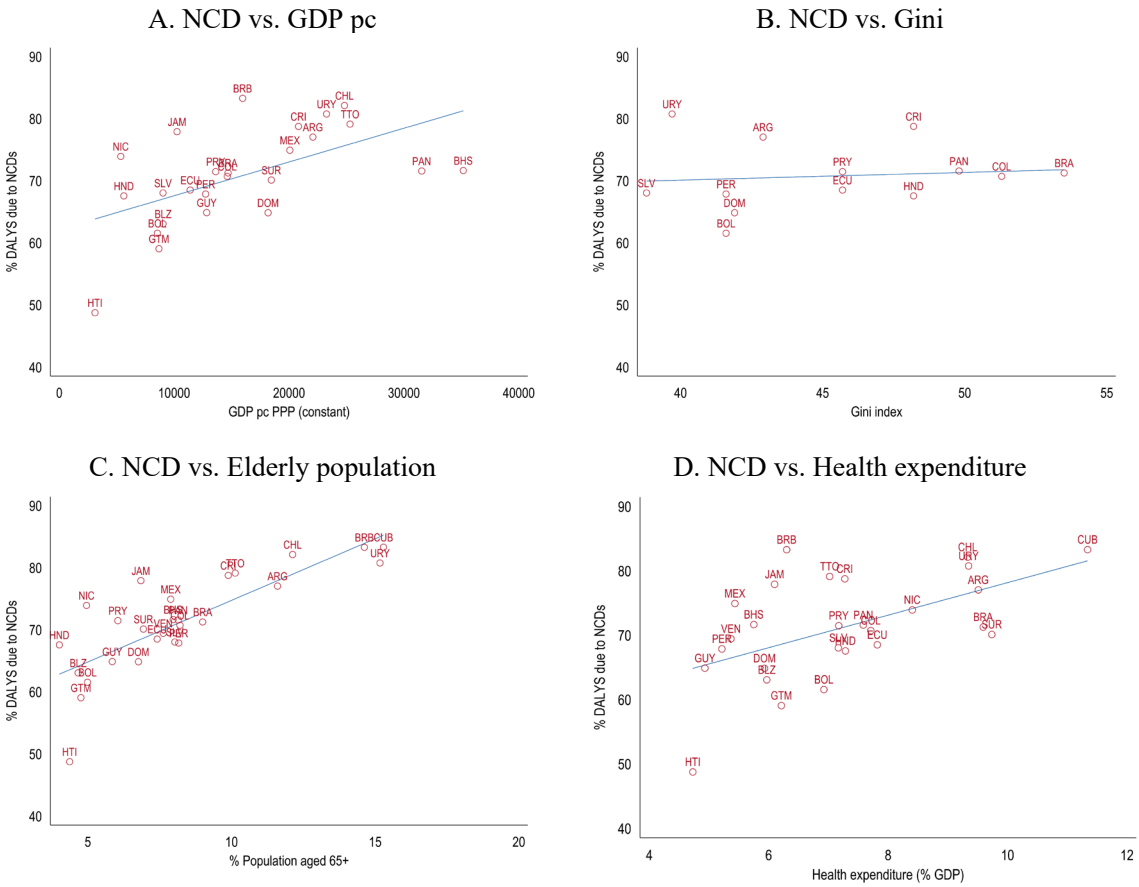


B. 2019



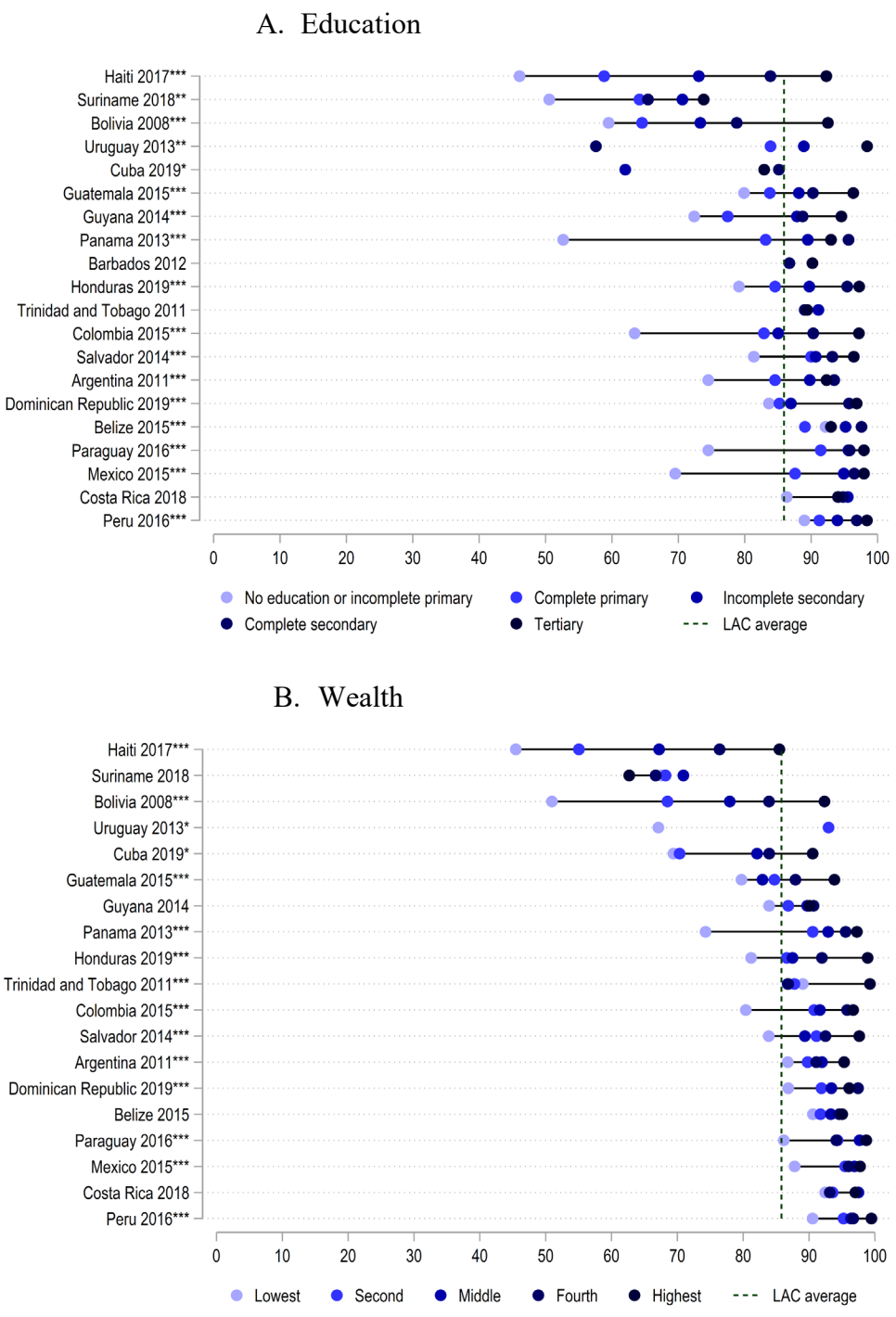
Note. DALYS, disability-adjusted life years; NCDs, percentage of DALYs caused by non-communicable diseases; CMNN, percentage of DALYs caused by communicable, maternal and neo-natal diseases; Injuries, percentage of DALYs caused by injuries, including self-harm and interpersonal violence, transport injuries and unintentional injuries. Data from the Global Burden of Disease - Global Health Data Exchange (GHDx) for the years 1990 (Panel A) and 2019 (Panel B) for Latin American and Caribbean (LAC) countries.

Figure 3: NCDs, GDP and aging population (2019)



Note. Data from the Global Burden of Disease - Global Health Data Exchange (GHDx) for NCDs and from the World Bank DataBank for the country indicators. NCD, percentage of DALYS caused by non-communicable diseases; GDP pc, GDP per capita PPP in constant international dollars; Gini, Gini index; Elderly population, percentage of the population above 65 years old; Health expenditure, expenditure in healthcare as a percentage of GDP.

Figure 4: Attended antenatal care (4+ visits)



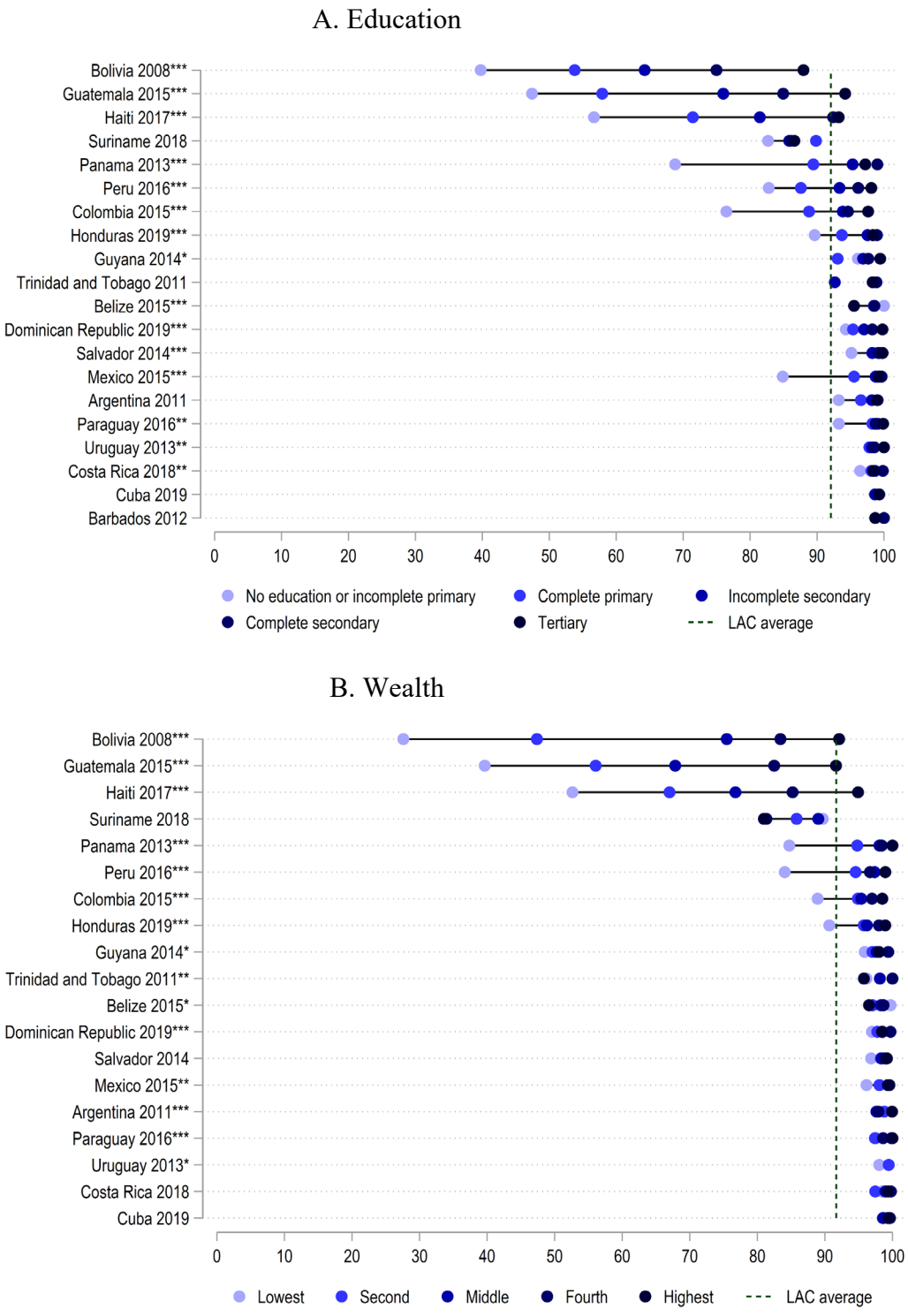
Note. Percentage of women (12-49 years old) that attended at least four antenatal care visits in their last pregnancy. In Panel A, the educational attainment corresponds to the women. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the women. LAC average computed with the countries included in the plot.

Table 1: Inequalities in attending antenatal care (4+ visits)

			Education		Wealth		Residence	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Argentina 2011-MICS	3327	90.55	92.90	0.89***	95.34	0.91***	90.55	
Barbados 2012-MICS	146	87.94					82.74	1.17***
Belize 2015-MICS	916	92.78	95.12	0.95**	95.05	0.95	93.51	0.99
Bolivia 2008-DHS	3515	72.05	84.54	0.71***	92.35	0.55***	82.23	0.73***
Colombia 2015-DHS	4660	90.10	94.26	0.79***	96.71	0.83***	93.18	0.88***
Costa Rica 2018-MICS	1286	94.36	94.36	0.98	97.04	0.95	94.85	0.98
Cuba 2019-MICS	1870	79.26	83.84		90.56	0.77***	83.16	0.88**
Dominican Republic 2019-MICS	3336	92.68	96.37	0.87***	96.10	0.90***	92.97	0.99
Guatemala 2015-DHS	4964	84.87	92.43	0.88***	93.86	0.85***	87.44	0.95***
Guyana 2014-MICS	1258	87.55	90.28	0.82**	90.10	0.93	87.70	1.00
Haiti 2017-DHS	2639	63.00	89.03	0.56***	85.50	0.53***	74.05	0.77***
Honduras 2019-MICS	3278	88.41	96.07	0.86***	98.91	0.82***	90.41	0.96***
Mexico 2015-MICS	3032	94.26	97.13	0.86***	97.76	0.90***	94.90	0.97*
Panama 2013-MICS	2278	87.87	94.30	0.75***	97.28	0.76***	93.31	0.85***
Paraguay 2016-MICS	1803	93.59	97.01	0.87***	98.70	0.87***	95.28	0.95***
Peru 2016-ENDES	8051	95.40	97.66	0.92***	99.48	0.91***	96.56	0.95***
Salvador 2014-MICS	2832	90.17	94.14	0.90***	97.64	0.86***	91.83	0.96***
Suriname 2018-MICS	1395	67.72	69.01	0.86**	62.70	1.08	63.95	1.12***
Trinidad and Tobago 2011-MICS	410	89.06	89.16	0.95	99.25	0.90***	85.95	1.10***
Uruguay 2013-MICS	433	76.77	71.28	1.12			75.73	1.19
Average across countries		85.92	90.47	0.86	93.57	0.85	87.51	0.96

Note. Percentage of women (12-49 years old) that attended at least four antenatal care visits in their last pregnancy. DHS, Demographic and Health Surveys; MICS, Multiple Indicator Cluster Survey. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure 5: Quality antenatal care



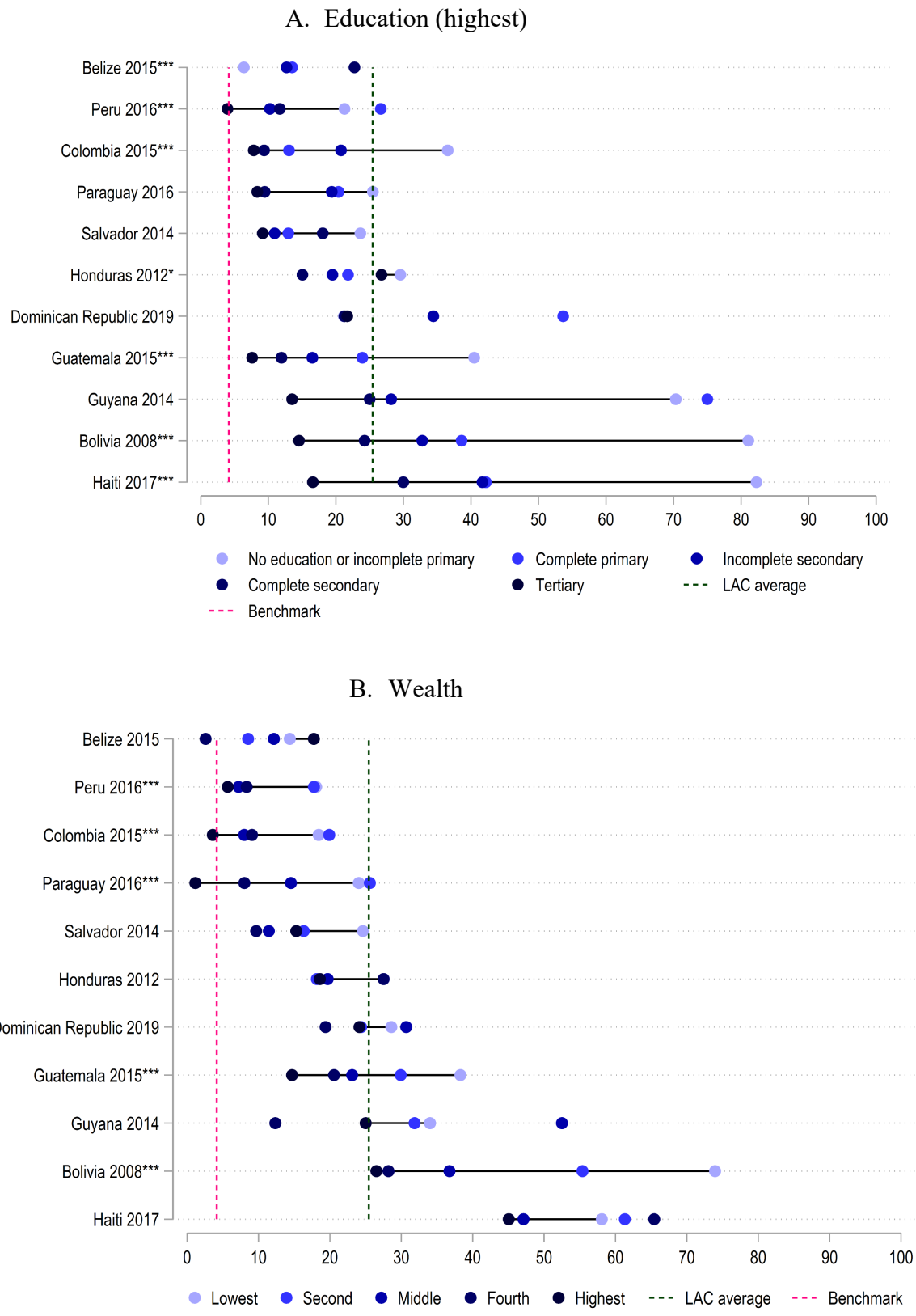
Note. Percentage of women (12-49 years old) that received all components of antenatal care (according to WHO standards) in their last pregnancy. The sample is restricted to women who report pregnancies happening within the two years prior to the survey. In Panel A, the educational attainment corresponds to the women. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the women. LAC average computed with the countries included in the plot.

Table 2: Inequalities in quality antenatal care

			Education		Wealth		Residence	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Argentina 2011-MICS	3327	98.32	99.01	0.97**	99.94	0.98***	98.32	
Barbados 2012-MICS	146	99.32					98.92	1.01
Belize 2015-MICS	916	98.13	96.93	1.02	96.53	1.03*	97.94	1.00
Bolivia 2008-DHS	3515	60.92	80.41	0.52***	92.11	0.30***	81.60	0.44***
Colombia 2015-DHS	4660	94.40	96.35	0.87***	98.50	0.90***	95.94	0.94***
Costa Rica 2018-MICS	1286	98.67	98.98	0.99	99.34	0.99	98.46	1.01
Cuba 2019-MICS	1870	99.15	99.27		99.42	0.99	99.35	0.99
Dominican Republic 2019-MICS	3336	98.20	99.13	0.95***	98.46	0.98***	98.32	1.00
Guatemala 2015-DHS	4962	63.58	88.23	0.58***	91.64	0.43***	79.42	0.69***
Guyana 2014-MICS	1258	97.28	98.13	0.97	98.01	0.98**	98.87	0.98**
Haiti 2017-DHS	2639	72.32	92.92	0.65***	94.90	0.55***	83.08	0.80***
Honduras 2019-MICS	3278	95.59	98.74	0.93***	98.93	0.92***	97.17	0.97***
Mexico 2015-MICS	3032	98.27	99.46	0.93***	99.52	0.97***	98.67	0.98**
Panama 2013-MICS	2278	93.69	98.10	0.83***	100.00	0.85***	97.38	0.90***
Paraguay 2016-MICS	1803	98.53	99.39	0.97	100.00	0.98***	98.54	1.00
Peru 2016-ENDES	8072	93.92	97.15	0.88***	98.95	0.85***	96.46	0.90***
Salvador 2014-MICS	2832	98.20	99.34	0.97***	99.18	0.98*	98.44	0.99
Suriname 2018-MICS	1395	86.29	86.31	1.01	80.97	1.11	83.06	1.09***
Trinidad and Tobago 2011-MICS	410	97.98	98.69	0.97	95.77	1.00**	97.83	1.00
Uruguay 2013-MICS	433	98.56	99.04	0.98			98.72	0.98
Average across countries		92.07	96.08	0.89	96.79	0.89	94.83	0.94

Note. Percentage of women (12-49 years old) that received all components of antenatal care (according to WHO standards) in their last pregnancy. DHS, Demographic and Health Surveys; MICS, Multiple Indicator Cluster Survey. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure 6: Infant mortality



Note. Percentage of infants (born during the five years preceding the survey) that did not survive their first year, multiplied by 1,000. In Panel A, the attainment corresponds to the highest educational attainment of either the mother or father. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the infant. Benchmark corresponds to the average of 37 OECD countries. LAC average computed with the countries included in the plot.

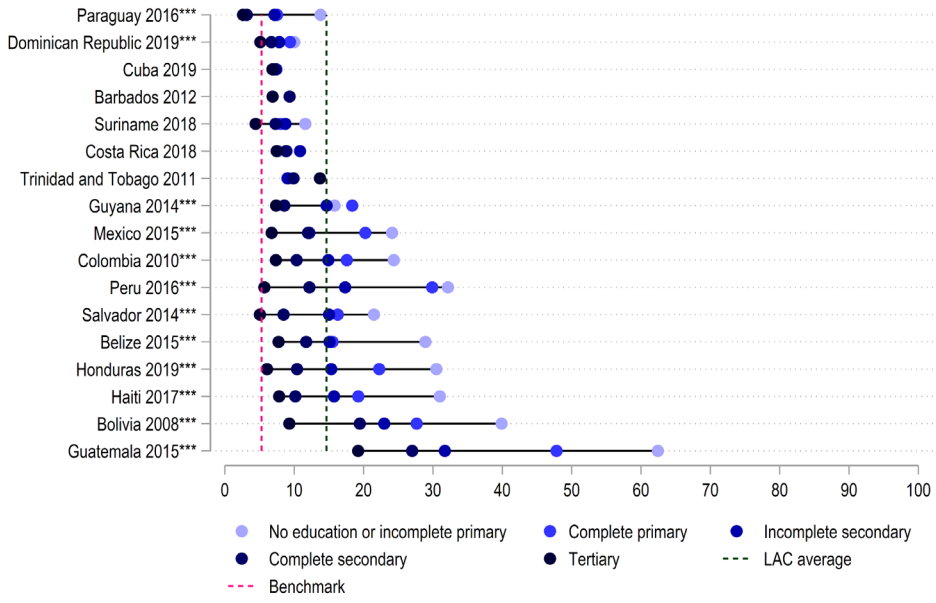
Table 3: Inequalities in infant mortality

			Education		Wealth		Residence		Sex	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*	*Male*	*Female / Male*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Belize 2015-MICS	2559	10.83	11.11	0.92	17.75	0.81	9.08	1.32	11.80	0.83
Bolivia 2008-DHS	8748	47.42	19.97	3.75***	26.52	2.79***	34.04	1.85***	52.30	0.81*
Colombia 2015-DHS	11849	13.35	8.53	2.84***	3.60	5.13***	11.84	1.44	15.04	0.77
Dominican Republic 2019-MICS	8442	25.67	21.51	1.28	24.13	1.19	26.78	0.83	22.04	1.33
Guatemala 2015-DHS	12642	27.12	10.33	3.38***	14.70	2.60***	23.41	1.25	29.55	0.83
Guyana 2014-MICS	3165	32.81	22.15	3.25	25.01	1.36	7.87	5.12***	35.10	0.87
Haiti 2017-DHS	6591	56.01	21.58	3.35***	45.05	1.29	57.15	0.97	56.26	0.99
Honduras 2012-DHS	11064	22.75	18.98	1.33	18.60	1.48	24.04	0.90	23.72	0.91
Paraguay 2016-MICS	4445	16.00	8.83	2.60*	1.15	20.84***	15.99	1.00	16.11	0.99
Peru 2016-ENDES	17894	12.00	7.72	3.09***	5.68	3.18***	10.23	1.65**	12.84	0.86
Salvador 2014-MICS	7191	16.04	15.14	1.37	15.29	1.61	14.00	1.34	17.06	0.88
Average across countries		25.45	15.08	2.46	17.95	1.82	21.31	1.33	26.53	0.92

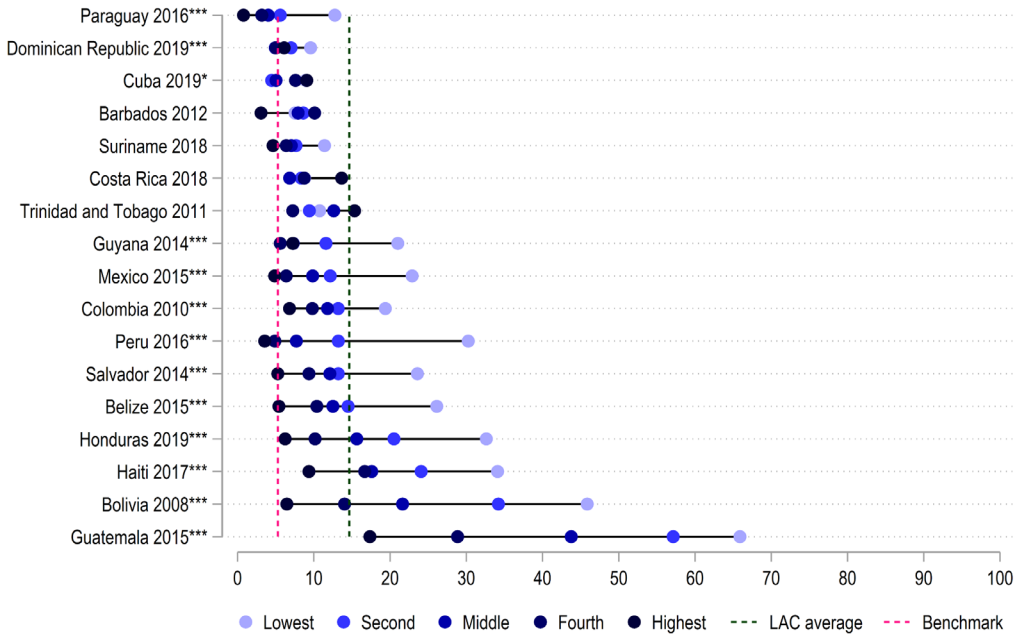
Note. Percentage of infants (born during the five years preceding the survey) that did not survive their first year, multiplied by 1,000. DHS, Demographic and Health Surveys; MICS, Multiple Indicator Cluster Survey. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure 7: Stunted

A. Education (highest)



B. Wealth (quintile)



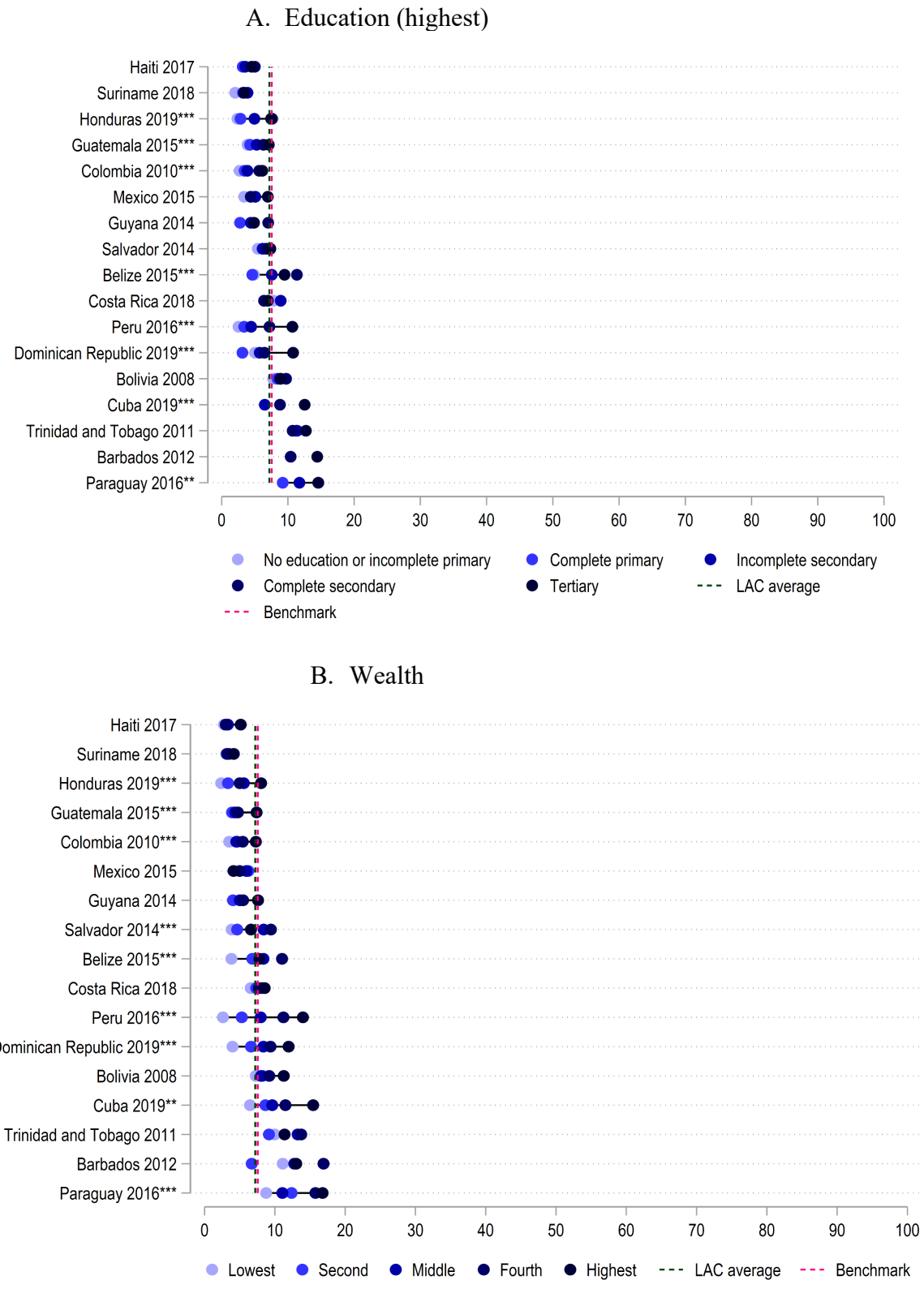
Note. Percentage of children under five years old whose height-for-age is below -2 standard deviation units from the median of the WHO's reference group. In Panel A, the attainment corresponds to the highest educational attainment of either the mother or father. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the child. Benchmark corresponds to the average of 14 OECD countries. LAC average computed with the countries included in the plot.

Table 4: Inequalities in stunting

			Education		Wealth		Residence		Sex	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*	*Male*	*Female / Male*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Barbados 2012-MICS	395	7.71			3.08	2.45	7.98	0.91	8.88	0.72
Belize 2015-MICS	2417	14.96	9.60	2.09***	5.43	4.82***	10.58	1.67***	16.15	0.85
Bolivia 2008-DHS	8320	27.06	15.03	2.53***	6.47	7.09***	17.22	2.24***	27.93	0.94
Colombia 2010-DHS	17705	13.19	9.16	2.26***	6.81	2.84***	11.63	1.46***	14.22	0.85***
Costa Rica 2018-MICS	3132	8.98	8.00	1.07	13.65	0.64	10.35	0.58**	10.19	0.75
Cuba 2019-MICS	5246	7.11	7.00	1.86	9.08	0.99*	6.75	1.15	7.69	0.85
Dominican Republic 2019-MICS	8224	6.72	5.79	1.71***	6.11	1.57***	6.44	1.16	7.52	0.78**
Guatemala 2015-DHS	12258	46.49	24.14	2.38***	17.36	3.80***	34.59	1.53***	47.10	0.97
Guyana 2014-MICS	2990	12.04	8.25	2.04***	7.24	2.90***	9.79	1.30	13.28	0.81*
Haiti 2017-DHS	6769	21.95	8.75	3.19***	9.37	3.64***	17.95	1.33***	24.03	0.83***
Honduras 2019-MICS	8187	18.71	8.90	2.88***	6.24	5.23***	11.99	1.94***	19.21	0.95
Mexico 2015-MICS	7854	12.38	9.70	2.20***	4.87	4.70***	10.18	1.86***	12.97	0.91
Paraguay 2016-MICS	4417	5.94	2.85	3.64***	0.78	16.38***	4.39	1.87***	6.93	0.71**
Peru 2016-ENDES	21804	13.22	8.68	3.56***	3.56	8.49***	7.95	3.33***	14.09	0.87***
Salvador 2014-MICS	7224	13.65	7.51	2.63***	5.28	4.47***	11.41	1.46***	15.27	0.79***
Suriname 2018-MICS	3387	8.26	6.03	1.58	4.65	2.45**	8.38	0.75	10.05	0.64***
Trinidad and Tobago 2011-MICS	1082	10.88	11.17	0.87	15.35	0.70	10.34	1.12	13.80	0.59***
Average across countries		14.66	9.41	2.26	7.37	3.12	11.64	1.53	15.84	0.85

Note. Percentage of children under five years old whose height-for-age is below -2 standard deviation units from the median of the WHO's reference group. DHS, Demographic and Health Surveys; MICS, Multiple Indicator Cluster Survey. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure 8: Child overweight



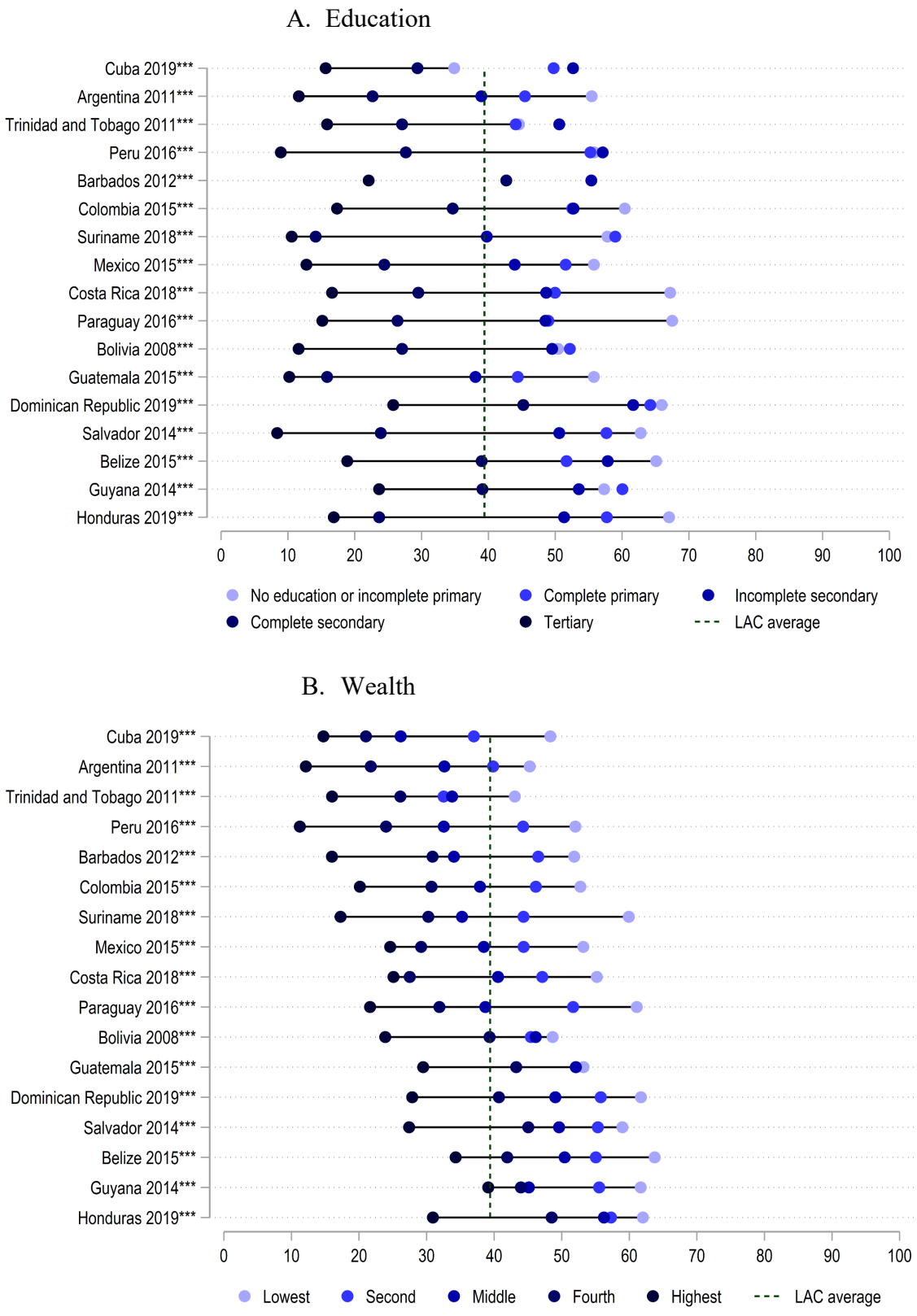
Note. Percentage of children under five years old whose weight-for-height is above +2 standard deviation units from the median of the WHO's reference group. In Panel A, the attainment corresponds to the highest educational attainment of either the mother or father. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the child. Benchmark corresponds to the average of 15 OECD countries. LAC average computed with the countries included in the plot.

Table 5: Inequalities in overweight for children

			Education		Wealth		Residence		Sex	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*	*Male*	*Female / Male*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Barbados 2012-MICS	362	12.21			13.04	0.85	11.37	1.21	11.30	1.17
Belize 2015-MICS	2402	7.30	10.37	0.45***	7.81	0.49***	10.64	0.49***	8.03	0.81
Bolivia 2008-DHS	8320	8.53	9.38	0.84	11.27	0.65*	8.78	0.94	9.08	0.88
Colombia 2010-DHS	17696	4.76	5.86	0.53***	7.30	0.48***	5.05	0.80**	5.30	0.79***
Costa Rica 2018-MICS	3133	7.51	6.75	1.07	8.55	0.77	7.75	0.90	8.13	0.84
Cuba 2019-MICS	5227	10.30	11.02	1.27**	15.45	0.42**	11.11	0.80	11.82	0.74*
Dominican Republic 2019-MICS	8162	7.67	8.94	0.52***	11.96	0.33***	8.01	0.84	8.22	0.87
Guatemala 2015-DHS	12258	4.71	6.61	0.61***	7.41	0.58***	5.24	0.84*	4.81	0.96
Guyana 2014-MICS	2972	5.25	6.44	0.63*	7.61	0.67	6.52	0.74	5.69	0.84
Haiti 2017-DHS	6741	3.37	4.71	0.71	5.14	0.54	3.55	0.93	3.96	0.70**
Honduras 2019-MICS	8141	4.48	7.57	0.35***	8.04	0.29***	5.85	0.61***	4.42	1.02
Mexico 2015-MICS	7831	5.20	5.52	0.83	4.13	0.99	5.28	0.94	5.05	1.06
Paraguay 2016-MICS	4407	12.44	14.59	0.63***	16.79	0.52***	13.53	0.80**	12.96	0.92
Peru 2016-ENDES	21804	7.53	9.09	0.33***	13.99	0.19***	9.26	0.34***	8.56	0.75***
Salvador 2014-MICS	7194	6.38	7.00	0.83	6.60	0.58***	6.99	0.80*	6.19	1.06
Suriname 2018-MICS	3381	3.54	3.39	0.80	4.15	0.74	3.04	1.74*	3.27	1.16
Trinidad and Tobago 2011-MICS	1066	11.37	11.39	1.00	11.38	0.88	11.68	0.94	13.04	0.75
Average across countries		7.21	8.04	0.72	9.45	0.56	7.86	0.83	7.64	0.89

Note. Percentage of children under five years old whose weight-for-height is above +2 standard deviation units from the median of the WHO's reference group. DHS, Demographic and Health Surveys; MICS, Multiple Indicator Cluster Survey. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure 9: Teenage pregnancy



Note. Percentage of women (25-49 years old) that had their first child when teenager. In Panel A, the educational attainment corresponds to the woman. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the women. Sample is restricted to women above age 25, when the typical educational stage has ended. LAC average computed with the countries included in the plot.

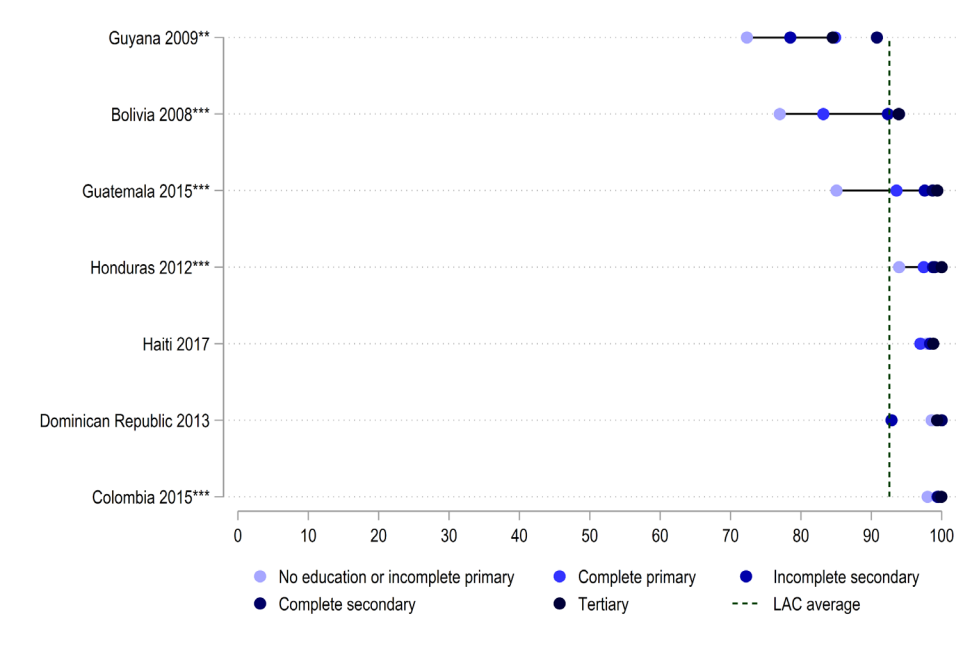
Table 6: Inequalities in teenage pregnancy

			Education		Wealth		Residence	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Argentina 2011-MICS	12592	29.60	16.42	2.90***	12.13	3.73***	29.60	
Barbados 2012-MICS	886	34.74	32.10	1.68***	15.99	3.24***	34.52	1.02
Belize 2015-MICS	2496	48.17	28.61	2.03***	34.30	1.86***	46.30	1.07
Bolivia 2008-DHS	10046	39.57	18.57	2.72***	23.89	2.04***	35.77	1.30***
Colombia 2015-DHS	22467	36.30	24.42	2.32***	20.13	2.62***	33.09	1.50***
Costa Rica 2018-MICS	4468	39.32	21.14	2.61***	25.10	2.20***	37.32	1.19***
Cuba 2019-MICS	6017	29.47	21.80	2.11***	14.73	3.28***	24.19	1.58***
Dominican Republic 2019-MICS	13147	46.13	33.19	1.98***	27.87	2.21***	43.33	1.27***
Guatemala 2015-DHS	14453	44.90	13.19	4.04***	29.50	1.80***	38.80	1.30***
Guyana 2014-MICS	2777	48.30	34.44	1.69***	39.13	1.58***	42.58	1.18**
Honduras 2019-MICS	10574	50.61	20.64	3.02***	30.94	2.00***	44.72	1.25***
Mexico 2015-MICS	7059	37.78	17.79	3.00***	24.62	2.16***	34.89	1.37***
Paraguay 2016-MICS	4058	39.46	19.39	2.97***	21.64	2.82***	35.92	1.29***
Peru 2016-ENDES	21594	31.40	16.69	3.33***	11.25	4.63***	26.96	1.81***
Salvador 2014-MICS	7194	46.85	18.03	3.42***	27.42	2.15***	42.71	1.28***
Suriname 2018-MICS	5096	37.21	12.37	4.73***	17.27	3.47***	33.35	1.28***
Trinidad and Tobago 2011-MICS	2134	30.21	23.69	1.86***	16.01	2.69***	28.52	1.13*
Average across countries		39.41	21.91	2.52	23.05	2.38	36.03	1.30

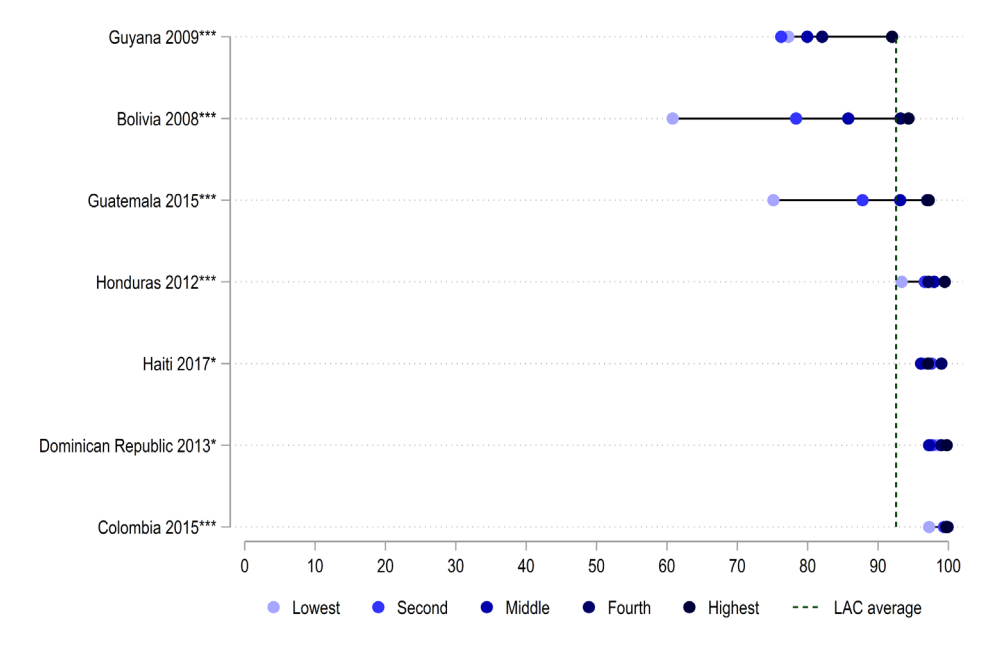
Note. Percentage of women (25-49 years old) that had their first child when teenager. DHS, Demographic and Health Surveys; MICS, Multiple Indicator Cluster Survey. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Sample is restricted to women above age 25, when the typical educational stage has ended.

Figure 10: Knowledge of concealing contraceptive methods among adolescents

A. Education (Highest)



B. Wealth



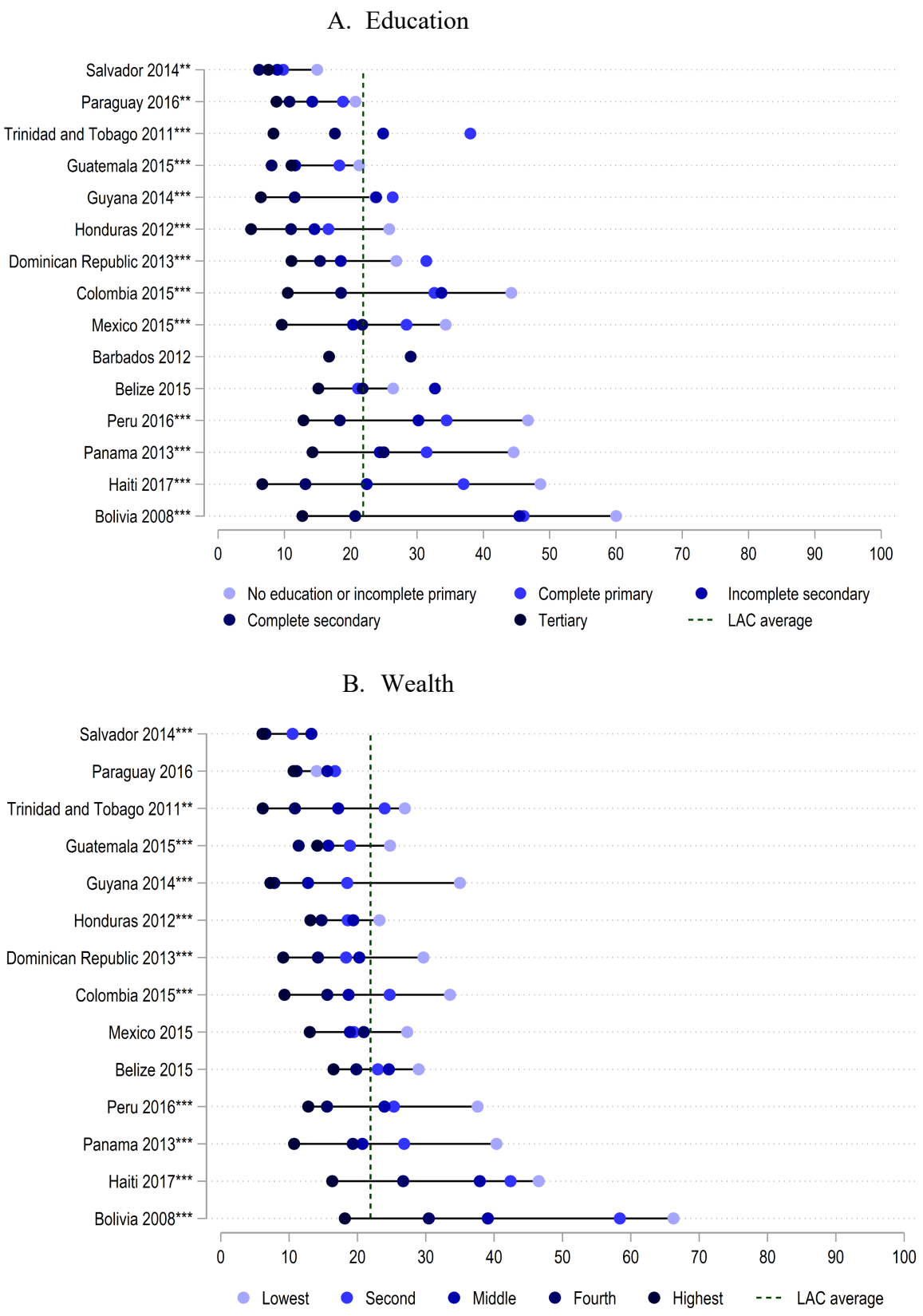
Note. Percentage of women (15-17 years old) that know about the methods: pill, IUD, injectables and implants. In Panel A, the educational attainment corresponds to the highest educational attainment of either the mother or father (only available for adolescents up to 17 years old). We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the adolescent. LAC average computed with the countries included in the plot.

Table BOX: Inequalities in knowledge of concealing contraceptive methods among adolescents

			Education		Wealth		Residence	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Bolivia 2008-DHS	2181	84.26	93.91	0.83***	94.34	0.64***	92.23	0.76***
Colombia 2015-DHS	4107	99.13	99.71	0.99**	99.70	0.98***	99.64	0.98***
Dominican Republic 2013-DHS	1098	98.39	99.59	0.99	99.77	0.99*	98.63	0.99
Guatemala 2015-DHS	3594	90.07	98.98	0.88***	97.22	0.77***	94.12	0.93***
Guyana 2009-DHS	620	81.79	89.32	0.87	92.00	0.84**	87.53	0.90**
Haiti 2017-DHS	2084	97.35	99.26	0.98	97.11	0.99**	97.82	0.99
Honduras 2012-DHS	3253	96.99	99.40	0.96***	99.48	0.94***	98.94	0.96***
Average across countries		92.57	97.17	0.93	97.09	0.88	95.56	0.93

Note. Percentage of women (15-17 years old) that know about the methods: pill, IUD, injectables and implants. DHS, Demographic and Health Surveys; MICS, Multiple Indicator Cluster Survey. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ ***

Figure 11: Unwanted pregnancy



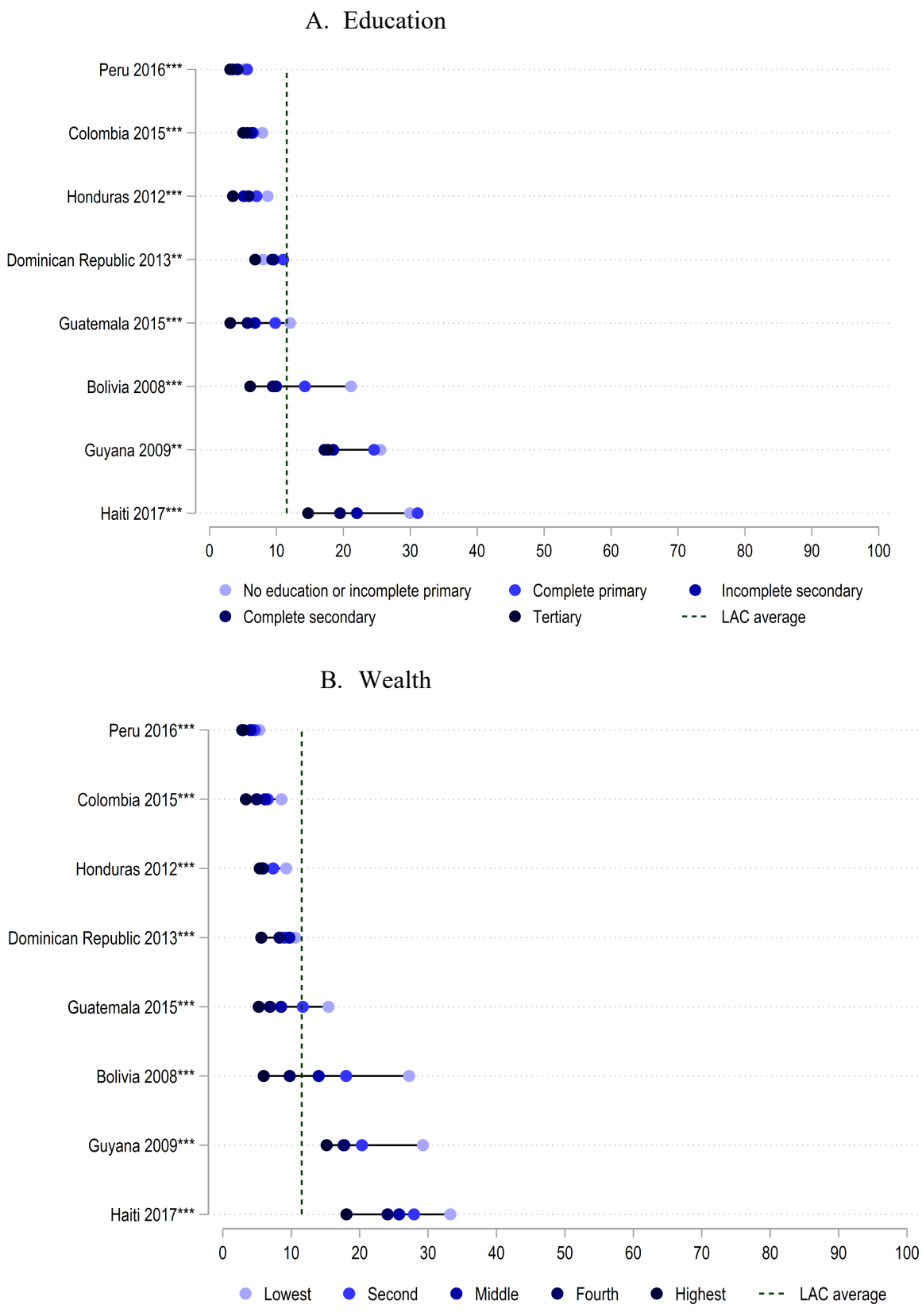
Note. Percentage of women (25-49 years old) that didn't want their last pregnancy. In Panel A, the educational attainment corresponds to the woman. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the women. Sample is restricted to women above age 25, when the typical educational stage has ended. LAC average computed with the countries included in the plot.

Table 7: Inequalities in unwanted pregnancy

			Education		Wealth		Residence	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Barbados 2012-MICS	132	21.44					22.64	0.85
Belize 2015-MICS	639	22.67	18.15	1.31	16.50	1.76	22.28	1.03
Bolivia 2008-DHS	2769	45.31	16.87	3.50***	18.16	3.65***	33.13	1.82***
Colombia 2015-DHS	2975	20.38	13.32	2.92***	9.33	3.60***	17.73	1.67***
Dominican Republic 2013-DHS	964	18.63	12.71	2.21***	9.14	3.25***	18.51	1.03
Guatemala 2015-DHS	3451	17.84	9.29	2.22***	14.13	1.75***	15.75	1.21**
Guyana 2014-MICS	893	18.01	9.70	2.52***	7.27	4.82***	13.55	1.44*
Haiti 2017-DHS	2231	35.42	9.07	5.13***	16.32	2.85***	26.46	1.52***
Honduras 2012-DHS	3024	18.10	8.74	2.49***	13.12	1.77***	17.06	1.12
Mexico 2015-MICS	1870	20.52	15.20	1.98**	13.03	2.09	20.48	1.01
Panama 2013-MICS	1546	25.60	18.62	2.05***	10.74	3.76***	22.20	1.42**
Paraguay 2016-MICS	1286	13.62	9.59	2.06***	10.66	1.32	13.79	0.97
Peru 2016-ENDES	6323	22.97	15.23	2.70***	12.81	2.93***	19.93	1.67***
Salvador 2014-MICS	1788	10.04	6.77	2.02***	6.11	2.17**	10.24	0.95
Trinidad and Tobago 2011-MICS	339	17.73	14.43	2.18*	6.14	4.39***	18.31	0.92
Average across countries		21.88	12.69	2.46	11.67	2.74	19.47	1.28

Note. Percentage of women (25-49 years old) that didn't want their last pregnancy. DHS, Demographic and Health Surveys; MICS, Multiple Indicator Cluster Survey. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Sample is restricted to women above age 25, when the typical educational stage has ended. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure 12: Unmet need for contraceptives



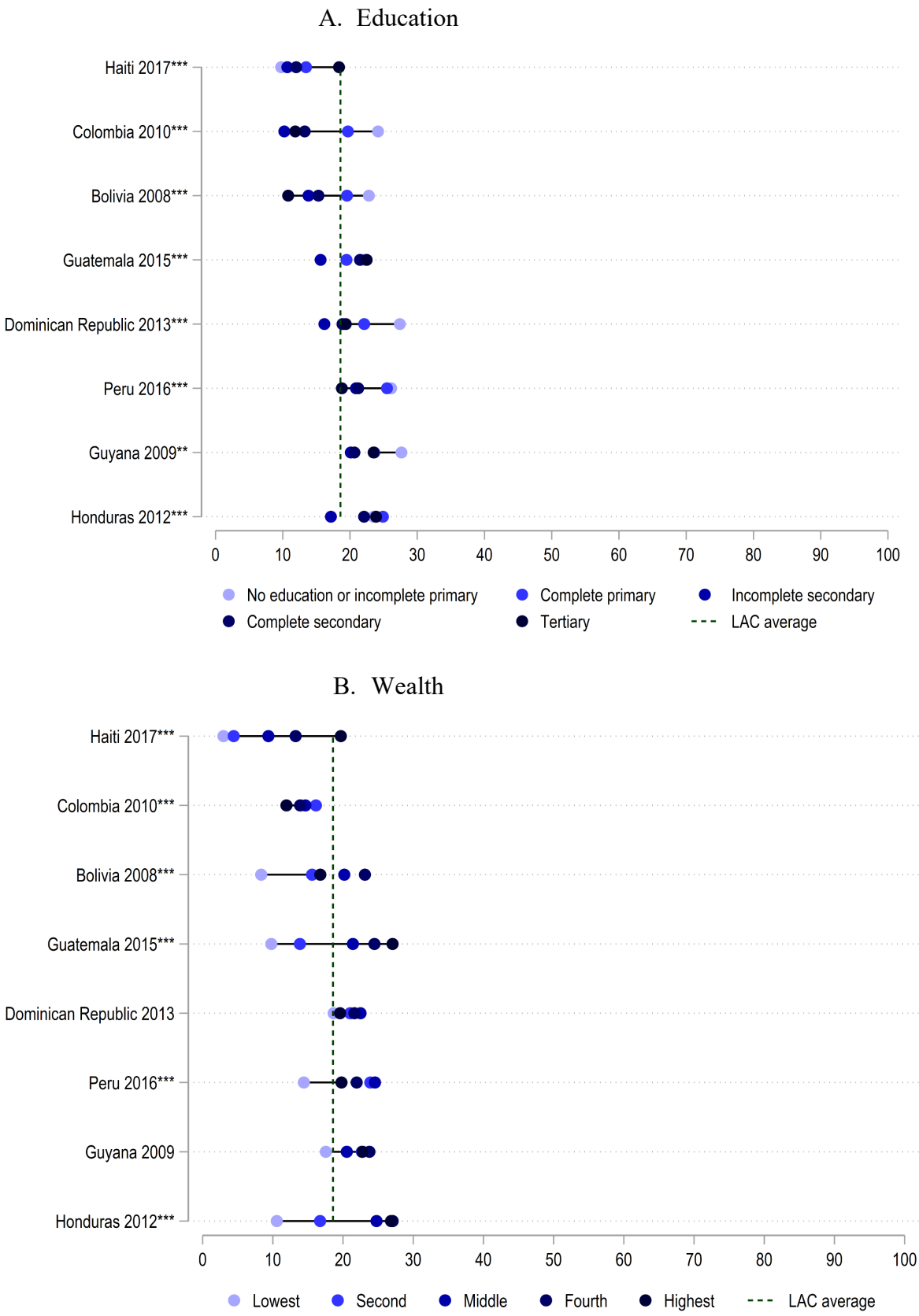
Note. Percentage of women (15-49 years old) married or in a consensual union with unmet need for contraceptives. In Panel A, the educational attainment corresponds to the woman. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the women. LAC average computed with the countries included in the plot.

Table 8: Inequalities in unmet need

			Education		Wealth		Residence	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Bolivia 2008-DHS	16939	13.85	7.77	2.59***	5.98	4.55***	10.23	2.04***
Colombia 2015-DHS	35979	5.84	5.28	1.37***	3.39	2.53***	5.39	1.40***
Dominican Republic 2013-DHS	9372	8.51	7.82	1.12	5.63	1.88***	8.80	0.87
Guatemala 2015-DHS	25914	9.24	4.61	2.48***	5.26	2.94***	6.70	1.69***
Guyana 2009-DHS	4996	19.43	17.30	1.46***	15.18	1.93***	16.62	1.24***
Haiti 2017-DHS	14371	24.94	16.46	1.83***	18.08	1.84***	21.51	1.30***
Honduras 2012-DHS	22757	6.57	4.96	1.58***	5.40	1.72***	5.62	1.37***
Peru 2016-ENDES	33135	3.90	3.57	1.49***	2.85	1.88***	3.64	1.36***
Average across countries		11.54	8.47	1.71	7.72	2.25	9.81	1.38

Note. Percentage of women (15-49 years old) married or in a consensual union with unmet need for contraceptives. DHS, Demographic and Health Surveys; MICS, Multiple Indicator Cluster Survey. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Sample is restricted to women above age 25, when the typical educational stage has ended. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure 13: Women obesity



Note. Percentage of women (12-49 years old) whose BMI is 30 or higher. In Panel A, the educational attainment corresponds to the woman. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the women. LAC average computed with the countries included in the plot.

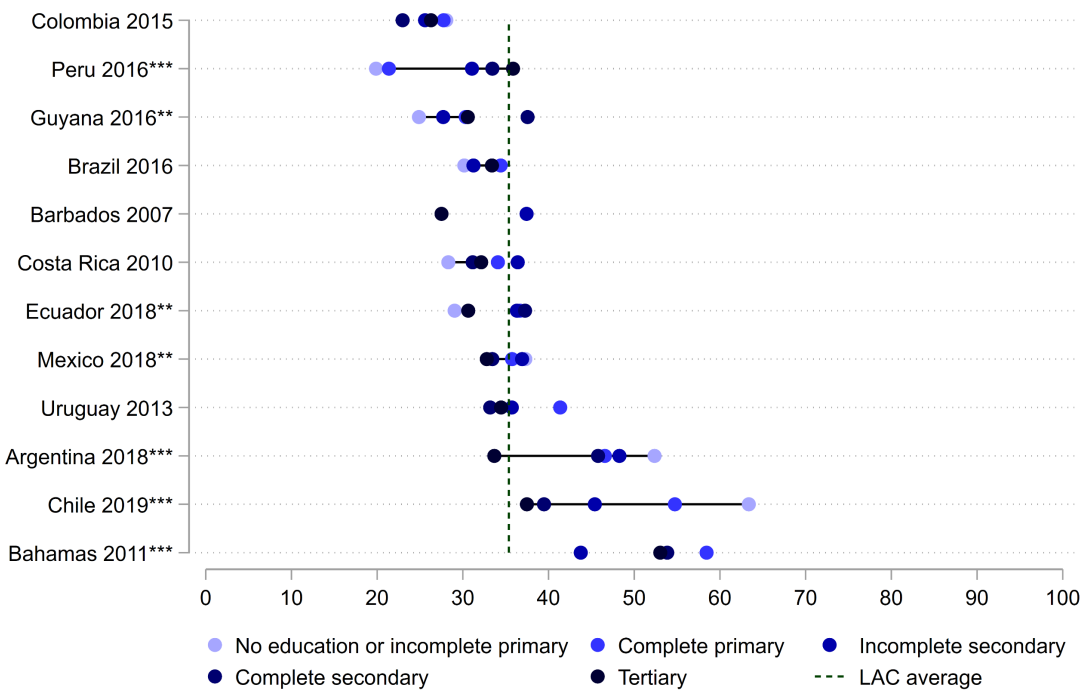
Table 9: Inequalities in obesity for women aged 12-49 years old

			Education		**Wealth**		**Residence**	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Bolivia 2008-DHS	15311	17.43	13.07	1.71***	16.77	0.50***	19.14	0.74***
Colombia 2010-DHS	47452	14.13	12.59	1.74***	11.94	1.17***	13.90	1.08**
Dominican Republic 2013-DHS	8587	20.77	19.18	1.36***	19.57	0.95	21.10	0.93
Guatemala 2015-DHS	23898	20.03	21.90	0.97***	27.06	0.36***	24.73	0.65***
Guyana 2009-DHS	4459	21.74	21.28	1.23**	22.78	0.77*	23.37	0.90
Haiti 2017-DHS	8880	11.20	15.93	0.66***	19.69	0.15***	14.37	0.58***
Honduras 2012-DHS	20802	22.13	22.77	1.06***	26.84	0.39***	25.39	0.72***
Peru 2016-ENDES	31798	21.19	19.85	1.30***	19.78	0.73***	22.31	0.75***
Average across countries		18.58	18.32	1.22	20.55	0.59	20.54	0.79

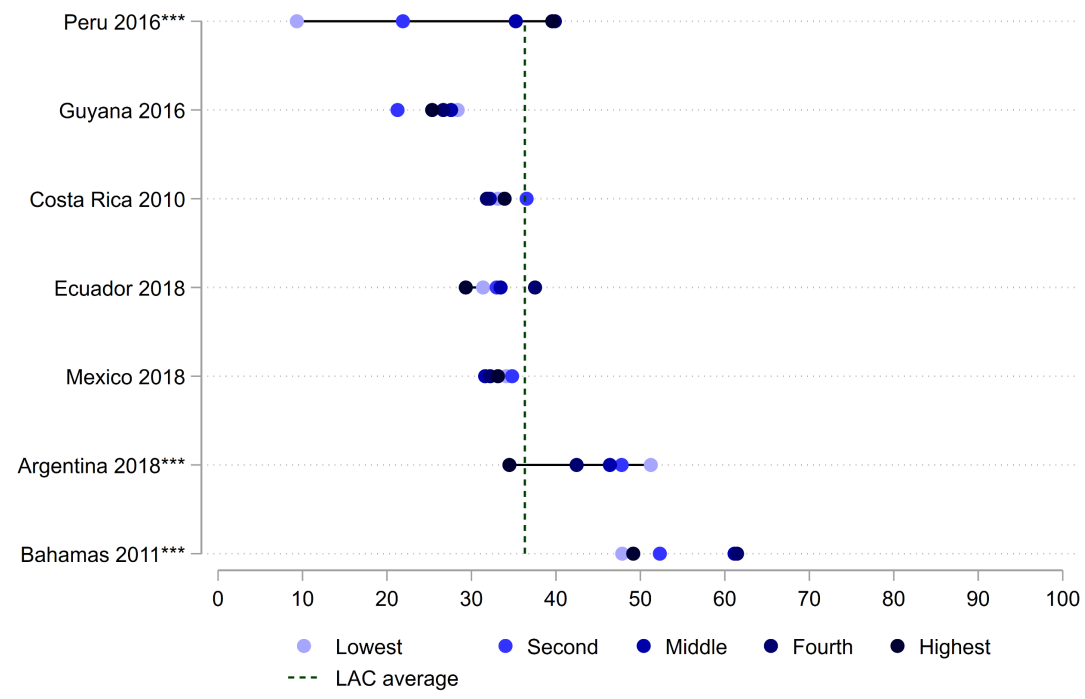
Note. Percentage of women (12-49 years old) whose BMI is 30 or higher. DHS, Demographic and Health Surveys; MICS, Multiple Indicator Cluster Survey. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure 14: Adult obesity, standardized at age 60

A. Education



B. Wealth



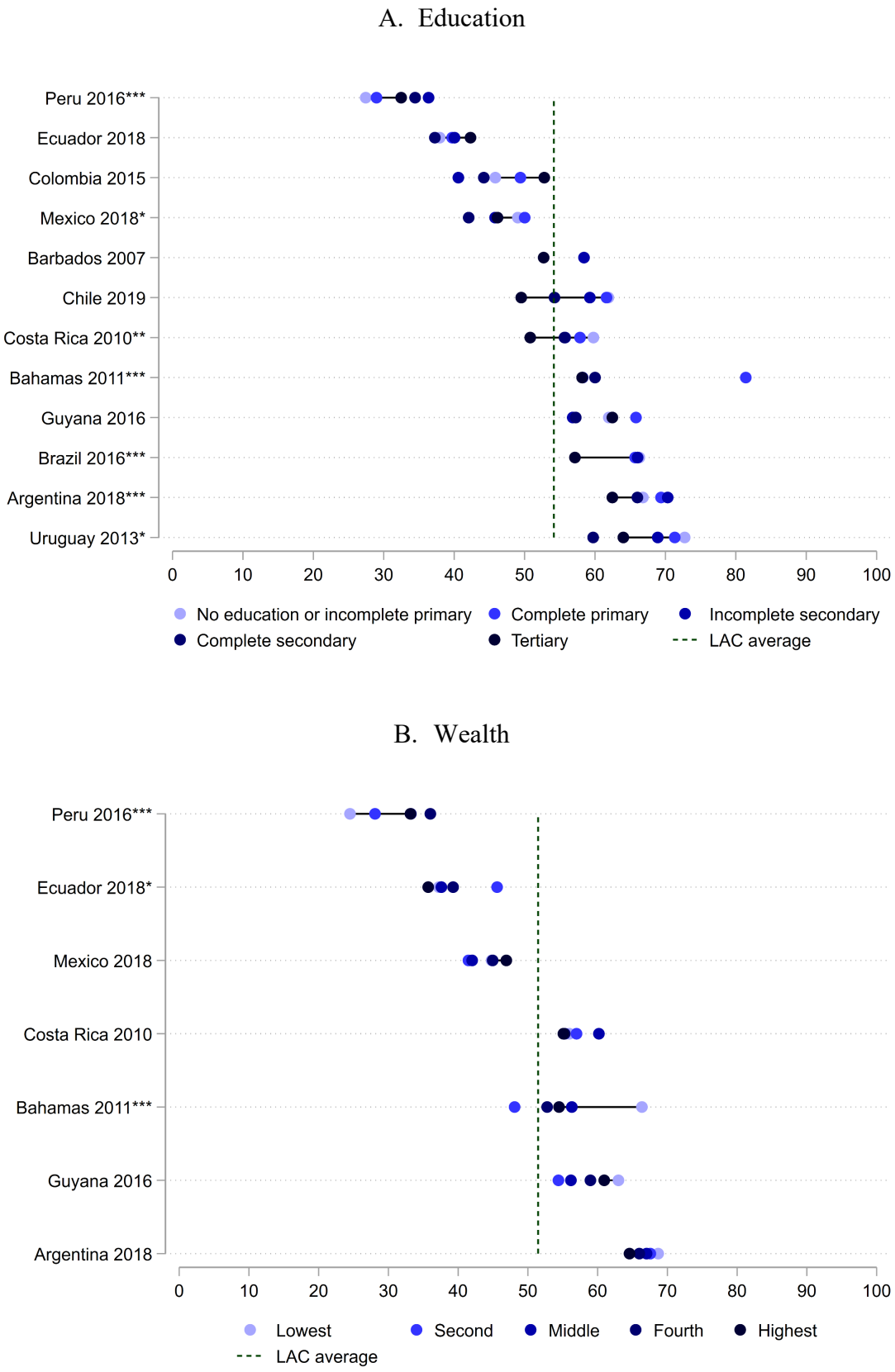
Note. Percentage of people whose BMI is 30 or higher. Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. In Panel A, the educational attainment corresponds to the respondent. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the respondent. Weighted average is the average across countries of the estimated margins at age 60.

Table 10: Inequalities in adult obesity, standardized at age 60

			Education		Wealth		Residence		Sex	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*	*Male*	*Female / Male*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Argentina 2018-ENFR	16410	43.74	39.07	1.23***	34.49	1.49***			42.74	1.04
Bahamas 2011-STEPS	1534	50.95	53.37	0.94	49.16	0.97			49.59	1.06*
Barbados 2007-STEPS	340	32.81	28.58	1.20					20.02	2.13***
Brazil 2016-ELSI	9001	30.99	33.40	0.92			32.23	0.76***	24.26	1.52***
Chile 2019-ENS	5483	43.99	38.48	1.59***			42.79	1.23***	39.37	1.22***
Colombia 2015-SABE	20503	26.75	25.14	1.12			27.91	0.81**	16.04	2.27***
Costa Rica 2010-CRELES	5087	33.58	31.93	1.05	33.93	0.98	35.02	0.91*	21.69	1.88***
Ecuador 2018-STEPS	4473	33.84	32.90	1.04	29.33	1.07			27.66	1.46***
Guyana 2016-STEPS	2637	29.63	34.18	0.83*	25.35	1.12			18.49	2.24***
Mexico 2018-ENSANUT	14362	35.46	33.18	1.10**	33.14	1.03	36.25	0.91**	30.49	1.30***
Peru 2016-ENDES	18235	27.09	34.64	0.60***	39.57	0.24***	35.26	0.37***	21.82	1.56***
Uruguay 2013-STEPS	2217	35.88	33.80	1.19*					34.10	1.10
Average across countries		35.39	34.89	1.07	35.00	0.96	34.91	0.85	28.86	1.43

Note. Percentage of people whose BMI is 30 or higher. Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. Weighted average is the average across countries of the estimated margins at age 60. STEPS, Step towards a healthier world: monitoring noncommunicable diseases and their risk factors; ENFR, National Survey of Risk Factors; ELSI, Longitudinal Study of Aging; ENS, National Health Survey; SABE, Survey on Health,Well-Being, and Aging; CRELES, Longevity and Healthy Aging Study; ENSANUT, National Survey of Health and Nutrition; ENDES, National Survey of Demography and Health. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure 15: Hypertension, standardized at age 60



Note. Percentage of people whose blood pressure is 140/90mmHg or above. Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. In Panel A, the educational attainment corresponds to the respondent. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the respondent.. Weighted average is the average across countries of the estimated margins at age 60.

Table 11: Inequalities in hypertension, standardized at age 60

			Education		Wealth		Residence		Sex	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*	*Male*	*Female / Male*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Argentina 2018-ENFR	16227	66.57	64.00	1.07***	64.57	1.06*			75.80	0.77***
Bahamas 2011-STEPS	1434	59.21	58.03	1.35**	54.47	1.22***			61.16	0.93
Barbados 2007-STEPS	342	52.70	52.30	1.02					58.28	0.83
Brazil 2016-ELSI	9225	63.98	57.15	1.16***			63.86	1.01	62.45	1.05**
Chile 2019-ENS	5516	55.72	52.12	1.19**			55.31	1.06	58.44	0.91
Colombia 2015-SABE	5399	46.15	49.10	0.96			47.61	0.79**	42.38	1.16**
Costa Rica 2010-CRELES	5156	56.60	52.24	1.11***	55.09	1.02	57.22	0.98	53.90	1.08***
Ecuador 2018-STEPS	4537	39.55	40.16	0.98	35.71	1.04			45.48	0.73***
Guyana 2016-STEPS	2645	60.41	59.75	1.08	60.95	1.03			60.97	0.98
Mexico 2018-ENSANUT	15048	47.67	44.85	1.10**	46.91	0.95	47.75	0.99	49.54	0.93**
Peru 2016-ENDES	32291	30.25	33.35	0.85***	33.16	0.74***	33.50	0.74***	34.02	0.79***
Uruguay 2013-STEPS	2223	67.76	62.59	1.14***					72.98	0.87***
Average across countries		53.88	52.14	1.10	50.12	1.03	50.88	0.95	56.28	0.92

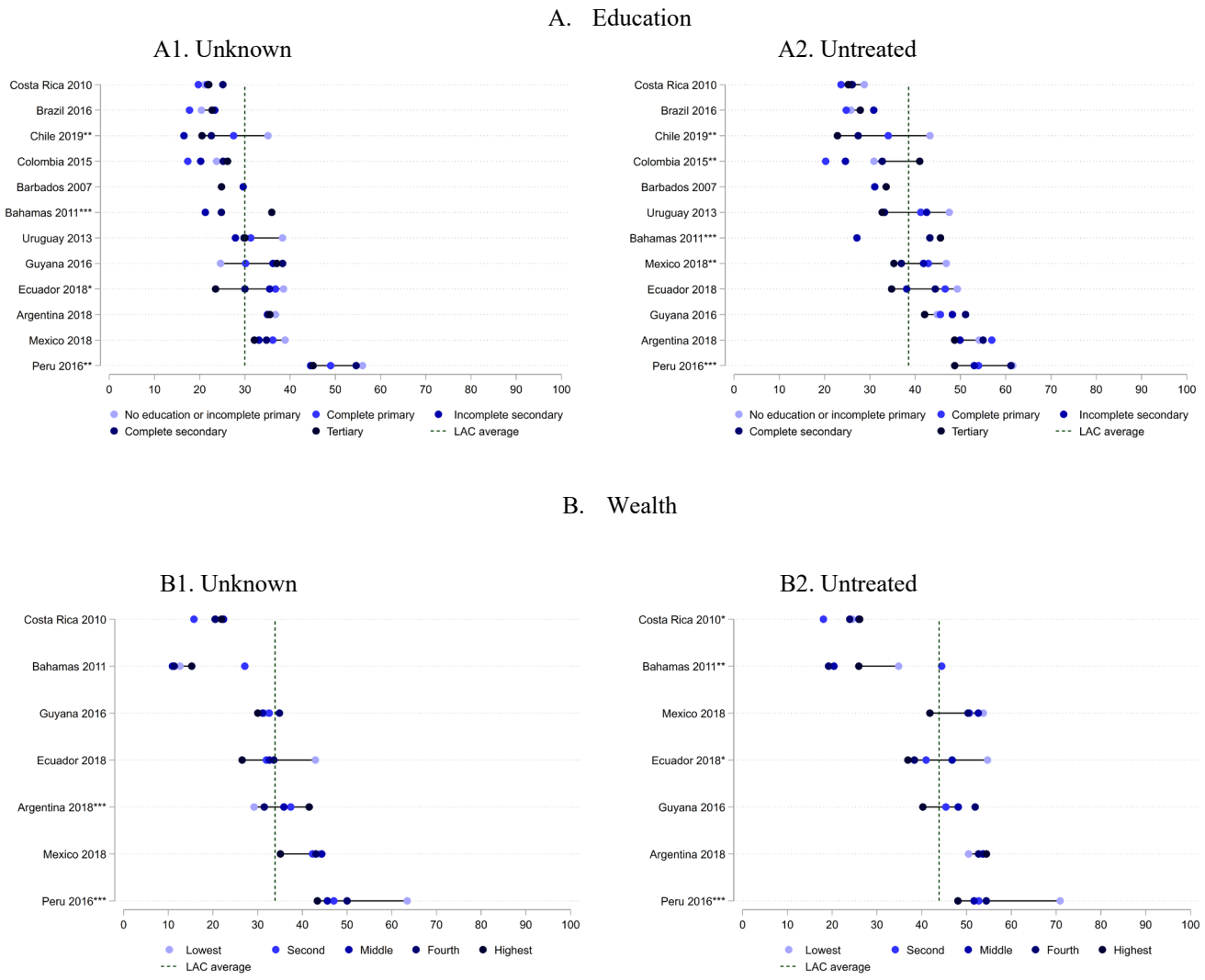
Note. Percentage of people whose blood pressure is 140/90mmHg or above. Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. Weighted average is the average across countries of the estimated margins at age 60. STEPS, Step towards a healthier world: monitoring noncommunicable diseases and their risk factors; ENFR, National Survey of Risk Factors; ELSI, Longitudinal Study of Aging; ENS, National Health Survey; SABE, Survey on Health, Well-Being, and Aging; CRELES, Longevity and Healthy Aging Study; ENSANUT, National Survey of Health and Nutrition; ENDES, National Survey of Demography and Health. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 12: Inequalities in hypertension, unknown and untreated, standardized at age 60

			Education		Wealth		Residence		Sex	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*	*Male*	*Female / Male*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A. Unkown										
Argentina 2018-ENFR	7466	35.49	35.39	1.01	41.52	0.70***			40.02	0.76***
Bahamas 2011-STEPS	507	28.85	31.09	0.80***	15.25	0.83			34.75	0.59***
Barbados 2007-STEPS	142	24.50	21.98						35.77	0.35***
Brazil 2016-ELSI	5880	20.93	22.73	0.88			21.05	0.96	26.00	0.63***
Chile 2019-ENS	1981	21.80	21.61	1.53**			21.98	0.93	29.04	0.55***
Colombia 2015-SABE	3533	22.51	25.56	0.85			21.14	1.67**	30.68	0.55***
Costa Rica 2010-CRELES	2908	20.65	23.02	0.86*	21.91	0.94	19.30	1.16**	26.65	0.65***
Ecuador 2018-STEPS	897	33.56	25.87	1.44***	26.53	1.62**			44.51	0.47***
Guyana 2016-STEPS	788	32.70	37.51	0.75*	30.03	1.06			43.18	0.56***
Mexico 2018-ENSANUT	4556	35.78	32.89	1.15*	35.09	1.25*	34.00	1.19***	45.56	0.64***
Peru 2016-ENDES	4203	50.22	49.65	1.06	43.36	1.46***	47.59	1.18***	60.73	0.66***
Uruguay 2013-STEPS	810	29.85	30.11	1.10					32.97	0.83
Average across countries		29.74	29.78	1.05	30.53	1.14	27.51	1.18	37.49	0.60
Panel B. Untreated										
Argentina 2018-ENFR	7466	53.14	51.54	1.09*	54.44	0.93			58.16	0.81***
Bahamas 2011-STEPS	507	41.06	45.74	0.69	25.96	1.34			51.28	0.51***
Barbados 2007-STEPS	142	30.96	32.34						42.92	0.41***
Brazil 2016-ELSI	5880	26.54	27.88	0.92			26.76	0.95	34.23	0.58***
Chile 2019-ENS	1981	27.02	25.33	1.62**			27.14	0.96	35.57	0.57***
Colombia 2015-SABE	3533	29.60	37.24	0.74			27.71	1.71***	40.58	0.54***
Costa Rica 2010-CRELES	2908	24.58	25.47	0.95	26.15	0.94	23.31	1.13*	31.45	0.66***
Ecuador 2018-STEPS	897	43.32	38.28	1.24*	36.92	1.48***			56.69	0.49***
Guyana 2016-STEPS	788	46.57	46.90	0.97	40.25	1.20			54.85	0.73***
Mexico 2018-ENSANUT	4556	42.60	35.82	1.27***	41.82	1.29**	39.79	1.26***	54.83	0.63***
Peru 2016-ENDES	4203	55.87	54.69	1.06	48.08	1.47***	52.85	1.19***	66.65	0.68***
Uruguay 2013-STEPS	810	39.86	33.02	1.30*					46.93	0.73***
Average across countries		38.43	37.85	1.07	39.09	1.23	32.93	1.21	47.85	0.62

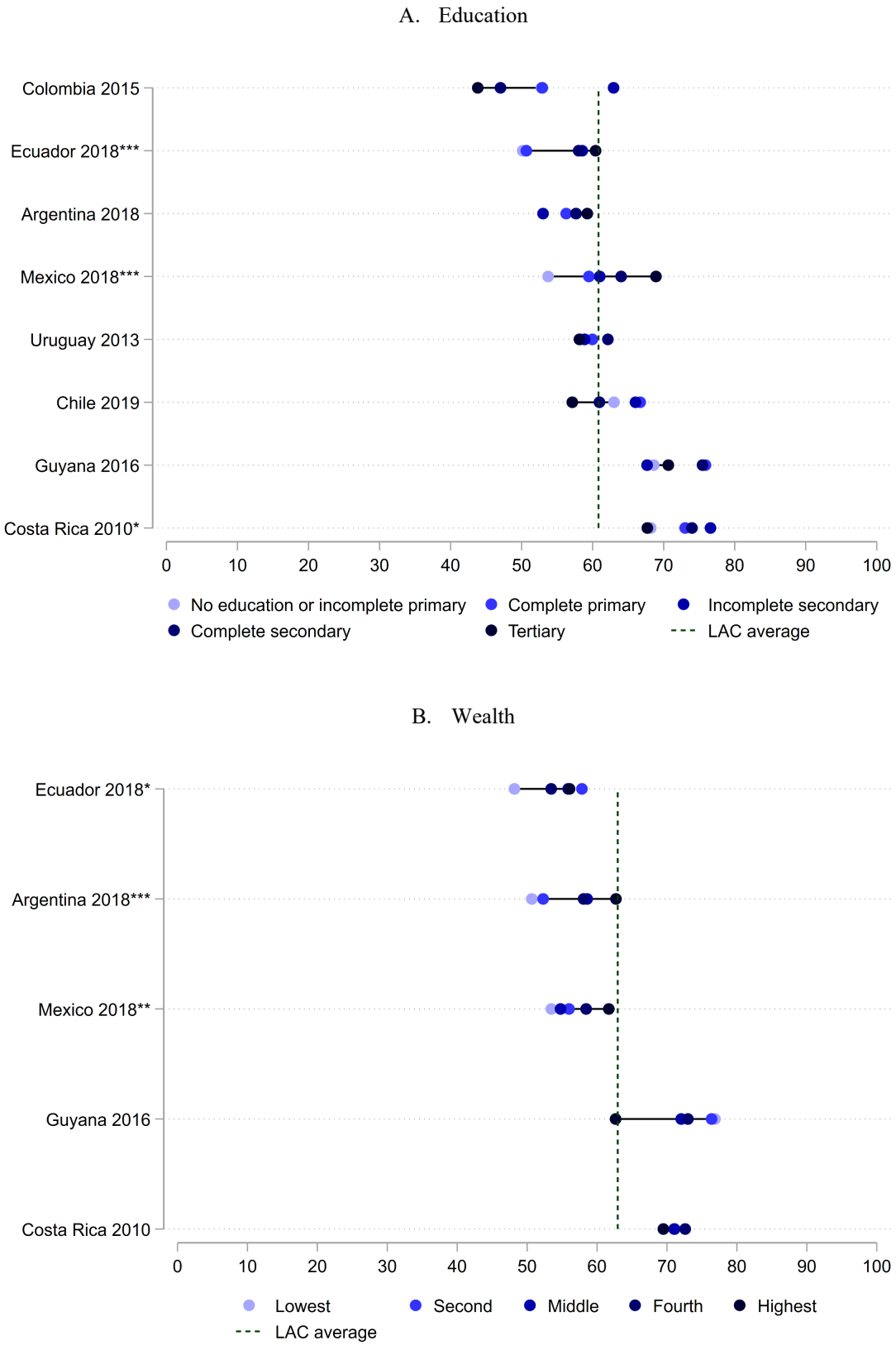
Note. Percentage of people whose blood pressure is 140/90mmHg or above, but this is unknown by the respondent (Panel A) or it is not being treated (Panel B). Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. . Weighted average is the average across countries of the estimated margins at age 60.

Figure 16: Hypertension, unknown and untreated, standardized at age 60



Note. Percentage of people whose blood pressure is 140/90mmHg or above, but this is unknown by the respondent (A1 and B1) or it is not being treated (A2 and B2). Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. In Panel A, the educational attainment corresponds to the respondent. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the respondent. Weighted average is the average across countries of the estimated margins at age 60.

Figure 17: High cholesterol, standardized at age 60



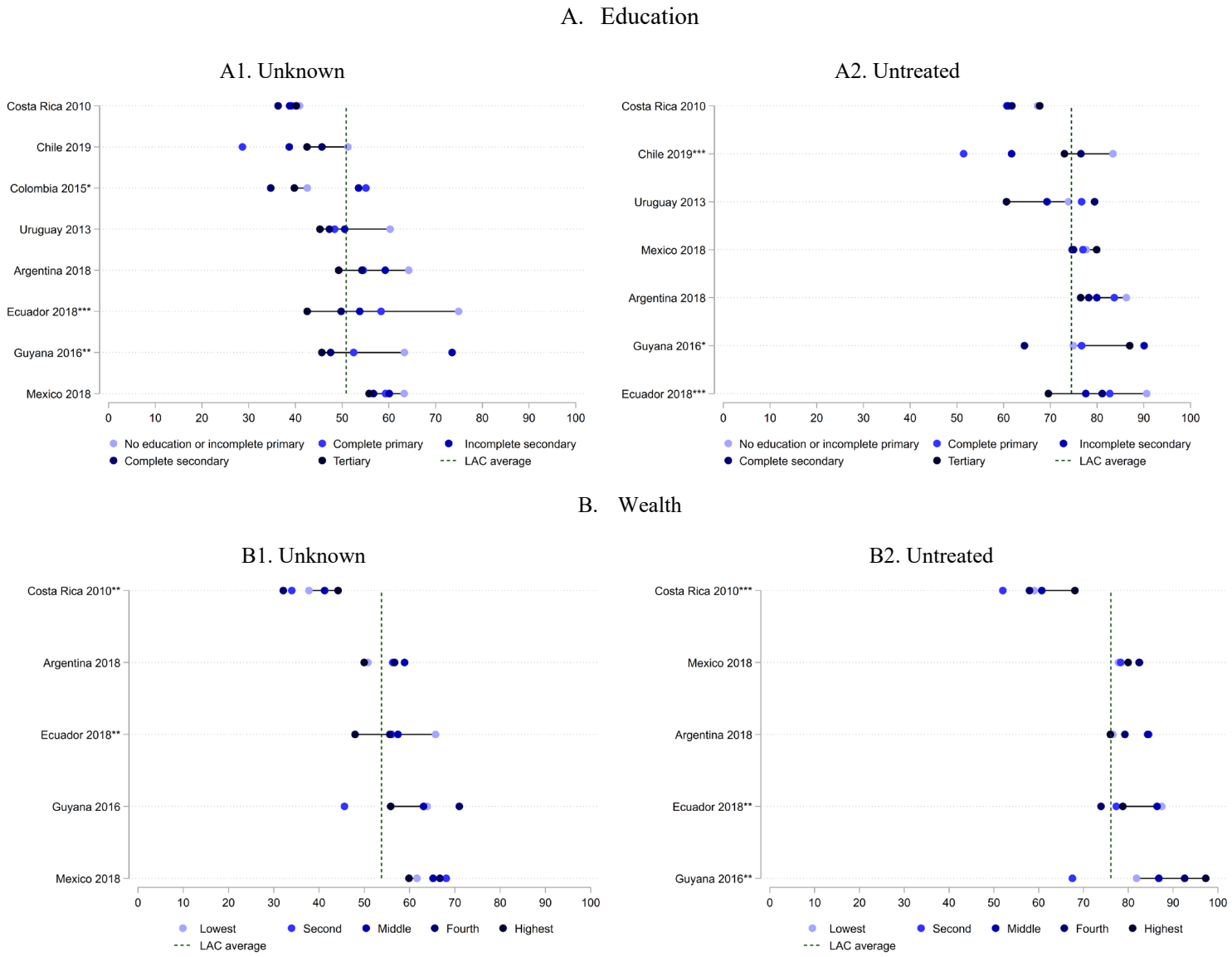
Note. Percentage of people with cholesterol level at 5mmol/L or above. Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. In Panel A, the educational attainment corresponds to the respondent. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the respondent. Weighted average is the average across countries of the estimated margins at age 60.

Table 13: Inequalities in high cholesterol, standardized at age 60

			Education		Wealth		Residence		Sex	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*	*Male*	*Female / Male*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A. High cholesterol										
Argentina 2018-ENFR	4911	57.07	58.61	0.97	62.70	0.81***			54.60	1.08*
Chile 2019-ENS	3715	61.36	59.11	1.09			61.39	1.00	59.10	1.07
Colombia 2015-SABE	4088	51.47	44.74	1.18			50.84	1.10	45.65	1.23**
Costa Rica 2010-CRELES	3831	72.43	69.64	1.04	69.48	1.02	72.51	1.00	61.64	1.29***
Ecuador 2018-STEPS	4078	54.50	59.34	0.85***	56.06	0.86**			47.00	1.33***
Guyana 2016-STEPS	890	71.71	73.19	1.00	62.65	1.23*			68.78	1.09
Mexico 2018-ENSANUT	13099	59.11	66.91	0.84***	61.68	0.87***	60.66	0.91***	57.85	1.04*
Uruguay 2013-STEPS	1332	59.33	59.72	1.00					60.18	0.97
Average across countries		60.87	61.41	0.99	62.51	0.96	61.35	1.00	56.85	1.13
Panel B. Unknown										
Argentina 2018-ENFR	2066	54.48	51.38	1.11	49.96	1.02			56.10	0.95
Chile 2019-ENS	1651	42.63	44.12	1.01			42.54	1.02	51.89	0.69***
Colombia 2015-SABE	2167	45.35	38.26	1.19			45.86	0.91	57.14	0.67***
Costa Rica 2010-CRELES	2600	39.22	38.91	1.01	44.20	0.85*	36.57	1.17**	48.72	0.71***
Ecuador 2018-STEPS	1566	56.25	46.70	1.37***	47.95	1.37***			58.49	0.93
Guyana 2016-STEPS	500	58.64	46.98	1.19	55.83	1.14			65.17	0.83
Mexico 2018-ENSANUT	6000	60.34	56.18	1.09**	59.86	1.03	58.57	1.12***	64.26	0.90***
Uruguay 2013-STEPS	598	50.03	46.33	1.10					54.87	0.84
Average across countries		50.87	46.11	1.14	51.56	1.09	45.88	1.05	57.08	0.82
Panel C. Untreated										
Argentina 2018-ENFR	2033	80.04	77.19	1.09**	75.99	1.01			80.46	0.99
Chile 2019-ENS	1592	70.78	74.78	0.99			71.23	0.95	75.59	0.89
Costa Rica 2010-CRELES	1870	62.09	65.81	0.93	68.09	0.87**	59.44	1.10**	70.12	0.83***
Ecuador 2018-STEPS	1566	80.28	74.69	1.14***	78.78	1.11**			80.01	1.01
Guyana 2016-STEPS	500	80.74	73.99	1.03	97.28	0.84**			88.83	0.84**
Mexico 2018-ENSANUT	5981	77.46	78.55	0.99	79.96	0.97	76.36	1.06**	80.33	0.94***
Uruguay 2013-STEPS	598	71.02	67.69	1.12					76.69	0.87*
Average across countries		74.63	73.24	1.04	80.02	0.96	69.01	1.03	78.86	0.91

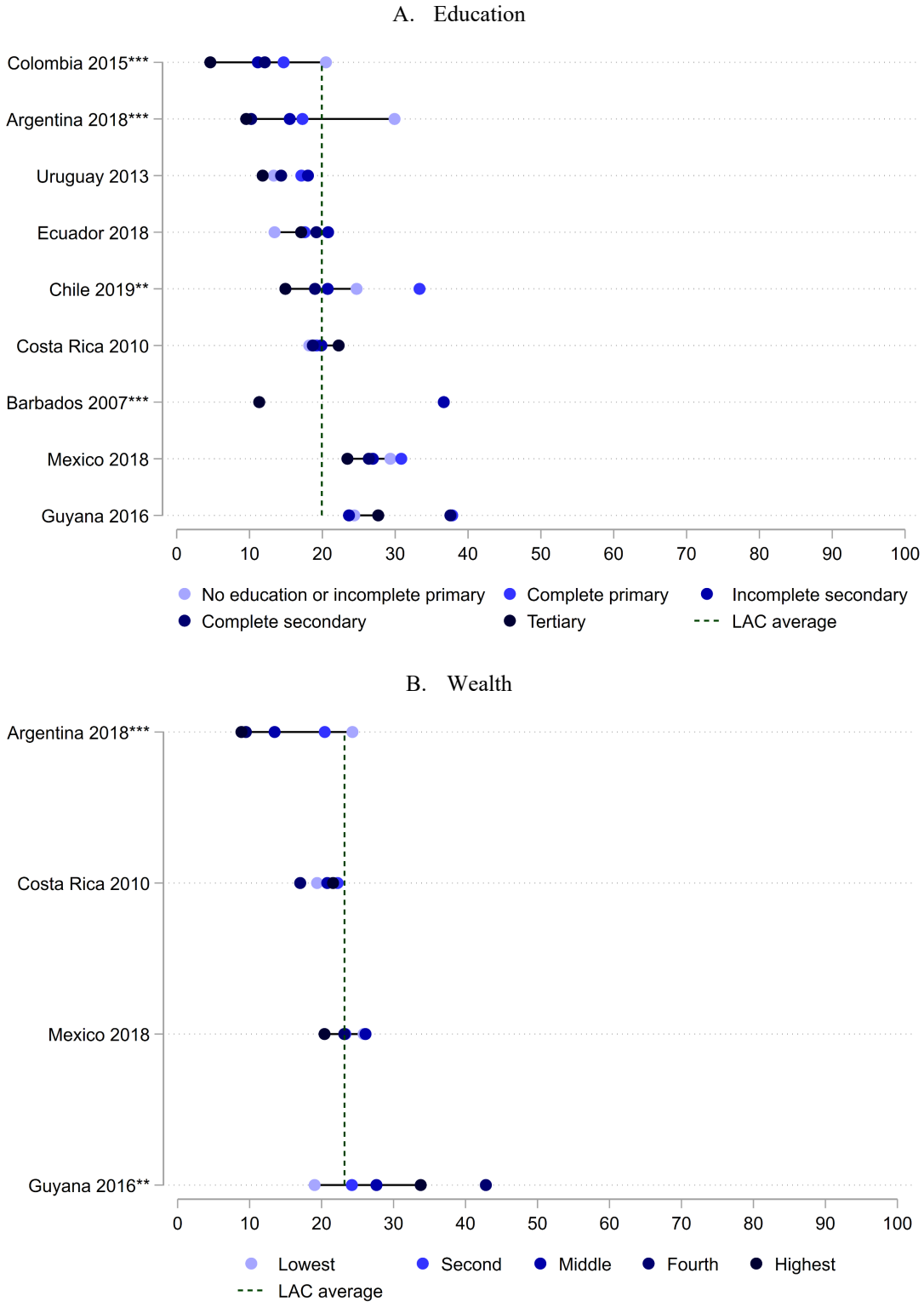
Note. Percentage of people with cholesterol level at 5mmol/L or above (Panel A), but this is unknown by the respondent (Panel B) or it is not being treated (Panel C). Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. Weighted average is the average across countries of the estimated margins at age 60. STEPS, Step towards a healthier world: monitoring noncommunicable diseases and their risk factors; ENFR, National Survey of Risk Factors; ENS, National Health Survey; SABE, Survey on Health, Well-Being, and Aging; CRELES, Longevity and Healthy Aging Study; ENSANUT, National Survey of Health and Nutrition. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure 18: High cholesterol, unknown and untreated, standardized at age 60



Note. Percentage of people with cholesterol level at 5mmol/L or above, but this is unknown by the respondent (A1 and B1) or it is not being treated (A2 and B2). Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. In Panel A, the educational attainment corresponds to the respondent. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the respondent. Weighted average is the average across countries of the estimated margins at age 60.

Figure 19: Diabetes, standardized at age 60



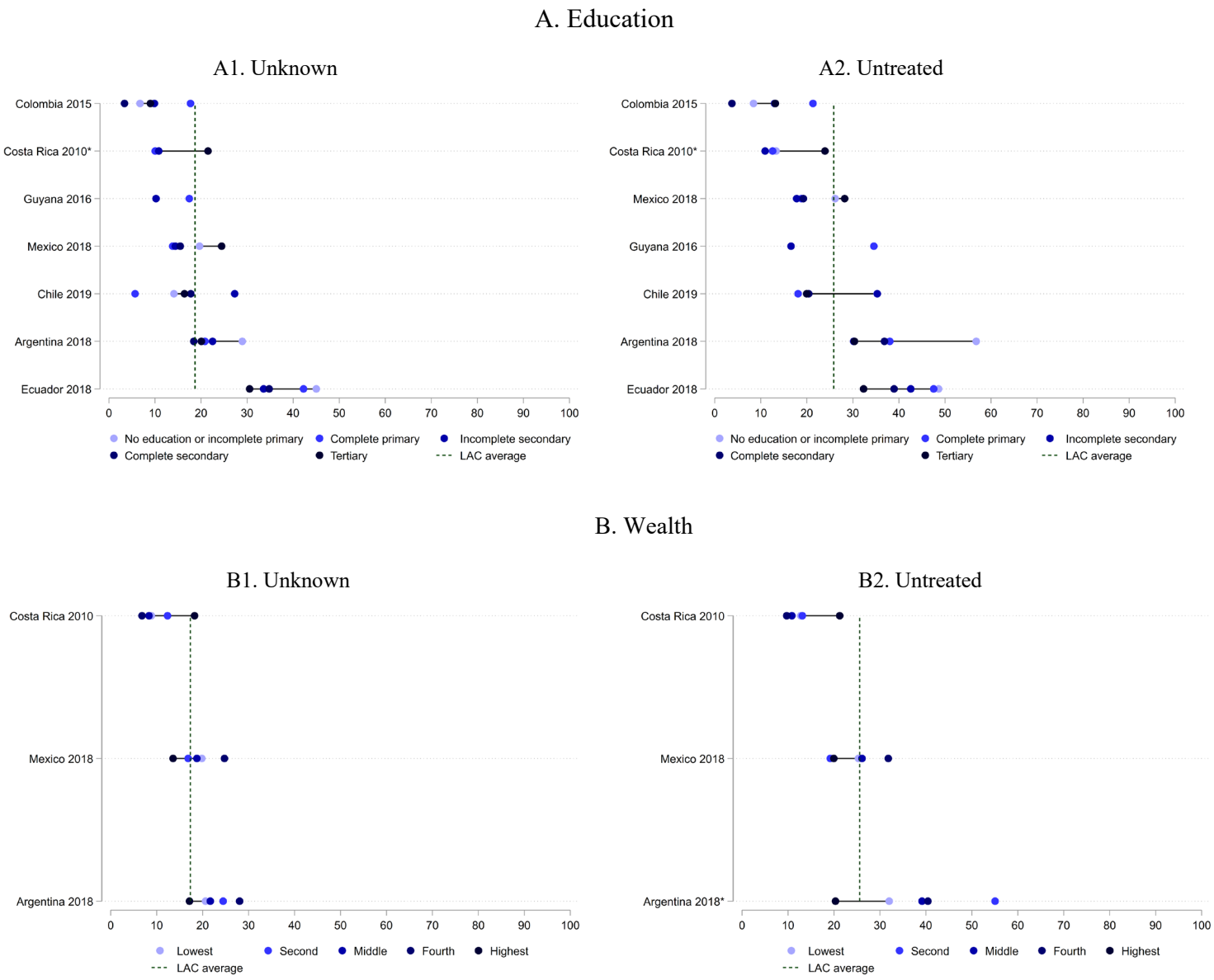
Note. Percentage of people whose blood sugar level is 140 mg/dL (7.8 mmol/L) or more. Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. In Panel A, the educational attainment corresponds to the respondent. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the respondent. Benchmark corresponds to the average of the European region. Weighted average is the average across countries of the estimated margins at age 60.

Table 14: Inequalities in diabetes, standardized at age 60

			Education		Wealth		Residence		Sex	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Richest*	*Poorest / Richest*	*Urban*	*Rural / Urban*	*Male*	*Female / Male*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A. High glucose										
Argentina 2018-ENFR	5188	14.74	9.86	2.13***	8.86	2.74***			15.09	0.96
Barbados 2007-STEPS	333	23.88	14.31	2.66**					23.52	1.03
Chile 2019-ENS	5117	19.61	17.16	1.60*			19.64	0.98	17.25	1.25*
Colombia 2015-SABE	4078	13.81	6.79	2.76***			14.42	0.66	12.52	1.19
Costa Rica 2010-CRELES	3821	19.64	21.21	0.90	21.60	0.90	20.27	0.93	18.09	1.14
Ecuador 2018-STEPS	4040	17.19	17.77	0.91					17.75	0.93
Guyana 2016-STEPS	891	30.43	32.82	0.99	33.77	0.56			25.24	1.42*
Mexico 2018-ENSANUT	12802	27.93	24.31	1.23**	20.41	1.27*	29.38	0.82***	25.11	1.20***
Uruguay 2013-STEPS	1341	16.50	12.74	1.27					18.81	0.78
Average across countries		20.41	17.44	1.40	21.16	1.05	20.93	0.86	19.26	1.11
Panel B. Unknown										
Argentina 2018-ENFR	448	22.42	19.55	1.24	17.14	1.20			20.94	1.13
Barbados 2007-STEPS	51	50.27								
Chile 2019-ENS	697	19.43	17.23	0.65			18.42	1.45	27.12	0.48**
Colombia 2015-SABE	673	8.06	5.31	1.48			8.17	0.92	8.58	0.82
Costa Rica 2010-CRELES	654	12.24	19.12	0.53*	18.24	0.48	13.76	0.71	14.55	0.74
Ecuador 2018-STEPS	343	37.88	32.46	1.32					38.18	0.98
Guyana 2016-STEPS	136	16.83	15.68	1.16					19.80	0.71
Mexico 2018-ENSANUT	1805	17.33	21.24	0.81	13.56	1.46	17.61	0.93	18.65	0.89
Uruguay 2013-STEPS	122	33.35	11.26	3.40**					48.92	0.40***
Average across countries		24.20	17.73	1.20	16.31	1.01	14.49	1.04	24.59	0.72
Panel C. Untreated										
Argentina 2018-ENFR	444	39.88	33.57	1.37	20.33	1.57			42.54	0.89
Barbados 2007-STEPS	51	51.36								
Chile 2019-ENS	692	26.51	20.08	1.48			25.41	1.35	31.37	0.72
Colombia 2015-SABE	673	10.21	7.25	1.34			10.51	0.83	11.09	0.77
Costa Rica 2010-CRELES	514	14.67	21.94	0.58*	21.24	0.60	16.07	0.77	18.18	0.69
Ecuador 2018-STEPS	343	42.60	35.17	1.36					43.96	0.93
Guyana 2016-STEPS	136	27.76	28.25	1.11					34.99	0.62
Mexico 2018-ENSANUT	1802	22.28	25.07	0.92	19.97	1.27	21.85	1.08	25.53	0.80*
Uruguay 2013-STEPS	122	39.89	13.26	3.86***					59.47	0.38***
Average across countries		30.57	23.07	1.36	20.51	1.14	18.46	1.07	33.39	0.70

Note. Percentage of people whose blood sugar level is 140 mg/dL (7.8 mmol/L) or more (Panel A), but this is unknown by the respondent (Panel B) or it is not being treated (Panel C). Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. Weighted average is the average across countries of the estimated margins at age 60. STEPS, Step towards a healthier world: monitoring noncommunicable diseases and their risk factors; ENFR, National Survey of Risk Factors; ENS, National Health Survey; SABE, Survey on Health, Well-Being, and Aging; CRELES, Longevity and Healthy Aging Study; ENSANUT, National Survey of Health and Nutrition. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

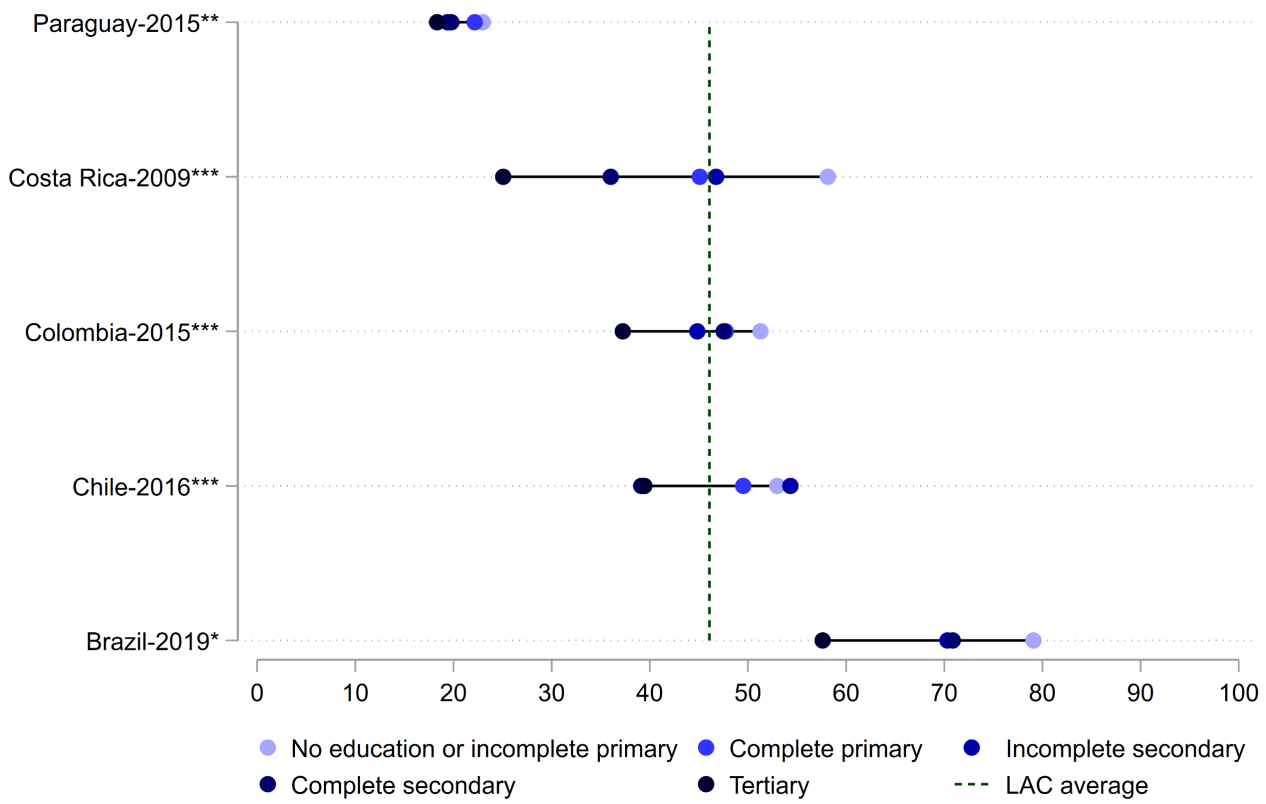
Figure 20: Diabetes, unknown and untreated, standardized at age 60



Note. Percentage of people whose blood sugar level is 140 mg/dL (7.8 mmol/L) or more, but this is unknown by the respondent (A1 and B1) or it is not being treated (A2 ad B2). Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. In Panel A, the educational attainment corresponds to the respondent. We drop educational groups with fewer than 30 observations. In Panel B, the wealth quintile corresponds to the household of the respondent. Weighted average is the average across countries of the estimated margins at age 60.

Figure 21: Depression, standardized at age 60

A. Education



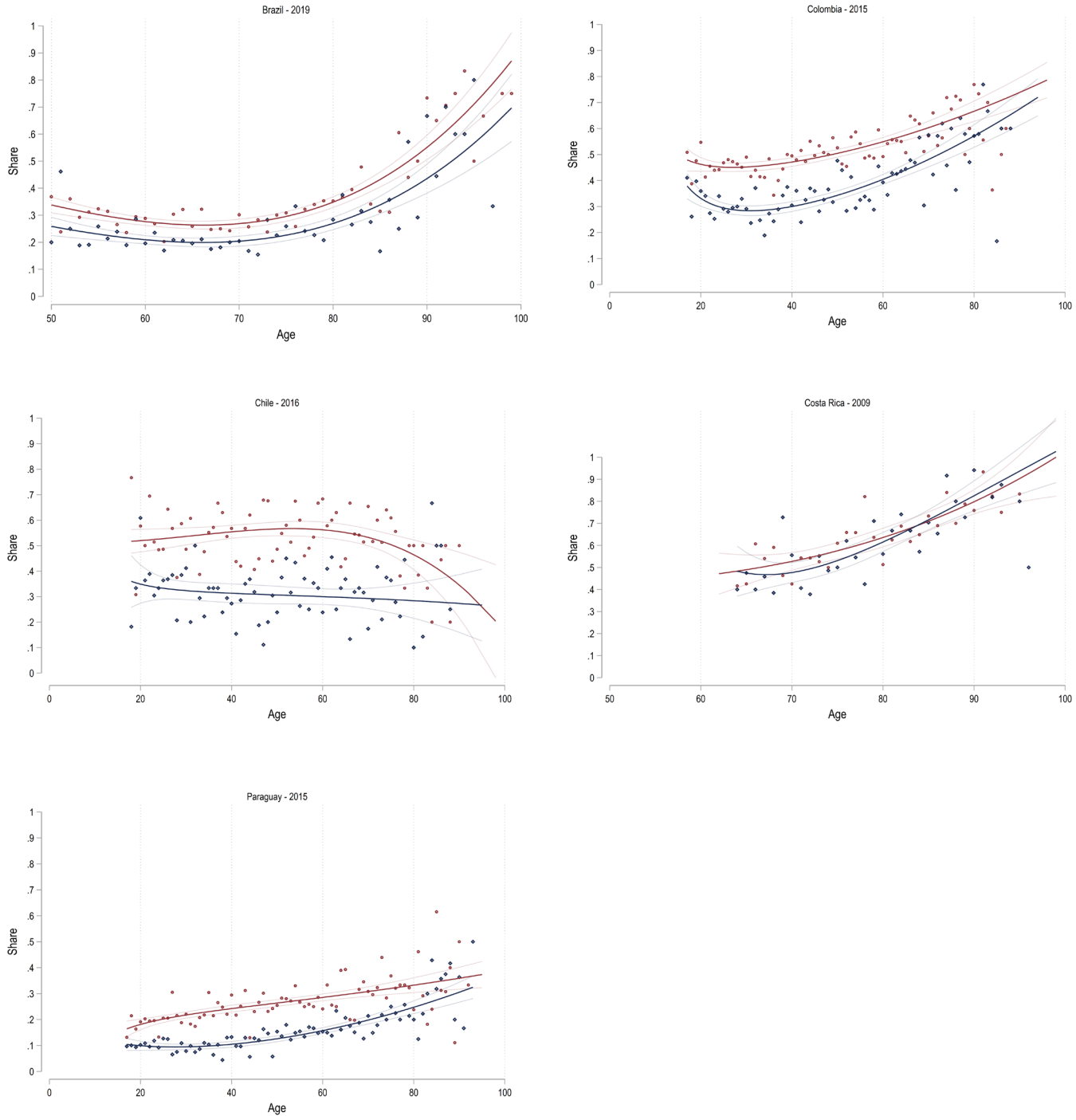
Note. Percentage of adults with depression. See Appendix C for how we build a homogenized mental health index from different scales and validated cut-offs used for each scale. Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. In Panel A, the educational attainment corresponds to the respondent. We drop educational groups with fewer than 30 observations. Weighted average is the average across countries of the estimated margins at age 60.

Table 15: Inequalities in depression, standardized at age 60

			Education		Residence		Sex	
	Obs	*Mean*	*Highest*	*Lowest / Highest*	*Urban*	*Rural / Urban*	*Male*	*Female / Male*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Brazil 2019-ELSI	9949	24.23	58.10	1.33**	24.88	0.83***	20.52	1.33***
Chile 2016-ENS	3391	46.88	40.37	1.28**	47.63	0.87	33.86	1.70***
Colombia 2015-ENSM	12624	46.04	37.97	1.32***	45.63	1.04	39.27	1.34***
Costa Rica 2009-CRELES	1863	43.49	24.04	2.21***			41.54	1.09
Paraguay 2015-ELPS	15173	21.21	17.71	1.24***	22.17	0.89***	14.33	1.95***
Average across countries		36.37	35.64	1.43	35.08	0.92	29.90	1.41

Note. Percentage of adults with depression. See Appendix C for how we build a homogenized different mental health scales and the validated cut-off used for each scale. Estimated margins at age 60 from a Logit regression controlling for the second order polynomial of age. Weighted average is the average across countries of the estimated margins at age 60. ELSI, Longitudinal Study of Aging; ENS, National Health Survey; ENS, National Health Survey; ENSM, National Study of Mental Health; CRELES, Longevity and Healthy Aging Study; ELPS, Longitudinal Survey of Social Protection. 'Lowest' corresponds to primary education completed or less but without any secondary education, and 'Highest' to complete secondary or more. 'Poorest' corresponds to the first quintile of the wealth distribution, and 'Richest' to the highest quintile. Statistical significance of difference across groups is denoted by * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

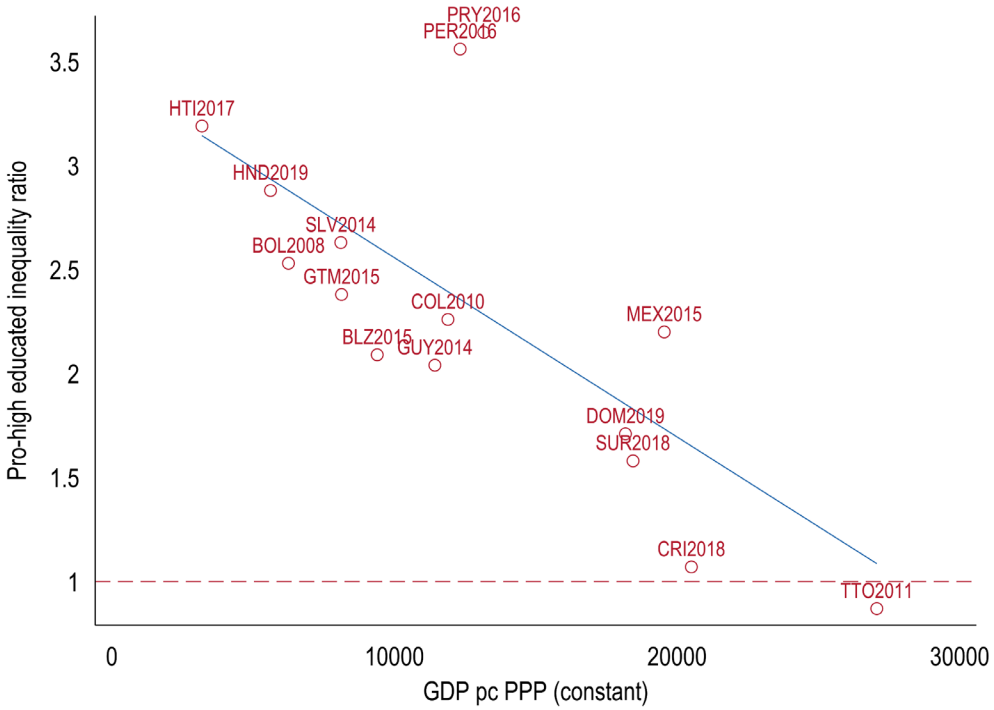
Figure 22: Depression, by age and gender



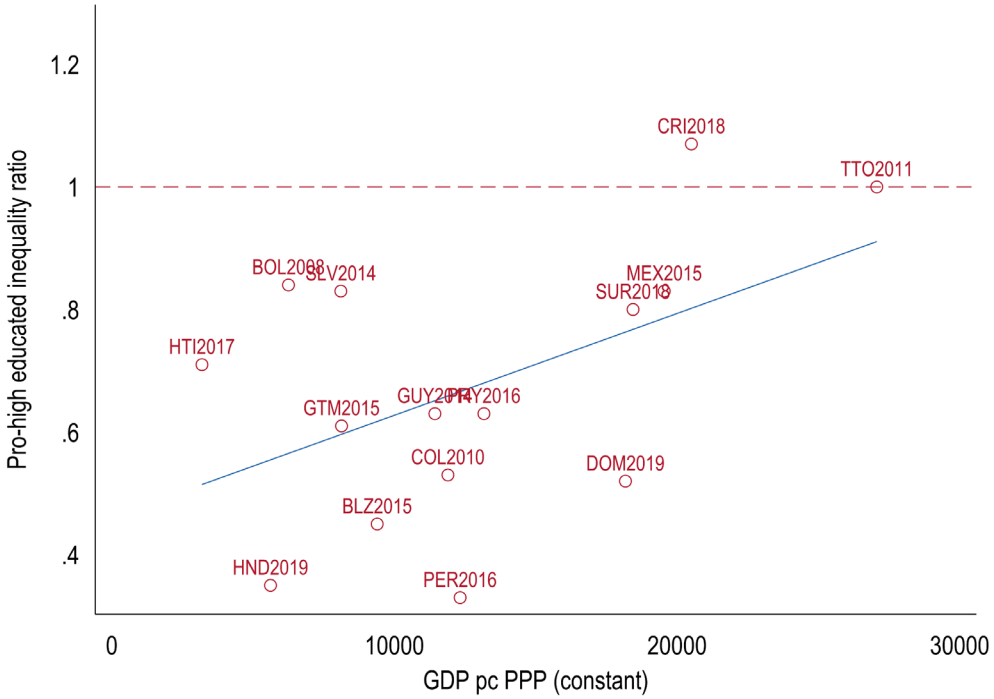
Note. Percentage of adults with depression. See Appendix C for how we build a homogenized different mental health scales and the validated cut-off used for each scale. Blue curves and markers are males and red curves and markers are women. Graph excluding CAF surveys because they focus only on big cities.

Figure 23: Inequalities in child health vs. GDP per capita

A. Child stunting

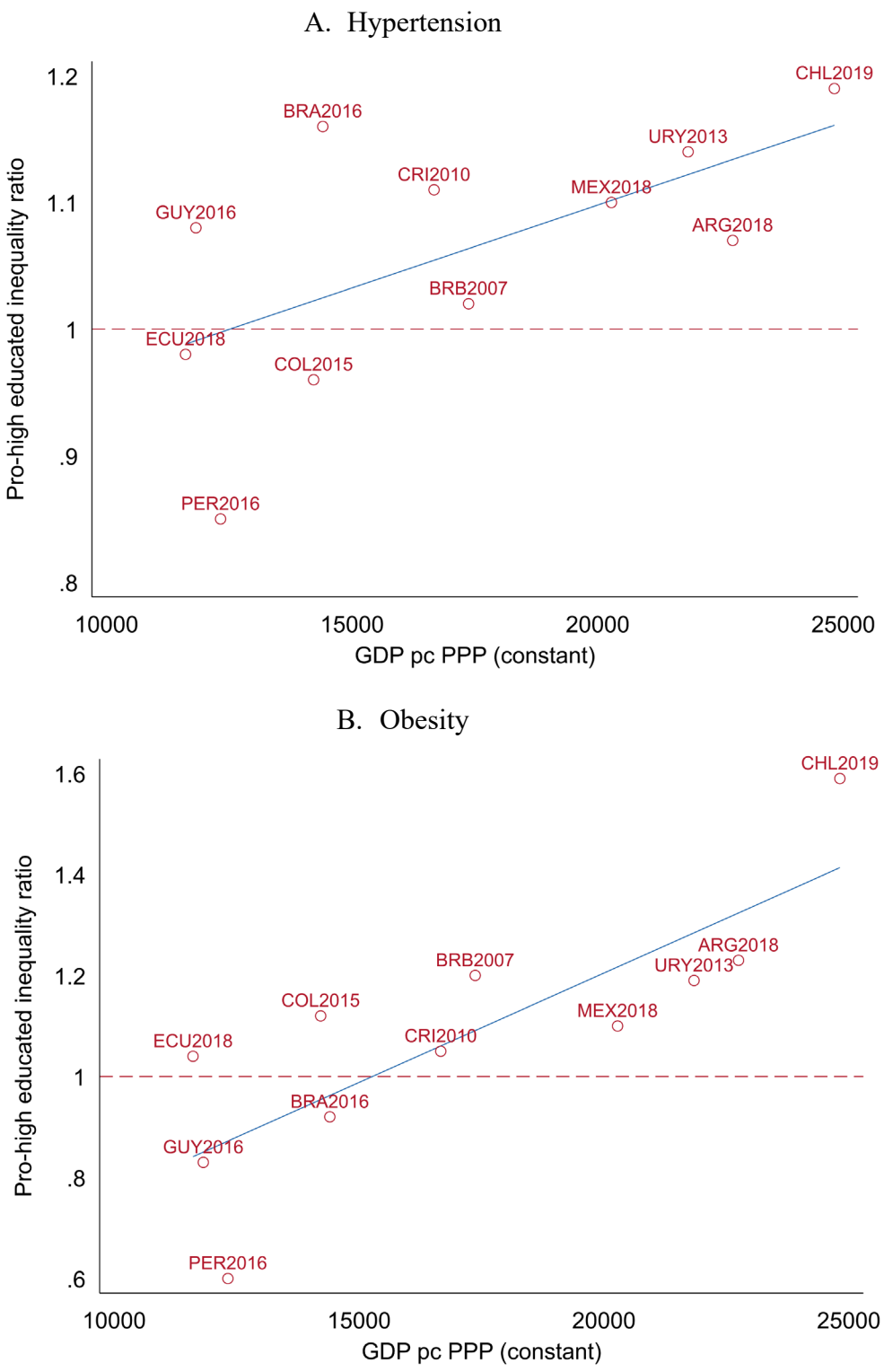


B. Child overweight



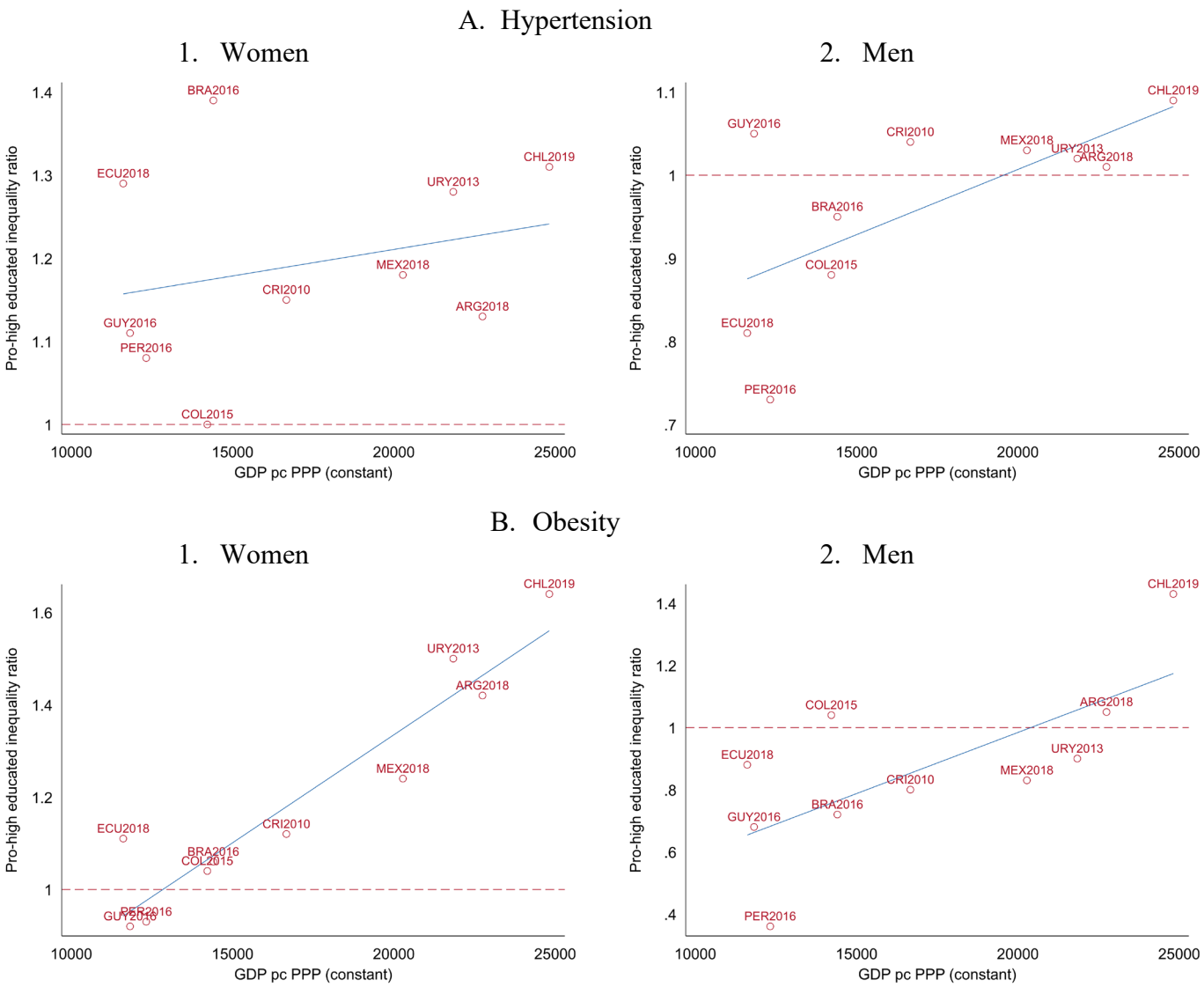
Note. Pro-high educated inequality ratio from Tables 4 (Panel A) and 5 (Panel B), Column (3). GDP per capita in PPP in constant 2017 international dollars.

Figure 24: Inequalities in adult health (standardized at age 60) vs. GDP per capita



Note. Pro-high educated inequality ratio from Tables 11 (Panel A) and 10 (Panel B), Column (3). GDP per capita in PPP in constant 2017 international dollars.

Figure 25: Inequalities in adult health (standardized at age 60) vs. GDP per capita, by Gender



Note. Same Notes as Figure 24. Inequality ratios split by gender.

APPENDIX

This appendix provides additional information on the data and methods.

A More about epidemiological profile

Table A1: Ranking of DALYs by cause for LAC, 1990

	East Asia and Pacific	Europe and Central Asia	Latin America and Caribbean	Middle East and North Africa	North America	South Asia	Sub-Saharan Africa
NCDs							
Cardiovascular diseases	1	1	2	2	1	5	9
Chronic respiratory diseases	7	11	16	17	6	10	16
Diabetes and kidney diseases	16	14	13	14	11	18	17
Digestive diseases	13	12	11	13	12	12	14
Enteric infections	10	18	6	5	20	3	2
Mental disorders	12	6	9	9	4	13	15
Musculoskeletal disorders	8	5	12	11	3	15	19
Neoplasms	3	2	5	10	2	11	12
Neurological disorders	15	8	15	12	7	17	18
Other non-communicable diseases	5	3	4	3	5	7	6
Skin and subcutaneous diseases	18	16	18	19	15	19	20
Substance use disorders	20	15	19	20	13	20	21
CDs							
HIV/AIDS and sexually transmitted infections	21	20	21	21	17	21	8
Maternal and neonatal disorders	4	9	1	1	14	1	3
Neglected tropical diseases and malaria	19	21	20	18	21	9	5
Nutritional deficiencies	17	19	14	16	18	6	7
Other infectious diseases	9	17	17	8	19	4	4
Respiratory infections and tuberculosis	2	7	3	4	16	2	1
Injuries							
Self-harm and interpersonal violence	14	13	8	15	10	14	11
Transport injuries	11	10	10	7	9	16	13
Unintentional injuries	6	4	7	6	8	8	10

Note. Calculations based on IHM-GHDx. Samples includes individuals of any gender and age.

Table A2: Ranking of DALYS by cause for LAC, 2019

	East Asia and Pacific	Europe and Central Asia	Latin America and Caribbean	Middle East and North Africa	North America	South Asia	Sub-Saharan Africa
NCDs							
Cardiovascular diseases	1	1	1	1	1	1	7
Chronic respiratory diseases	4	10	14	14	6	6	19
Diabetes and kidney diseases	7	9	3	8	7	11	15
Digestive diseases	12	8	9	12	11	12	12
Enteric infections	17	19	19	15	17	7	4
Mental disorders	6	4	6	3	4	9	11
Musculoskeletal disorders	3	3	4	5	3	8	18
Neoplasms	2	2	2	4	2	4	9
Neurological disorders	8	6	10	9	8	15	16
Other non-communicable diseases	5	5	5	2	9	5	6
Skin and subcutaneous diseases	14	15	15	16	14	18	20
Substance use disorders	16	13	16	18	5	20	21
CDs							
HIV/AIDS and sexually transmitted infections	19	17	17	21	18	21	5
Maternal and neonatal disorders	13	16	8	7	16	2	1
Neglected tropical diseases and malaria	21	21	20	20	21	19	3
Nutritional deficiencies	18	18	18	17	19	13	10
Other infectious diseases	20	20	21	19	20	17	8
Respiratory infections and tuberculosis	10	12	12	13	15	3	2
Injuries							
Self-harm and interpersonal violence	15	11	7	11	12	16	17
Transport injuries	11	14	13	6	13	14	14
Unintentional injuries	9	7	11	10	10	10	13

Note. Calculations based on IHM-GHDx. Samples includes individuals of any gender and age.

Table A3: Ranking of DALYS by cause for LAC, 1990

	Argentina	Bahamas	Barbados	Belize	Bolivia	Brazil	Chile	Colombia	Costa Rica	Cuba	Dom Rep	Ecuador	El Salvador	Guatemala	Guyana	Haiti	Honduras	Jamaica	Mexico	Nicaragua	Panama	Paraguay	Peru	Suriname	TandT	Uruguay	Venezuela
NCDs																										
Cardiovascular diseases	1	1	1	2	6	2	1	3	1	1	4	3	4	8	1	3	5	1	6	6	2	5	2	1	1	2
Chronic respiratory diseases	11	17	16	17	13	16	14	15	13	14	17	18	15	13	18	14	11	15	16	17	19	16	19	14	9	15
Diabetes and kidney diseases	8	5	3	11	14	15	13	13	11	9	16	17	17	17	10	12	17	5	7	12	14	17	7	2	11	14
Digestive diseases	9	13	10	16	9	13	9	14	12	12	10	9	9	6	12	11	3	14	9	13	11	4	11	12	10	13
Enteric infections	18	20	20	9	5	5	17	11	16	19	2	4	3	3	7	1	2	12	4	2	8	6	9	19	19	7
Mental disorders	7	7	6	7	12	9	5	9	5	3	9	8	11	11	13	15	12	6	13	9	5	10	6	6	7	9
Musculoskeletal disorders	6	10	7	13	15	11	6	8	6	7	13	11	13	15	16	19	14	7	11	14	9	13	14	9	5	10
Neoplasms	2	2	2	6	8	6	2	4	2	2	11	7	10	10	11	10	9	3	8	11	6	8	4	4	2	4
Neurological disorders	12	14	8	14	16	14	11	12	9	10	14	12	16	14	15	16	13	8	14	16	10	15	13	11	8	12
Other non-communicable diseases	4	3	4	3	4	3	4	5	3	4	5	5	5	9	4	5	8	4	3	4	3	7	3	5	4	3
Skin and subcutaneous diseases	15	15	12	19	20	18	15	18	15	15	19	19	19	20	20	20	19	16	18	18	17	18	20	16	15	19
Substance use disorders	17	18	19	20	21	20	16	20	17	18	21	20	12	12	21	21	20	20	17	19	20	21	21	20	16	20
CDs																										
HIV/AIDS and sexually transmitted infections	21	9	15	15	19	21	21	21	20	20	18	21	21	21	17	9	21	17	21	21	18	20	16	17	20	21
Maternal and neonatal disorders	3	4	5	1	2	1	10	2	4	11	1	1	2	2	2	4	1	2	1	1	1	2	1	3	6	1
Neglected tropical diseases and malaria	20	21	21	21	18	19	20	19	21	21	20	15	20	18	8	18	18	21	20	20	21	19	15	21	21	18
Nutritional deficiencies	16	16	17	10	7	12	19	16	18	17	6	13	18	5	9	8	16	10	15	8	16	9	18	15	17	16
Other infectious diseases	19	19	18	18	10	17	18	17	19	16	8	16	14	16	19	7	10	19	19	10	12	14	17	18	18	17
Respiratory infections and tuberculosis	10	11	11	4	1	4	7	6	10	13	3	2	6	1	5	2	4	11	2	3	4	1	10	10	13	8
Injuries																										
Self-harm and interpersonal violence	14	12	14	12	17	7	8	1	14	5	15	14	1	4	6	13	7	13	12	5	15	11	8	7	14	11
Transport injuries	13	8	13	8	11	10	12	10	8	6	12	10	8	19	14	17	15	18	10	15	13	12	12	13	12	6
Unintentional injuries	5	6	9	5	3	8	3	7	7	8	7	6	7	7	3	6	6	9	5	7	7	3	5	8	3	5

Note. Calculations based on IHM-GHDx. Samples includes individuals of any gender and age.

B Data and Measurement

Table B1: Indicators: maternal, child and reproductive health

Indicator	Definition	Sample (denominator)	Construction (numerator)	Age	Source
Infant mortality rate	Percentage of infants dying before the first birthday, per 1,000 live births	Children from birth history who were born in the last 5 years preceding the survey	1 if died before the first birthday, 0 if survived	Child age: 0-5 years Mother age: 12-49 years	DHS and MICS
Stunting	Percentage of children stunted	Children between ages 0 and 59 months before the survey	1 if below -2 SD of height for age according to the WHO standard, 0 if its over -2SD	Child age: 0-59 months	DHS and MICS
Overweight	Percentage of children overweight	Children between ages 0 and 59 months before the survey	1 if weight-for-height z-score is above plus 2 (+2.0) standard deviations (SD), 0 if it's equal or below	Child age: 0-59 months	DHS and MICS
Antenatal visits for pregnancy: 4+ visits	Percentage of women with a live birth that had 4+ antenatal care visits in their last pregnancy	Women with a birth in the last 2 years	1 if woman had 4 or more antenatal visits in last pregnancy, 0 otherwise	Woman age: 12-49 years	DHS and MICS
High quality antenatal care	Percentage of women with at least one antenatal care visit with blood pressure measured + urine sample taken + blood sample taken	Women with a birth in the last 2 years	1 if women who had blood presure mesured and urine sample taken and blood sample in ANC during last pregnancy, 0 if did not have any ANC or the components were not completed	Woman age: 12-49 years	DHS and MICS
Teenage pregnancy	Percentage of women +25 years who had their first child when youger than 20 years	Women +25 years	1 if woman had a child under 20 years; 0 otherwise	Woman age: 26-49 years	DHS and MICS
Unwanted pregnancy	Percentage of women pregnant or with a child that do not want child	Women +25 pregnant or with a child in the last 2 years	1 if woman not wanted at all pregnancy when became pregnant; 0 if woman wanted or wanted later pregnancy when became pregnant	Woman age: 25-49 years	DHS and MICS
Women overweight or obese	Percentage of women with BMI>=25	All women with height and weight measures	1 if BMI>=25; 0 if BMI<25		DHS and MICS
Women obese	Percentage of women with BMI>=30	Women with height and weight measures	1 if BMI>=30; 0 if BMI<30	Woman age: 12-49 years	DHS and MICS
Unmet need for family planning	Percentage of women with an unmet need for family planning	Women married or in a consensual union	1 if unmet need for contraception (for spacing or limiting); 0 otherwise	Woman age: 15-49 years	DHS and MICS
Knowledge of any modern method of contraception (teens)	Percentage of adolescent women (15-17 years) who know any modern method of contraception	Adolescent women (15-17 years)	1 if woman knew any modern contraception method; 0 otherwise	Woman age: 15-17 years	DHS and MICS

Table B2: Indicators: adult health

Indicator	Definition	Sample (denominator)	Construction (numerator)	Age	Source
Obese	Percentage who are obese (BMI ≥ 30 kg/m2)	People with weight and height measures	1 if BMI>=30; 0 if BMI<30	min: 15 max: 108	Health Surveys and STEPS
Hypertension	Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)	People with hypertension measures	1 if SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised blood preasure; 0 if does not have hypertension with anthropometric measures and is not in currently on medication for raised blood preasure	min: 15 max: 111	Health Surveys and STEPS
Unknown hypertension	Percentage of hypertensive people who previously were not diagnosed with hypertension.	Hypertensive people (bp_HBP==1)	1 if person had not a previous diagnosis of hypertension; 0 if person had a previous diagnosis of hypertension	min: 15 max: 105	Health Surveys and STEPS
Untreated hypertension	Hypertensive people who does not have medication for their condition	Hypertensive people (bp_HBP==1)	1 if does not take medications to control hypertension or not know have hypertension; 0 if take medications to control hypertension	min: 15 max: 105	Health Surveys and STEPS
Diabetes	Percentage with raised fasting blood glucose (value in venous plasma ≥126mg/dl) or currently on medication for raised blood glucose	People with glucose measures	1 if blood glucose ≥126mg/dl or currently on medication for raised blood glucose; 0 if blood glucose<126mg & not take medications	min: 15 max: 111	Health Surveys and STEPS
Unknown diabetes	Percentage of diabetic people who previously were not diagnosed with diabetes.	Diabetic people (glu_high_glu==1)	1 if person had not a previous diagnosis of diabetes; 0 if person had a previous diagnosis of diabetes	min: 15 max: 100	Health Surveys and STEPS
Untreates diabetes	Diabetic people who does not have medication for their condition	Diabetic people (glu_high_glu==1)	1 if does not take medications to control diabetes or not know have diabetes; 1 if take medications to control diabetes	min: 15 max: 100	Health Surveys and STEPS
High cholesterol	Percentage with raised total cholesterol (≥ 190 mg/dl or currently on medication for raised cholesterol)	People with cholesterol measures	1 if cholesterol ≥190mg/dl or currently on medication for raised cholesterol; 0 if cholesterol<126mg & not take medications	min: 15 max: 111	Health Surveys and STEPS
Unknown high cholesterol	Percentage of people with high cholesterol who previously were not diagnosed with that condition.	People with high cholesterol (cho_high_cholesterol==1)	1 if person had not a previous diagnosis of high cholesterol; 0 if person had a previous diagnosis of high cholesterol	min: 15 max: 102	Health Surveys and STEPS
Untreated high cholesterol	People with high cholesterol who does not have medication for their condition	People with high cholesterol (cho_high_cholesterol==1)	1 if does not take medications to control high cholesterol or not know have high cholesterol; 1 if take medications to control high cholesterol	min: 15 max: 102	Health Surveys and STEPS

Table B3: Educational attainment used in each indicator

Indicator	Definition	Education
Infant mortality rate	Percentage of infants dying before the first birthday, per 1,000 live births	Maximum level of education between child mother and mother's spouse in DHS. Maximum level of child mother education in MICS and ENDES.
Stunting	Percentage of children stunted	Maximum level of education between child mother, mother's spouse, and father.
Overweight	Percentage of children overweight	Maximum level of education between child mother, mother's spouse, and father.
Antenatal visits for pregnancy: 4+ visits	Percentage of women with a live birth that had 4+ antenatal care visits in their last pregnancy	Maximum level of education between child mother, mother's spouse, and father.
High quality antenatal care	Percentage of women with at least one antenatal care visit with blood pressure measured + urine sample taken + blood sample taken	Maximum level of education between child mother, mother's spouse, and father.
Teenage pregnancy	Percentage of women +25 years who had their first child when youger than 20 years	Maximum level of woman education
Unwanted pregnancy	Percentage of women pregnant or with a child that do not want child	Maximum level of woman education
Women overweight or obese	Percentage of women with BMI>=25	Maximum level of woman education
Women obese	Percentage of women with BMI>=30	Maximum level of woman education
Unmet need for family planning	Percentage of women with an unmet need for family planning	Maximum level of woman education
Knowledge of any modern method of contraception (teens)	Percentage of adolescent women (15-17 years) who know any modern method of contraception	Education of parents of adolescents.

C Measuring mental health

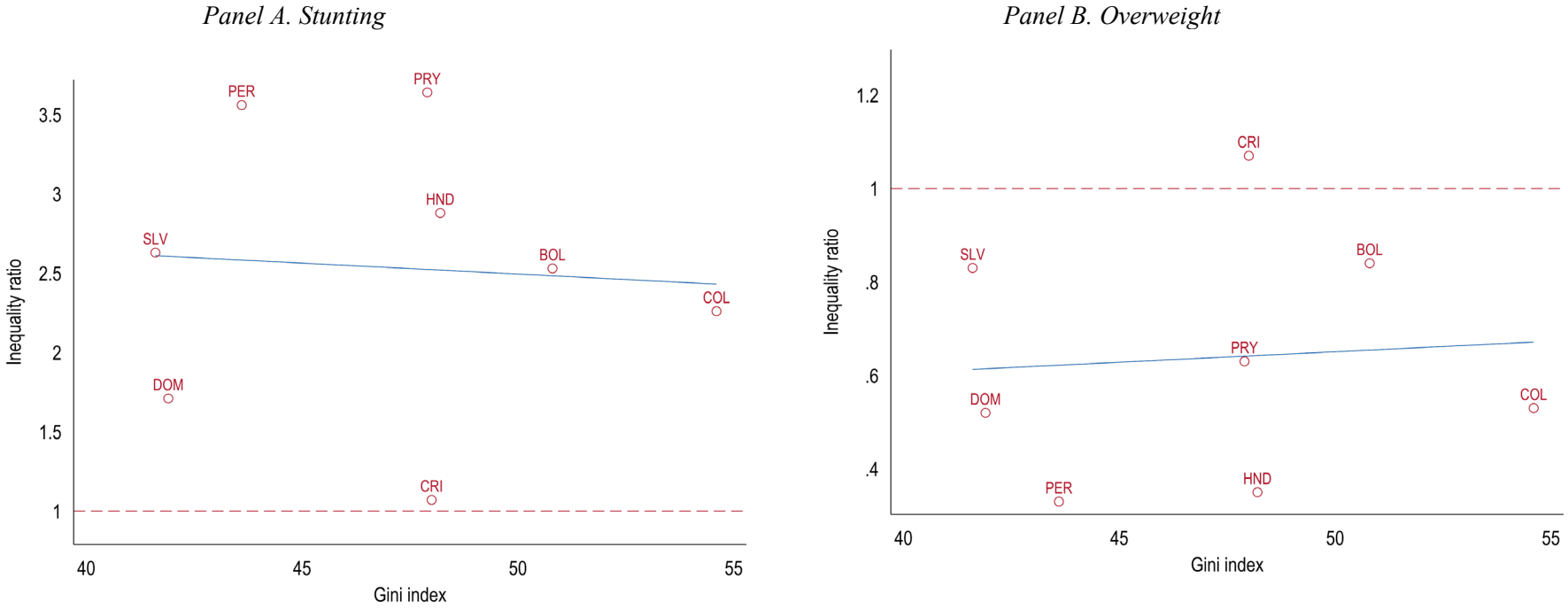
The surveys included in this cross-country analysis use different mental health scales for screening mental illness symptoms, in most of the cases they screen for depression symptoms, hence this is the homogenized measurement we build across countries.

Table C1: Measurement of mental health

Country (1)	Survey (2)	Scale (3)	Response (4)	Validated cut-off (5)	Validation sources (6)
Scales for adults (>= 17 years old)					
Chile	ENS	Composite International Diagnostic Interview Short Form (CIDI-SF)	Binary	3/8 items	Mojtabai and Olfson (2006)
Colombia	ENSM	Self Reporting Questionnaire 20-item (SRQ-20)	Binary	1/13 items	van der Westhuizen et al. (2016)
Peru	ENDES	Patient Health Questionnaire 9-item (PHQ-9)	Binary	2/9 items	Villarreal-Zegarra et al. (2019)
Paraguay	ELPS	Center for Epidemiologic Studies Depression Scale 8-item (CESD-8)	Binary	3/8 items	Karim et al. (2015)
Scales for elderly (>=50 years old)					
Brazil	ELSI	Center for Epidemiologic Studies Depression Scale 8-item (CESD-8)	Binary	3/8 items	Wang et al. (2017)
Costa Rica	CRELES	Geriatric Depression Scale 15-item (GDS15)	Binary	7/15 items	Park and Kwak (2021)

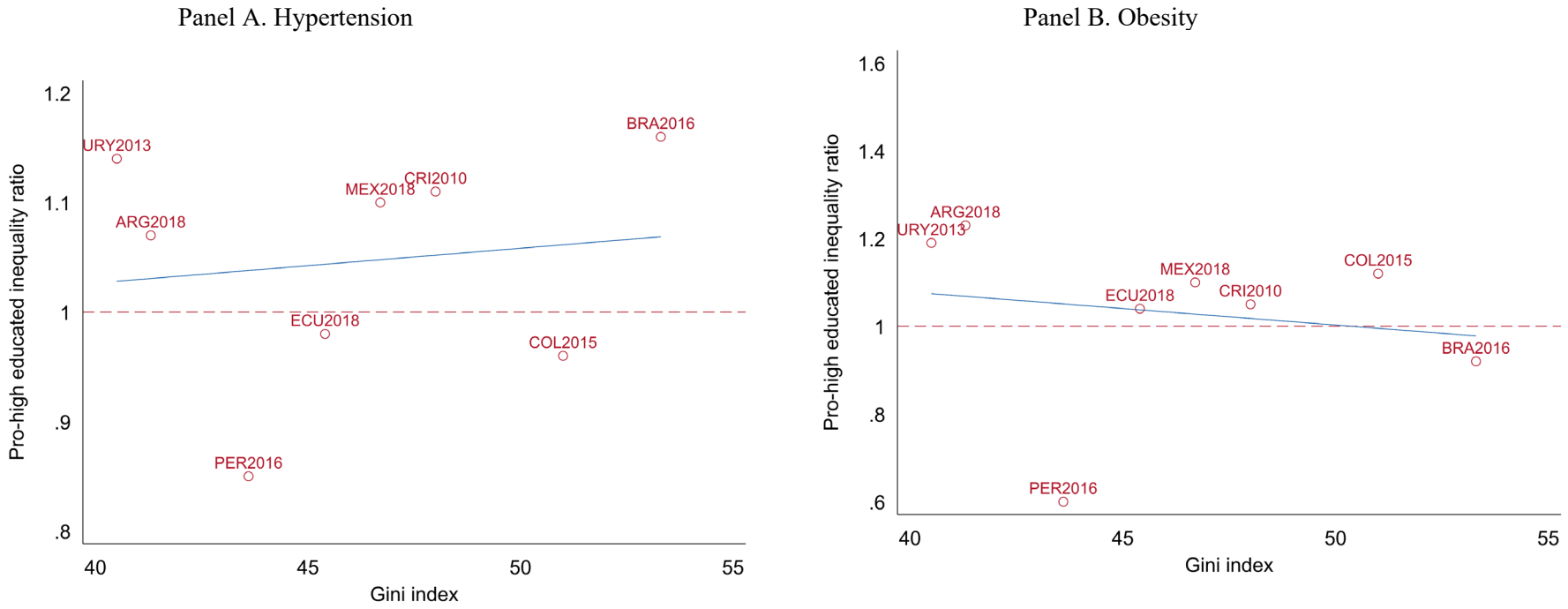
Note. The table lists the name of the survey, the questionnaire used to calculate depression symptom prevalence, the response format (e.g. what answers the respondent could have given in response to each question) the cut-off score used to determine the risk of depressive symptoms, the reference from the literature that was used to validate the cut-off.

Figure C1: Inequalities in child health vs. Gini



Note. Pro-high educated inequality ratio from Tables 4 (Panel A) and 5 (Panel B), Column (3).

Figure C2: Inequalities in adult health (standardized at age 60) vs. Gini

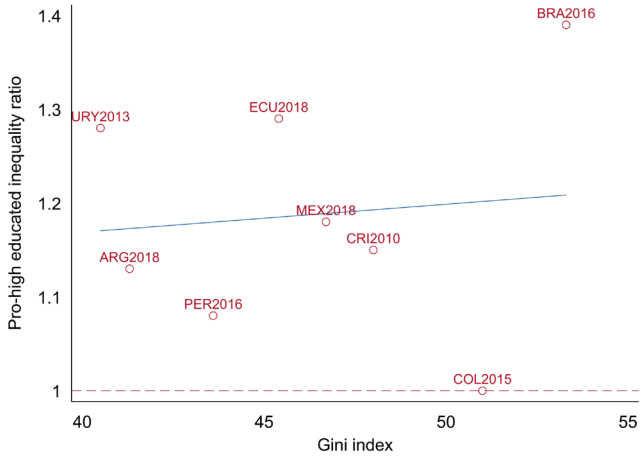


Note. Pro-high educated inequality ratio from Tables 11 (Panel A) and 10 (Panel B), Column (3).

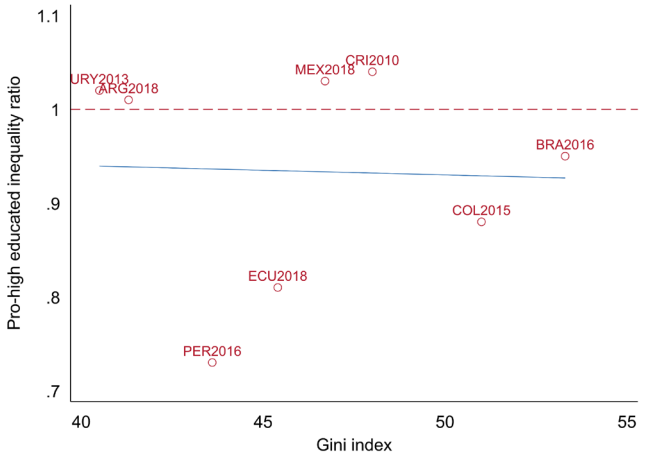
Figure C3: Inequalities in adult health (standardized at age 60) vs. Gini, by gender

A. Hypertension

A. Women

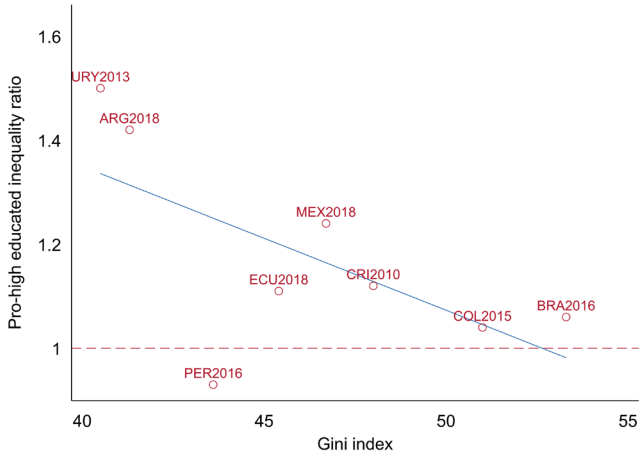


B. Men

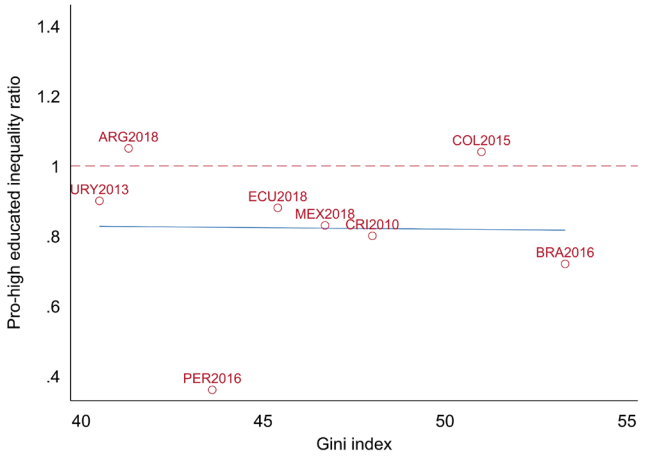


B. Obesity

C. Women



D. Men



Note. Same Notes as Figure C2. Inequality ratios split by gender.

Table A4: Ranking of DALYS by cause for LAC, 2019

	Argentina	Bahamas	Barbados	Belize	Bolivia	Brazil	Chile	Colombia	Costa Rica	Cuba	Dom Rep	Ecuador	El Salvador	Guatemala	Guyana	Haiti	Honduras	Jamaica	Mexico	Nicaragua	Panama	Paraguay	Peru	Suriname	TandT	Uruguay	Venezuela
NCDs																										
Cardiovascular diseases	2	1	2	1	3	1	2	1	2	1	1	1	3	4	1	1	1	1								
Chronic respiratory diseases	10	16	14	15	13	14	10	13	12	10	15	15	15	17	16	15	12	12	14	14	16	13	15	14	8	14
Diabetes and kidney diseases	6	3	3	2	6	7	6	6	4	4	6	3	2	1	2	9	6	3	1	1	4	9	2	2	9	4
Digestive diseases	11	12	8	14	9	10	9	12	8	9	10	10	8	7	9	12	4	13	6	7	12	10	9	9	11	12
Enteric infections	19	19	19	19	18	19	18	19	18	18	17	18	18	13	18	8	13	19	19	18	19	17	18	19	19	18
Mental disorders	5	8	6	6	7	3	4	7	5	5	5	5	6	10	8	11	9	5	8	5	3	4	6	6	5	7
Musculoskeletal disorders	3	6	4	9	10	4	3	4	3	3	8	6	5	11	11	17	8	6	4	6	5	5	7	5	3	5
Neoplasms	1	2	1	3	2	2	1	2	1	2	3	2	4	5	3	7	2	2	3	3	2	1	3	3	1	2
Neurological disorders	9	11	7	11	11	9	7	8	7	8	12	11	9	12	14	16	11	8	9	9	7	11	11	8	7	10
Other non-communicable diseases	4	4	5	5	5	5	5	5	6	6	4	4	7	9	6	3	7	4	5	4	6	2	5	4	4	6
Skin and subcutaneous diseases	15	15	12	16	16	16	13	15	15	14	16	14	17	18	19	19	16	14	15	17	15	14	16	16	14	16
Substance use disorders	16	17	17	18	19	15	14	16	16	15	20	17	11	15	20	21	17	18	16	15	17	18	19	18	16	19
CDs																										
HIV/AIDS and sexually transmitted infections	17	9	16	13	17	18	17	17	17	19	14	16	16	19	13	6	21	11	18	16	14	15	13	13	17	17
Maternal and neonatal disorders	13	13	10	7	1	8	16	9	13	16	2	8	14	8	5	2	5	7	11	8	10	6	4	10	15	8
Neglected tropical diseases and malaria	21	21	21	21	21	20	21	20	21	21	21	21	21	21	17	20	19	21	20	21	21	21	21	21	21	15
Nutritional deficiencies	18	18	18	17	14	17	19	18	19	17	18	19	19	16	15	14	18	17	17	19	18	19	17	17	18	20
Other infectious diseases	20	20	20	20	20	21	20	21	20	20	19	20	20	20	21	13	20	20	21	20	20	20	20	20	20	21
Respiratory infections and tuberculosis	7	14	11	12	4	13	15	14	14	11	13	13	12	3	10	4	14	15	13	12	13	7	14	15	13	13
Injuries																										
Self-harm and interpersonal violence	12	7	13	4	15	6	11	3	10	12	9	12	1	2	4	10	3	9	7	10	11	16	8	7	10	3
Transport injuries	14	10	15	10	12	12	12	10	9	13	7	7	10	14	12	18	15	16	12	13	8	12	12	12	12	9
Unintentional injuries	8	5	9	8	8	11	8	11	11	7	11	9	13	6	7	5	10	10	10	11	9	8	10	11	6	11

Note. Calculations based on IHM-GHDx. Samples includes individuals of any gender and age.