

UNDP LAC C19 PDS Nº. 19 Challenges posed by the COVID-19 pandemic in the health of women, children, and adolescents in Latin America and the Caribbean

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Abstract

The COVID-19 pandemic has unexpectedly transformed the access and the organization of health services for an indeterminate time, circumventing the efforts made in recent years to improve women, children, and adolescent health indicators in Latin America and the Caribbean. In most countries, the segmentation of health services, the concentration of human resources and medical technology in some urban hospitals, the under-financing of primary health care and epidemiological surveillance, and the lack of coordination between the different levels of care weaken the coordination of national response actions. Maintaining essential health services for women, children, and adolescents while mitigating the pandemic's impact represents an unprecedented challenge. This report presents estimates of the effects of the reduction of health services coverage on achieving or maintaining the 2030 Agenda for Sustainable Development's Goal 3 targets – reducing maternal, neonatal, and under-5 mortality and guaranteeing universal access to sexual and reproductive health services. The pandemic and its response make it challenging to reach or sustain these targets, even though the region was well on track to achieve them. Urgent priorities oriented towards achieving women, children, and adolescent health equity during and after the pandemic require to 1) increase public spending on health and social policies to control the pandemic and to favor social and economic reactivation and reconstruction, 2) restore and rebuild essential health services, and 3) strengthen the primary health care strategy.





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This document was commissioned jointly with UNICEF to contribute to the public policy debate in the region, with a particular emphasis on the protection of the rights of children and adolescents.



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Introduction to the series: Evidence, Experience, and Pertinence in Search for Effective Policy Alternatives

The COVID-19 pandemic is one of the most serious challenges the world has faced in recent times. The total cost in terms of human lives is yet to unfold. Alongside the cost of lives and deep health crisis, the world is witnessing an economic downfold that will severely impact the wellbeing of large parts of the population in the years to come. Some of the measures that are currently being used to counteract the pandemic may impact our future lives in non-trivial ways. Understanding the association between different elements of the problem to broaden the policy space, with full awareness of the economic and social effects that they may bring, is the purpose of this series.

Thus far, the impossibility of targeted isolation of infected individuals and groups has led to policies of social distancing that impose a disproportionately high economic and social cost around the world. The combination of policies such as social distancing, lockdowns, and quarantines, imply a slowdown or even a complete stop in production and consumption activities for an uncertain period of time, crashing markets and potentially leading to the closure of businesses, sending millions of workers home. Labor, a key factor of production, has been quarantined in most sectors in the economy, borders have been closed and global value chains have been disrupted. Most estimates show a contraction of the level of output globally. For the Latin America and Caribbean region, the consensus forecasts are at -3 to -4%, and it is not until 2022 that the region is expected to go back to its pre-crisis output levels in scenarios that foresee a U-shaped crisis pattern. According to ECLAC, more than 30 million people could fall into poverty in the absence of active policies to protect or substitute income flows to vulnerable groups.

We face a crisis that requires unconventional responses. We are concerned about the level-effect: the impact of the crisis on the size of the economies and their capacity to recover growth after the shock. But we are equally concerned about the distributional impact of the shock. The crisis interacts with pre-existing heterogeneity in asset holdings, incomegeneration capacity, labor conditions, access to public services, and many other aspects that make some individuals and households particularly vulnerable to an economic freeze of this kind. People in the informal markets, small and micro entrepreneurs, women in precarious employment conditions, historically excluded groups, such as indigenous and afro-descendants, must be at the center of the policy response.

UNDP, as the development agency of the United Nations, has a long tradition of accompanying policymaking in its design, implementation, monitoring and evaluation. It has a mandate to respond to changing circumstances, deploying its assets to support our member states in their pursuit of integrated solutions to complex problems. This series aims at drawing from UNDPs own experience and knowledge globally and from the expertise and capacity of our partner think tanks and academic institutions in Latin America and the Caribbean. It is an attempt to promote a collective reflection on the response to the COVID-19 health crisis and its economic and social effects on our societies. Timeliness is a must. Solutions that rely on evidence, experience, and reasoned policy intuition -coming from our rich history of policy engagement- are essential to guide this effort. This series also contributes to the integrated approach established by the UN reform and aspires to become an important input into the coherent response of the United Nations development system at the global, regional, and national levels.

Ben Bernanke, former Governor of the US Federal Reserve, reminds us in his book *The Courage to Act* that during crises, people are distinguished by those who act and those who fear to act. We hope this policy documents series will contribute to the public debate by providing timely and technically solid proposals to support the many who are taking decisive actions to protect the most vulnerable in our region.

Luis F. Lopez-Calva

United Nations Development Programme Regional Director, Latin America and the Caribbean New York, March 2020





The need to prioritize health care for women, children, and adolescents during the COVID-19 pandemic

Following the World Health Organization (WHO)'s declaration on March 11, 2020 that the COVID-19 disease was a pandemic (and the first caused by a coronavirus), the authorities of several Latin American and Caribbean countries decreed a state of alarm to reduce the transmission of the virus. This situation, predicted by some epidemiological projections, but for which there were no contingency plans, has great repercussions on the survival of the populations most underserved, particularly in urban slums and rural areas of a region characterized by social inequality and health inequities (1, 2). As of September 1, 2020, more than 7.8 million people in Latin America and the Caribbean have been diagnosed with COVID-19 (3) and around 300,000 have died, 40% of them in Brazil (3, 4). As of that same date, the estimated proportion of people who have lost their lives to COVID-19 per 100,000 inhabitants in the region is highest in Peru (117), Ecuador (102), Chile (59), Brazil (58), Mexico (51), Panama (47), Bolivia (44), Colombia (39), Argentina (20), Honduras (19), Guatemala (16), and the Dominican Republic (17) (4, 5).

In addition to the thousands of deaths from COVID-19 and the suffering caused in the region, comparing the deaths reported from any cause with those expected in the same period in previous years can more accurately indicate the impact of the pandemic on mortality (6). For some weeks, excess deaths have been estimated at 185% in Peru, 219% in Mexico, and 242% in Ecuador (7). These excess deaths are due both to COVID-19 and indirect causes produced by the decrease in the provision of health services and the decrease in the use of these services. It is estimated that the indirect effect of the pandemic on services and on the health of women, children, and adolescents is extremely high (8, 9), even greater than that of direct deaths from COVID-19 (10).

On the one hand, the increase in the number of people with symptoms seeking care collapses health facilities, particularly if they require critical care. Intensive care beds have been insufficient in countries such as Bolivia, Brazil, Chile, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, or Peru (4). In some countries, hospitals have been designated to exclusively care for people with COVID-19, the provision of prevention and health promotion services and clinical care (including essential services) have been interrupted, and a portion of the health personnel has been relocated to the most overloaded hospitals, which has depleted other facilities of personnel and supplies (11). On the other hand, confinement measures and curfews, the closure of schools, the limitation of public transport, or the population's fear of acquiring COVID-19 in health facilities hinder or postpone the search for care, even for health emergencies or for chronic conditions that require periodic care (12, 13).

Overcrowding for long periods of time in homes in areas neglected by public services, in addition to increasing the risk of exposure to the virus, leads to an increase in domestic violence against children, adolescents, and women (11, 14-17), pregnancies resulting from rape – which by definition are unintended – and other causes of toxic stress (9). In these same underserved areas, the economic poverty that characterizes them increases due to the decrease in job opportunities and the consequent difficulty in buying food as well as the suspension of school feeding programs (12), which can cause an increase in malnutrition. These situations affect indigenous (18, 19) and Afrodescendant populations to a greater extent due to their many deprivations and to the racism, discrimination, and violence they receive both in the community and in health care facilities (20).

This confluence of complex situations limits coverage, accessibility, and health care for women, children, and adolescents and leads to an increase in morbidity and mortality from various causes and not just from COVID-19. In addition to contributing to increasing poverty for a large portion of the population and social inequality in Latin America and the Caribbean, the pandemic's impact is reversing achievements made in the last two decades, reflected by social and health indicators (1).





Challenges for health systems and for access to health care for women, children, and adolescents

In Latin America and the Caribbean, governments have allocated resources to strengthen the capacity of the health sector to face the pandemic (21), but the response is insufficient in a large portion of the region's countries due to the pre-existing weaknesses of health systems (22). In most countries, segmentation between public services, social security services, and private medicine, the concentration of human resources and medical technology in some urban hospitals (23), the underfinancing of primary health care (PHC) and epidemiological surveillance, and the lack of articulation between the different levels of care weaken the coordinated actions of the national response (1). It is a pressing challenge.

Maintaining essential health services for the care of women, children, and adolescents while mitigating the impact of the pandemic represents an unprecedented challenge – or "two great challenges in parallel" (24) – particularly in the countries where health care coverage is not universal. The pre-pandemic situation is reflected in the reproductive, maternal, neonatal, and child health coverage index (RMNCH) developed by the WHO and collaborators (25, 26). It consists of the weighted average of eight indicators intrinsic to PHC: women between the ages of 15 and 49 with demand for contraception satisfied with modern methods; four or more prenatal care visits; skilled assistance during delivery; children 12 to 23 months who have received the tuberculosis vaccine (BCG); three or more doses of the diphtheria, tetanus, and pertussis vaccine (DPT3); and the measles vaccine; children under 5 years of age with diarrhea who received oral rehydration salts; and children under 5 years of age with symptoms of pneumonia treated by a health professional (27).

The association between the RMNCH index and health outcomes is evident in Latin America and the Caribbean. The higher the RMNCH coverage index, the lower the maternal mortality ratio (maternal deaths per 100,000 live births) (see **Figure 1**) and the under-five mortality rate (per 1,000 live births) (see **Figure 2**). The correlation coefficient that measures the linear relationship between the RMNCH index and maternal mortality ($R^2 = 0.6741$) and between the RMNCH index and the under-five mortality ($R^2 = 0.7023$) indicates that around 70% of the variance between countries in the maternal mortality ratio and in the under-five mortality rate is explained by the RMNCH coverage index. It would be expected that the countries that are in the quadrants closest to the lower right corner are the ones that can best cope with the pandemic's consequences on the health of women, children, and adolescents—both by having better coverage of RMNCH services and by having a lower maternal and under-five mortality.







Figure 1. Decrease in the maternal mortality ratio with the increase in the RMNCH coverage index

Source: Prepared by the author based on State of the World's Children 2019 (New York: UNICEF, 2019) (28) and Primary health care on the road to universal health coverage: 2019 monitoring report (WHO: Geneva, 2019) (27).

Figure 2. Decrease in the under-five mortality rate with the increase in the RMNCH coverage index



Source: Prepared by the author based on State of the World's Children 2019 (New York: UNICEF, 2019) (28) and Primary health care on the road to universal health coverage: 2019 monitoring report (WHO: Geneva, 2019) (27).





The priority that each country sets on its public health systems, indicated by public spending, explains another part of each country's preparedness and contingency planning to face the pandemic. In 2014, the Directing Council of the Pan American Health Organization (PAHO) set a goal of 6% of gross domestic product (GDP) for public spending on health, and PAHO suggests that 30% of this budget be allocated to primary health care (29). Of the seven countries with the highest RMNCH index (Cuba, Uruguay, Chile, Saint Vincent and the Grenadines, Argentina, Barbados, and Costa Rica), five dedicate the highest percentage of GDP to public spending on health: Cuba (10.9%), Uruguay (6.5%), Costa Rica (5.6%), Argentina (5.6%), and Chile (5.0%); the other countries in the region spend less than 5.0%, with the exception of Nicaragua (5.4%) (30).

In Latin America and the Caribbean, there is great variability between countries both in the response of health systems at the beginning of the pandemic and in the decrease in the demand for health services due to confinement measures, limitation in transportation, or fear of infection. Beginning in March 2020, UNICEF conducted a monthly survey with experts from its offices around the world to obtain information on the maintenance of health services and nutrition programs that have the greatest impact on child and maternal health (12). In the region, 23 countries reported information, presented in the Annex. This same Annex shows information from the Economic Commission for Latin America and the Caribbean (ECLAC) and the Food and Agriculture Organization of the United Nations (FAO) on the maintenance of school feeding programs, in-kind food vouchers, and cash transfers (31); information from PAHO on the maintenance of vaccination services (32); and results of a survey conducted by the author between April and May 2020 with key informants from different countries (13).

Each country's decisions to maintain or suspend the services that are reflected in the Annex were taken mainly as contingency plans at the time of the declaration of the pandemic, regardless of the number of COVID-19 cases diagnosed at that time:

- The countries that have maintained access to all health services are Cuba, Costa Rica, and Uruguay. These three countries
 have a public health system characterized by a high level of coordination and based on a PHC that is equitable, with high
 resolution capacity, and articulated with the hospital network (33, 34); modeling and epidemiological surveillance are
 another characteristic of the response in Cuba (35).
- The least affected services are emergency obstetric care (to attend childbirths, abortions, and other complications). They
 have been maintained in Anguilla, Antigua and Barbuda, Barbados, Belize, Brazil, British Virgin Islands, Dominica, Grenada,
 Guyana, Dominican Republic, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Venezuela, while
 in Bolivia and Ecuador they have decreased by less than 10%.
- Antenatal check-ups, obstetric care, postnatal care, essential newborn care, immunization, wellness checks for children, clinical care for gender-based violence victims, sexual and reproductive health (including contraception), treatment for infectious and chronic diseases, and nutrition programs have been suspended or limited to a greater or lesser extent in most countries. For example, vaccination programs have been partially suspended in Argentina, Bolivia, Brazil, the Dominican Republic, Ecuador, Haiti, Honduras, Paraguay, Peru, and Saint Lucia, while they have been maintained, in addition to Cuba, Costa Rica, and Uruguay, in the Bahamas, Barbados, Belize, Colombia, Dominica, Grenada, Guatemala, the British Virgin Islands, Mexico, Nicaragua, Panama, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, and Venezuela.
- Several of the programs to combat hunger, such as cash transfers, in-kind food vouchers, and school feeding programs have been expanded and even new measures have been introduced in Argentina, Brazil, Chile, Colombia, Costa Rica, El Salvador, Ecuador, Haiti, Honduras, Jamaica, Panama, Paraguay, and Venezuela (31).

In addition to the response capacity and the equity of health systems and other public policies, the variability of the crisis caused by the pandemic depends on the social determination and the social determinants of health that characterize each country, such as the health and nutrition status of the population, their demographic and socioeconomic composition, as





well as their degree of access or exclusion to services (2, 20). The evidence from the influenza pandemics of 1918 and 2009 and that of COVID-19 shows the contribution of the social determination and the social determinants in the incidence of cases and in mortality, which is higher in population groups with lower socioeconomic position – among whom there is a concentration of non-communicable chronic diseases (such as hypertension, diabetes, and obesity) (36) – and in disempowered and underserved ethnic population groups (37, 38). This situation contributes to the increase in health inequity, in a region that before the pandemic was already characterized by great inequities in women, children, and adolescent's health (39).

The pandemic and Goal 3 of the 2030 Agenda 2030 for Sustainable Development

"Ensure healthy lives and promote well-being for all at all ages" is Goal 3 of the 2030 Agenda for Sustainable Development (40). Among its goals, it includes: "By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births" (Target 3.1); "By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births" (Target 3.2); and "By 2030, ensure universal access to sexual and reproductive health care services, including for family planning, information and education, and the integration of reproductive health in national strategies and programmes" (Target 3.7). The pandemic and its response are making hindering the achievement or the maintenance of these targets, even though the region was well on track to achieve them (23, 41).

In Latin America and the Caribbean, Goal 3 affects millions of people. The United Nations projects 10.5 million newborns per year, with 16% being born from adolescent mothers (5) (see **Table 1**). Taking into account that 46% of pregnancies in the region end in abortion (42), the total annual pregnancies would be 19.5 million. By age group, there are 51.7 million boys and girls under 5 years old, 52.2 million between 5 and 9 years old, 52.4 million between 10 and 14 years old, and 53.5 million between 15 and 19 years old (5).

	Population 0-4 years	Population 5-9 years	Population 10-14 years	Population 15-19 years	Births per year	Births among adolescents
Latin America and the Caribbean	51,689,827	52,197,418	52,365,020	53,546,187	10,549,227	16.0%
South America	32,233,520	32,490,325	32,794,212	33,944,268	6,569,234	16.3%
Argentina	3,736,651	3,709,817	3,597,262	3,539,449	755,237	14.4%
Bolivia	1,185,499	1,179,088	1,161,012	1,136,684	246,637	14.4%
Brazil	14,475,093	14,601,817	14,942,442	16,218,004	2,934,460	16.6%
Chile	1,162,223	1,265,856	1,249,637	1,244,242	231,145	11.3%
Colombia	3,710,699	3,703,456	3,873,485	4,246,391	739,473	18.8%
Ecuador	1,667,087	1,610,643	1,555,045	1,560,940	336,114	17.9%
French Guiana	35,621	30,500	28,955	28,598	7,154	10.9%
Guyana	73,864	73,764	70,499	74,852	15,592	18.6%
Paraguay	701,092	682,819	676,926	659,352	143,157	16.2%
Peru	2,833,265	2,612,135	2,696,055	2,438,549	574,091	12.9%
Suriname	52,186	52,645	51,594	50,637	10,694	14.0%
Uruguay	236,656	236,414	233,314	245,615	47,931	15.1%
Venezuela	2,363.409	2.731.190	2.657.796	2.500.772	527.519	20.6%
Mexico and Central America	16.051.060	16.193.104	16.068.389	16.147.597	3.263.318	15.5%
Belize	39.446	38.660	37.997	39.853	7.922	16.9%

Table 1: Projection of the population size of children and adolescents, the number of annual births, and the concentration of births among adolescents, Latin America and the Caribbean, 2020





Costa Rica	348.002	357.596	355,406	363,431	70,147	14.2%
El Salvador	576,216	570,607	577,896	587,927	117,747	18.5%
Guatemala	2,065,382	1,982,085	1,926,021	1,945,584	423,040	15.5%
Honduras	1,017,017	988,975	1,023,648	1,040,990	207,332	17.8%
Mexico	10,958,742	11,210,511	11,140,870	11,209,593	2,224,071	14.9%
Nicaragua	656,942	660,204	637,140	603,021	134,045	18.6%
Panama	389,313	384,466	369,411	357,198	79,013	17.8%
Caribbean	3,405,247	3,513,989	3,502,419	3,454,322	716,675	14.5%
Antigua and Barbuda	7,355	7,228	6,814	7,053	1,480	10.5%
Aruba	6,080	5,677	6,800	7,210	1,230	6.7%
Bahamas	27,064	26,590	31,293	32,502	5,386	9.1%
Barbados	15,120	15,498	17,547	18,965	3,062	10.1%
Cuba	571,283	628,093	603,903	642,829	115,717	14.7%
Curaçao	8,996	10,335	10,497	11,077	1,755	8.4%
Grenada	9,012	9,119	8,623	7,514	1,843	6.4%
Guadeloupe	22,897	22,097	28,714	29,799	4,691	4.8%
Haiti	1,262,943	1,237,836	1,202,069	1,144,460	271,066	10.7%
US Virgin Islands	5,970	6,898	7,242	6,776	1,232	7.8%
Jamaica	30,823	233,966	226,882	239,718	47,487	13.9%
Martinique	18,353	17,600	22,799	24,323	3,734	3.4%
Puerto Rico	84,291	156,033	210,323	184,343	23,026	12.6%
Dominican Republic	1,002,829	996,519	977,245	958,630	207,971	21.5%
Saint Lucia	10,826	10,986	11,152	13,183	2,196	13.4%
Saint Vincent and the Grenadines	7,706	8,241	8,355	9,073	1,578	14.1%
Trinidad and Tobago	88,366	96,085	96,320	89,490	18,148	7.2%

Source: World Population Prospects 2019 (New York: United Nations, 2019) (5).

Note: The number of births is equivalent to the number of pregnancies carried to term, but not to the total number of pregnancies.

Two estimates made at the beginning of the pandemic have found alarming results. The first, conducted with data from all low- and middle-income countries in the world, including 34 countries and territories in Latin America and the Caribbean, estimated that a 10% reduction in essential maternal and child health services as a consequence of the pandemic could cause 28,000 maternal deaths and 168,000 neonatal deaths additional per year (9). The second study is conducted with data from 118 countries, including 23 from Latin America and the Caribbean, and the Lives Saved Tool (LiST) (8). The study estimated that a sustained reduction over six months of between 9.8% and 18.5% in the coverage of maternal and child health services and an increase in acute malnutrition of 10% as a consequence of the pandemic could cause 12,200 maternal deaths and 253,500 deaths in children under 5 years in the world in addition to those estimated before the pandemic (8). These figures could rise to 56,700 and 1,157,000 additional deaths, respectively, if during those six months there is a decrease in coverage of between 39.3% and 51.9% and an increase in acute malnutrition of 50% (8). These data more than justify the need to strengthen maternal and child health services instead of suspending or limiting them.

The LiST methodology assumes two major factors that affect the coverage of services: the provision of health services (determined by the availability of human resources in health and by the availability of supplies and medical equipment) and the utilization of health services (determined by the demand for services and by access to services), in addition to considering access to food (8). The data disaggregated by country from the LiST study (43) include the projection of maternal and under-five mortality and the use of services under three scenarios: reduction of the coverage of maternal and child care by 5%, 10%, and 25%, due to a decrease in both the provision and the demand for services.





Comparing these projections with the 2019 data on maternal and child health from UNICEF (28) allows to estimate the impact of the pandemic on the fulfillment of some of the Goal 3 targets in 23 countries in Latin America and the Caribbean. Although the data are not disaggregated by socioeconomic position or ethnic group, we should expect that the effect of the reduction in coverage will be greater among the most underserved populations. The analysis may be updated when homogeneous data are obtained for the entire region, which is ongoing within the framework of the ISLAC Project (44).

Target 3.1: Reduce maternal mortality to less than 70 deaths per 100,000 live births

In the 23 countries of Latin America and the Caribbean included in the LiST study, the excess maternal deaths during a year as a result of the response to the pandemic would be 1,210 with a 5% reduction in coverage, 2,430 with a 15% reduction, and 7,981 with a 25% reduction (43). **Figure 3** shows the estimate of the number of excess maternal deaths in one year for each range of reduction of coverage by country.

Figure 3: Estimate of the number of excess deaths due to maternal causes for each range of reduction of coverage (5%, 10% or 25%) during one year due to the effect of the response to the pandemic in selected countries in Latin America and the Caribbean.



Source: LiST Data Dashboard 2020 (43).





For example, if before the pandemic 1,700 women died per year in Brazil due to maternal causes, a reduction of 5% of coverage would increase that figure to 2,015 a year, a reduction of 10% would increase it to 2,677 deaths, and a reduction of 25% would increase it to 5,021 deaths. To these maternal deaths caused by the reduction in services we should add those that may result from the risk caused by COVID-19 during pregnancy, as it is beginning to be found in Brazil (45).

To contextualize these figures based on the number of births, **Figure 4** shows the estimated increase in the annual maternal mortality ratio with the reduction of services. According to these estimates, of the 10 countries that have already met Target 3.1 (Costa Rica, Mexico, Cuba, Belize, Argentina, El Salvador, Panama, Brazil, Ecuador, and Honduras), Honduras would stop meeting it with a 5% reduction in services, El Salvador, Panama, Brazil, and Ecuador, as well as Honduras, would no longer meet it with a 10% reduction, and only Costa Rica would continue to meet the target with a 25% reduction. In the case of Cuba, where services have been maintained, there would be no such impact. The 13 countries that had not met the target before the pandemic (Jamaica, Colombia, Peru, Guatemala, the Dominican Republic, Nicaragua, Suriname, Paraguay, Venezuela, Saint Lucia, Bolivia, Guyana, and Haiti) would have an alarming increase that would distance them from the achievements made in the last 10 or 20 years (46).

Figure 4: Estimate of the annual increase in the maternal mortality ratio (deaths per 100,000 live births) if the reduction in coverage due to the response to the pandemic is 5%, 10% or 25% during a year in selected countries in Latin America and the Caribbean



Source: Prepared by the author based on LiST Data Dashboard 2020 (43), State of the World's Children 2019 (New York: UNICEF, 2019) (28), and World Population Prospects 2019 (New York: United Nations, 2019) (5).





Target 3.2: Reduce neonatal mortality to less tan 12 per 1,000 live births and under-5 mortality to less than 25 per 1,000 live births

The neonatal mortality rate is associated with maternal mortality (39). In Latin America and the Caribbean, for every maternal death there are, on average, 12.2 neonatal deaths (28). In the region, complications related to preterm birth are the leading cause of neonatal deaths, followed by congenital anomalies, complications during delivery, and septicemia (39). For this reason, prenatal care for pregnant women and skilled birth attendance are essential interventions to reduce neonatal deaths (39). Promoting and supporting breastfeeding also helps to reduce child morbidity and mortality. It is worrisome that, during the pandemic, violations of the International Code of Marketing of Breastmilk Substitutes have been reported in Argentina, Belize, El Salvador, Ecuador, Guatemala, and Mexico (see Annex) —an inappropriate practice that runs counter to the improvement of infant nutrition. Situations of confusion have also arisen in health facilities where, due to unawareness of the WHO recommendations on the importance of continuing to promote and support breastfeeding during the pandemic, medical personnel have promoted, without clinical reasons, the separation between mother and newborn as well as feeding with substitutes rather than promoting attachment and breastfeeding (47, 48).

In children under 5, approximately 85% of deaths in the region occur before reaching one year of age (39). Living conditions during the first 5 years, such as those associated with acute malnutrition and lack of access to health services to prevent or treat preventable diseases, contribute to increased mortality during childhood (39). Despite the expected increase in acute malnutrition, care seeking may decline, in some cases, by fear of infection, as has been documented in Haiti, where admissions to treat acute malnutrition in children have decreased by 73% since the start of the pandemic, according to UNICEF data (49).

During the pandemic, increased food insecurity can lead to malnutrition in pregnant women, micronutrient deficiencies during pregnancy, intrauterine growth retardation, small for gestational age, acute and chronic malnutrition, and other forms of malnutrition during childhood, which in turn increase the risk of death from infectious diseases (50-52). Malnutrition can also lead to early childhood development delay (53-55), which can lead to impaired language, cognitive and socio-emotional skills, as well as to increased risk of chronic diseases throughout the life course (56, 57).

Other interventions that contribute to reducing the under-5 mortality rate are the expanded programs on immunization (EPIs). In Latin America and the Caribbean, this coverage decreased by 12% between 2010 and 2019, particularly in the diphtheria, tetanus, and pertussis (DPT) vaccine (58). The third dose of DPT has decreased in the region from 88% in 2010 to 81% in 2019, with the most marked decreases in Brazil (from 99% to 73%), Bolivia (from 91% to 75%), Haiti (from 67% to 51%), and Venezuela (from 78% to 64%), while in Suriname it has decreased 17 percentage points, in the Bahamas and Mexico 13 points, and in Honduras 10 points (58). On the other hand, 542,000 children in Brazil and 348,000 in Mexico did not receive any dose of DPT in 2019 (58).

During the pandemic, the population's fear of being exposed to COVID-19 and the difficulties caused by the limitation in public transport and by the confinement and physical distance policies (58) have been reflected in a decrease in the demand for vaccination services in half of the 38 countries in the region that reported information to PAHO in June 2020 (59). On the other hand, at least 18 countries have reported difficulties in obtaining vaccines and supplies such as syringes, mainly due to limitations in international and national transportation and to the closure of borders (59).

In 23 countries that provided information, the decrease in the number of doses administered between the first trimester of 2019 and the first trimester of 2020 is 5.5% for the first dose of DPT, 6.4% for the third dose of DPT, and 4.0% for the first dose of measles, mumps, and rubella (MMR) (59). Immunization campaigns against measles have been postponed in





at least Bolivia, Colombia, Honduras, the Dominican Republic, and Paraguay, and partially suspended in Brazil, Chile, and Mexico (59). Other countries that have partially suspended some EPIs are Argentina, Ecuador, Haiti, Peru, and Saint Lucia (32). In June, outbreaks of vaccine-preventable diseases had been detected in Argentina, Brazil, Guatemala, Haiti, Mexico, and Venezuela (59).

Even a partial suspension of the EPIs during the pandemic can have serious consequences for recovering coverage, particularly in countries where they were already in decline. According to the disaggregated data from the LiST study (43), even with a 5% reduction over a year of maternal and child health services in Latin America and the Caribbean, between 15 and 18 percentage points of health coverage would be lost for the measles vaccine and between 10 and 18 percentage points for polio. In the case of measles, which is highly communicable, lack of vaccination can lead to outbreaks that endanger children, particularly if they are malnourished (60).

One of the two indicators to measure compliance with Target 3.2 is the under-5 mortality rate. In the 23 Latin American and Caribbean countries included in the LiST study, excess deaths in children under 5 years of age would be 17,153 with a 5% reduction in coverage during one year, 33,074 with a 15% reduction, and 105,181 with a 25% reduction (43). **Figure 5** shows the number of additional under-5 deaths per country under the three scenarios of reduction of maternal and child health services coverage during one year of 5%, 10%, and 25%, and the increase in acute malnutrition of 10%, 20%, and 50%, respectively.

Figure 5: Estimate of the number of excess deaths in children under 5 years of age for each range of reduction in coverage (5%, 10% or 25%) during one year due to the effect of the response to the pandemic in selected countries in Latin America and the Caribbean.



Source: LiST Data Dashboard 2020 (43).

Figure 6 shows the increase in the under-5 mortality rate during one year under the same scenarios. Of the 18 countries studied that have already met Target 3.2 (Cuba, Costa Rica, Argentina, Mexico, Belize, Ecuador, El Salvador, Colombia, Peru, Brazil, Jamaica, Panama, Saint Lucia, Honduras, Nicaragua, Suriname, Paraguay, and Venezuela), all but Venezuela could



maintain the target with reductions of up to 5% in coverage, and Paraguay, in addition to Venezuela, would not maintain it with reductions of up to 10%. With reductions of 25%, only Cuba, Costa Rica, Argentina, Belize, Ecuador, and Peru would maintain the target. The five countries that have not met it (Guatemala, Bolivia, the Dominican Republic, Guyana, and Haiti) would have an alarming increase that would distance them from the achievements made in the last 10 or 20 years (46), in addition to causing a large number of preventable deaths.

Figure 6: Estimate of the increase in the under-five mortality rate (deaths per 1,000 live births) if the reduction in coverage due to the response to the pandemic is 5%, 10% or 25% during a year in selected countries in Latin America and the Caribbean



Source: Prepared by the author based on LiST Data Dashboard 2020 (43), State of the World's Children 2019 (New York: UNICEF, 2019) (28), and World Population Prospects 2019 (New York: United Nations, 2019) (5).

Target 3.7: Ensure universal access to sexual and reproductive health care services

Sexual and reproductive health services vary in the content of the services they offer, but at the very least they provide counseling and provision of contraceptive methods. In Latin America and the Caribbean, 79% of women who want to avoid becoming pregnant use modern contraceptive methods, yet the region has the highest unintended pregnancy rate in the world, estimated at 69% of all pregnancies (61). Another characteristic of the region is that it has the highest concentration of adolescent pregnancies in the world, with an average of 16% of the total (see **Table 1**) (5). Although adolescent pregnancy is a complex social phenomenon that results from many factors, one of them is the lack of information or access to contraceptive methods (39).

Using the disaggregated data from the LiST study (43), **Figure 7** shows the decrease in the annual prevalence of the use of contraceptive methods with reductions during one year in the care coverage by 5%, 10% and 25%. With a 5% reduction in coverage, the prevalence of contraceptive use would decrease by between 4 and 8 percentage points, and by between 7 and 16 with a coverage reduction of 10%.



Figure 7: Decrease in the annual prevalence of contraception if the reduction in coverage due to the response to the pandemic is 5%, 10% or 25% in selected countries in Latin America and the Caribbean



Source: Prepared by the author based on Roberton et al. 2020 (62).

Urgent priorities oriented towards women, children, and adolescent health equity during and after the pandemic

1. Increase public spending on health and social policies to control the pandemic and to favor social and economic reactivation and reconstruction

The COVID-19 pandemic undeniably exposes the limitations of Latin American and Caribbean health systems, the strengthening of which cannot continue to wait or depend exclusively on the budgets allocated during the pandemic. The political instability that preceded the outbreak of the pandemic in countries in which the population demanded more redistributive and fair social policies, together with the devastating impact of the pandemic, create the ideal conditions for governments to justify spending 6% of the GDP in health (29) and to fund other social policies, imminently (63, 64) – such as cash transfers (1) and other forms of responses to hunger (31, 49) – despite the economic contraction that results from the pandemic (23, 65). Doing otherwise would not only set back hard-won health and social gains but would exacerbate the current crisis and prevent countries from being prepared for the next pandemic or humanitarian crisis.

In this necessary readjustment of social policies, it is essential to include institutional and democratic mechanisms of public spending transparency and accountability (11). Information campaigns and public policies must be transparent and adapted to different living conditions, and in particular to those of the populations that survive with greater deprivations in both urban and rural areas. To achieve greater adaptation, it is essential to include the participation of people who live in these communities and of community organizations that have a track record and credibility in those areas, since they know better the needs of the population and their ability to accept measures that will require a temporary or medium-term





adaptation to new forms of social organization. Given the advancement of the pandemic, it is essential that populations who live in urban slums and indigenous and Afrodescendant communities take part in the development of public policies that are equitable, that promote transmission prevention, and that facilitate the isolation of symptomatic people and the treatment of those who develop complications without instances of discrimination occurring (2).

It is essential that public policies are established with a gender perspective, since the deprivations and needs of women, particularly if they are in charge of children, the elderly, or people with disabilities, or if they suffer violence by their partners, require a particular prioritization. The transformation of systems of caregiving for school-age children due to the closure of schools translates into a greater burden of responsibility for the people who care for them, who in most Latin American and Caribbean countries tend to be their mothers – many of whom are adolescents. The responsibility of caring for family members can delay seeking care when the person in charge develops symptoms of COVID-19 or other health conditions. For this reason, public policies and community action must be proactive in finding women who feel unable to leave their homes to seek care, as well as older people who live alone, which can be even more difficult in contexts of high citizen insecurity (2).

2. Restore and rebuild essential health services

The response to the pandemic in many countries of the region has led to the suspension or limitation of reproductive, maternal, neonatal, and child health services that need to be restored as soon as possible (66–69) to avoid greater morbidity and mortality.

The mechanisms that are drawn up to care for people with COVID-19 must include transfer plans to health facilities equipped with the sufficient technological density required to attend to serious cases. In rural areas, this will require investments in ambulances or in the provision of alternative modes of transportation that allow the safe transfer of patients to hospitals with intensive care units. It would be counterproductive to expect people living in urban slums and rural areas to find on their own – as has often been expected of them in so many places in the region – their way of getting to a hospital, to be admitted, and to receive the timely and quality care that they need. Here the question arises as to which hospitals should these people be directed: to the closest public or private hospital with available beds or to the one that is preassigned according to their rights or type of insurance? Due to the segmentation of health systems in many Latin American and Caribbean countries, the ministries of health must strengthen their leadership and conduct concerted and comprehensive actions, even if that requires to intervene all health facilities, and access to hospital beds in intensive care units, whether public or private. The lower the current segmentation, the lesser the challenge and the faster the response (2).

These new plans to respond to the pandemic must be leveraged to serve people in the same communities who require health care that cannot be postponed, such as sexual and reproductive health care (including contraception, pregnancy, childbirth, and abortion), newborn care, immunization programs, care for infectious diseases, delivering medications for chronic and mental illnesses, emergency surgeries, care for victims of violence and accidents, programs for the protection and promotion of breastfeeding, and nutrition programs, among other actions.

Table 2 offers a list of resources with recommendations for the continuation and reestablishment of health services for women, children, and adolescents with an equity, gender, and multicultural perspective.

3. Strengthen the primary health care strategy

It is essential to strengthen the PHC strategy – with a family and community approach that is organized to achieve universal health access, so that it can respond to the greatest number of health situations, including emergencies– investing 30% of public spending on health on PHC (29). In addition to helping to improve the coverage of services, a solid and quality PHC





protects the population from catastrophic health expenditures (11). Strong PHC systems can solve, in close proximity to the population, most of their health conditions, as well as develop health promotion and disease prevention measures, in coordination with specialized health services through reference and counter-reference health systems. The reproductive, maternal, neonatal, and child health coverage index (25–27) is closely linked to the strength of PHC and is associated with better maternal, child, and adolescent health indicators. Countries in the region that have had the capacity to respond to the challenges posed by the pandemic, without suspending their health services and nutrition programs and to transform their organization to further facilitate access, offer models for countries that are based on curative systems centered around hospitals that are having difficulties in making their services more flexible and closer to the population.

At the same time that the response to the pandemic is urgently developed, "it is essential, also urgently, to reflect on the structural causes not only of this, but also of other epidemic processes" and other public health priorities (70). Although the measures are designed for the immediate term, the success of these strategies will allow, when we overcome the pandemic, the strengthening of public health systems and the necessary rethinking of priorities oriented towards health equity for the coming decades.

Table 2: International recommendations for the continuation of health services for women, children, and adolescents with a multicultural, equity, and gender perspective

Maternal, child, and adolescent health care during the pandemic:

- Ensuring continuity in the provision of essential sexual, reproductive, maternal, neonatal, child, and adolescent health services for the population in the context of COVID-19 (24).
- Immediate Steps to Safeguard Progress for Every Woman, Child and Adolescent (66).
- Neonatal Care in Times of COVID-19 (71).
- Provision of Sexual and Reproductive Health care and Family Planning during the COVID-19 pandemic health emergency in Latin America and the Caribbean (72).
- Sexual and Reproductive Health and Rights, Maternal and Newborn Health & COVID-19. "It is critical that all women have access to safe birth, the
 continuum of antenatal and postnatal care, including screening tests according to national guidelines and standards, especially in epicenters of the
 pandemic, where access to services for pregnant women, women in labour and delivery, and lactating women is negatively impacted. Keep the
 health system functioning: Maintain sexual and reproductive health and rights (SRHR) information and services, protect health workers and limit
 spread of COVID-19" (73).
- Sexual and Reproductive Health and Rights: Modern Contraceptives and Other Medical Supply Needs, Including for COVID-19 Prevention, Protection and Response. "Provision of modern short- and long-acting contraceptives, information, counselling and services (including emergency contraception) is lifesaving and should be available and accessible during the COVID-19 pandemic response" (74).
- Adolescents and Young People & Coronavirus Disease (COVID-19). "In the context of COVID 19, with the disruption of schools, routine health services
 and community-level centers, new ways of providing information and support to adolescents and young people for sexual and reproductive health
 and rights need to be established. Young people can be an important resource in mitigating risks, and community outreach in this crisis" (75).
- Impact of the COVID-19 Pandemic on Family Planning and Ending Gender-based Violence, Female Genital Mutilation and Child Marriage (76).
- Programmatic guidance for sexual and reproductive health in humanitarian and fragile settings during COVID-19 pandemic (77).
- <u>The Immunization Program in the Context of the COVID-19 Pandemic</u> (78).
- Guiding principles for immunization activities during the COVID-19 pandemic (79).

Response to the pandemic with a multicultural and equity perspective:

- Promoting health equity, gender and ethnic equality, and human rights in COVID 19 responses: Key considerations. "The COVID-19 pandemic affects
 diverse groups of women and men differently. The risks and consequences are disproportionately felt by certain groups, especially those living in
 situations of vulnerability and those who experience discrimination. It is vital that country responses to COVID-19 consider equity, gender, ethnicity,
 and human rights perspectives to: prevent the expansion of inequalities; account for the everyday lived realities of different groups that may affect
 the success of measures" (80).
- Implications of COVID-19 for indigenous people in Latin America and the Caribbean (81).





Response to the pandemic with a gender perspective:

- Gender Equality and Addressing Gender-based Violence (GBV) and Coronavirus Disease (COVID-19) Prevention, Protection and Response. "The
 pandemic will compound existing gender inequalities, and increase risks of gender-based violence. The protection and promotion of the rights of
 women and girls should be prioritized" (82).
- COVID-19: A Gender Lens. Protecting sexual and reproductive health and rights and promoting gender equality. "Disease outbreaks affect women and men differently, and pandemics make existing inequalities for women and girls and discrimination of other marginalized groups such as persons with disabilities and those in extreme poverty, worse. This needs to be considered, given the different impacts surrounding detection and access to treatment for women and men" (83).

Annex

Impact of the response to the pandemic on health systems and on access to care, with information on the percentage of coverage reduction of primary health care and nutrition services, as a consequence of the COVID-19 pandemic in Latin American and Caribbean countries between March and June 2020.

Country or countries
Data from UNICEF from March and May 2020.
Data from UNICEF on the impact on the provision of health and nutrition services (in percentages) from June 2020.
Data from ECLAC and FAO on maintaining social services to combat hunger from April 2020.
Data from PAHO on maintaining immunization programs from May 2020.
Data collected via survey between April and May 2020
Anguilla, Antigua and Barbuda, Barbados, British Virgin Islands, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines
May: Impact on non-urgent dental health services, general medicine, and occupational therapy services. Lack of information. Temporary closure of school feeding programs and of non-urgent health nutrition counseling services
 Percentage of the drop in the coverage of health services (0% indicates no impact): 0% Emergency obstetric care, HIV and TB treatment, support for mental, psychosocial, addiction services, other emergency care, water, sanitation and hygiene services in health care facilities. < 10% Antenatal check-ups, obstetric care, postnatal care, essential newborn care, immunization, clinical care for gender-based violence victims, non-communicable diseases (NCD) treatment services (dialysis, physical therapy), protection and promotion of breastfeeding programs and appropriate complementary feeding, nutrition support for pregnant and lactating women. 10-25% Wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), contraception (sexual and reproductive health services). 75-100% Nutrition programs for school-going children and for adolescent girls and boys.
May: Immunization programs maintained in Barbados, British Virgin Islands, Dominica, Grenada, Saint Kitts and Nevis, Saint Vincent and the Grenadines. May: Immunization programs partially suspended: Saint Lucia.
Argentina
March: Hoarding of medical supplies and fear of saturation of health services. May: Impact on immunization services and preventive visits. Postponement of nutrition services. Difficulty in governing the health system and unifying the response due to its segmentation between public care, social security, and private care. Violation of the International Code of Marketing of Breastmilk Substitutes related to the response to the pandemic.
Percentage of the drop in the coverage of health services (0% indicates no impact): 0% Protection and promotion of breastfeeding programs, vitamin A supplementation. 10-25% Antenatal check-ups, obstetric care, postnatal care, immunization, contraception, TB treatment. 50-75% Wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations).
Maintained: cash transfers. Extended: in-kind food vouchers and school feeding programs.
May: Immunization programs partially suspended.
Bahamas
April: Maintained: in-kind food vouchers and cash transfers.
May: Immunization programs maintained.





Belize

May: Postponement of health fairs and other community activities, which means that health personnel cannot reach isolated communities. Suspension or limitation of public services and immunization programs, but the Ministry of Health has requested parents to take children scheduled for vaccination to health facilities. Lack of sufficient information because it is not publicly available, it is only available through key people in the Ministry of Health. Requirement to wear masks to go to health facilities, but masks are difficult to access. Suspension of deworming services and provision of vitamin A in schools due to the closure of schools. Violation of the International Code of Marketing of Breastmilk Substitutes related to the response to the pandemic.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Obstetric care, emergency obstetric care, essential newborn care, clinical care for gender-based violence victims, HIV treatment, TB treatment, malaria treatment, other emergency care, water, sanitation and hygiene services in health care facilities, home fortification with multiple micronutrient powders.

< 10% NCD treatment services (dialysis, physical therapy).

10-25% Antenatal check-ups y de contraception, protection and promotion of breastfeeding programs.

25-50% Nutrition support for pregnant and lactating women, early detection and treatment of child wasting/severe acute malnutrition. **50-75%** Postnatal care, immunization, wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), support for mental, psychosocial, addiction services, other health-related community services, protection and promotion of appropriate complementary feeding, vitamin A supplementation, deworming prophylaxis, nutrition programs for adolescent girls and boys. **75-100%** Nutrition programs for school-going children.

April: Maintained: in-kind food vouchers and school feeding programs.

May: Immunization programs maintained.

Bolivia

March: Initial stage of the pandemic (March 12).

May: Impact on care in general and on disease prevention programs. Decreased micronutrient and vitamin A supplementation due to priority response to COVID-19. Suspension of classes and consequent suspension of complementary food and breakfasts in schools. Lack of complete information on the situation due to the rural dispersion of the population.

Percentage of the drop in the coverage of health services:

< 10% Emergency obstetric care, clinical care for gender-based violence victims, NCD treatment services (dialysis, physical therapy), other emergency care.

10-25% Antenatal check-ups, obstetric care, postnatal care, early detection and treatment of child wasting/severe acute malnutrition. 25-50% Essential newborn care, immunization, wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), contraception, HIV treatment, TB treatment, malaria treatment, support for mental, psychosocial, addiction services, protection and promotion of breastfeeding programs and appropriate complementary feeding, vitamin A supplementation, deworming prophylaxis, nutrition support for pregnant and lactating women.

50-75% Home fortification with multiple micronutrient powders.

75-100% Nutrition programs for school-going children and for adolescent girls and boys.

May: Immunization programs partially suspended.

Brazil

March: Fear of the collapse of health services due to lack of financing and deterioration in quality in recent years. Circulation of fake news. May: Population fear of seeking care (prenatal, immunization, contraception, sexually transmitted infections, monitoring of child development). Decrease in the number of health professionals due to suspected or diagnosed COVID-19. Saturation of hospitals with confirmed cases of COVID-19. Difficulty for people with other health conditions in accessing hospital care in several cities of the country. Lack of information about the public health system given the high decentralization of the Unified Health System (SUS) and the priority of the Ministry of Health, states, and municipalities in responding to COVID-19 cases. School closings. Loss of income for self-employed or informally employed people. Suspension of the MMP Program due to lack of national production.

Percentage of the drop in the coverage of health services (0% indicates no impact): **0%** Emergency obstetric care, HIV treatment, TB treatment, malaria treatment, NCD treatment services (dialysis, physical therapy), water, sanitation and hygiene services in health care facilities.

April: Maintained: cash transfers.

Extended: school feeding programs.

May: Immunization programs partially suspended.

The delay in seeking routine care in health facilities, associated with difficulty in transportation, can affect prenatal consultations and obstetricgynecological emergency care. Lack of counseling and accessing medications can have an impact on the prevention of mother-to-child transmission of HIV and syphilis.

Chile

March: Disruption of children centers. Closing of borders, with the consequent impact on migration from Peru and Bolivia.

April: Maintained: school feeding programs and cash transfers. New measures are introduced: in-kind food vouchers.





Colombia

April: Maintained: school feeding programs and cash transfers. Extended: in-kind food vouchers.

May: Immunization programs maintained.

Costa Rica

March: Initiation of mitigation measures to avoid saturating health services and to provide fiscal relief to the population from utilities and taxes

April: Maintained: school feeding programs and cash transfers. New measures are introduced: in-kind food vouchers.

The response to the pandemic is supported by primary health care, which has been activated so that it continues to function normally. The control of the chains of contact of the transmission of COVID-19 is conducted at the community level. Regional hospitals have been streng-thened with personal protective equipment and the availability of COVID-19 tests. Each person who arrives at a hospital has their temperature taken and their symptoms evaluated; in case of suspicion, they are directed to the emergency room to separate them from other patients. An area of the National Rehabilitation Center, which has respiratory therapy, was designated to care for people with COVID-19. A regulation was created according to which low-risk pregnant women are called by phone to verify that they have taken the tests. If medium risk is detected or has already been diagnosed, the woman has to go to a clinic in the primary care system and, if she is at high risk, to a hospital. To guarantee access to medicines, a public-private cooperation agreement was made according to which rental, postal, and municipal cars are used with available vehicles, and gasoline and drivers are provided to distribute medicines at home and avoid population movement. This distribution system includes drugs for chronic diseases, such as antihypertensives, insulin, and antiretrovirals, as well as contraceptives, but high-risk drugs are excluded. The program is highly valued by the population. There has been no impact on sexual and reproductive health programs for the adolescent population.

Cuba

Development of a plan for the control of COVID-19 coordinated by an inter-sectoral working group of the Ministry of Public Health and the Civil Defense Staff. It consists of: the reinforcement of epidemiological surveillance, particularly at the borders; reorganization of care in all health facilities, with greater decentralization of care to communities to avoid saturation of hospitals, limitation of access to hospitals, and postponement of non-urgent surgeries; training of all health personnel in diagnosis and care; protection measures aimed at the population by promoting the use of homemade masks. Implementation of inter-sectoral measures in schools to inform the population and diagnose respiratory infections early and fiscal relief for the payment of utilities. Maintaining support for child health services in primary care and for children with disabilities who go to school. Activation of all municipal and provincial Defense Councils. Increase in cases of gender violence. **May:** No impact on health care.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Antenatal check-ups, obstetric care, postnatal care, emergency obstetric care, essential newborn care, immunization, wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), contraception, clinical care for gender-based violence victims, HIV treatment, TB treatment, malaria treatment, NCD treatment services (dialysis, physical therapy), support for mental, psychosocial, addiction services, other emergency care, other health-related community services, water, sanitation and hygiene services in health care facilities, protection and promotion of breastfeeding programs and appropriate complementary feeding, vitamin A supplementation, home fortification with multiple micronutrient powders, nutrition programs for school-going children and for adolescent girls and boys, nutrition support for pregnant and lactating women, early detection and treatment of child wasting/severe acute malnutrition.

May: Immunization programs maintained.

There is no collapse of the health system, which relies on the strength of the family medicine model and the comprehensive service network at the first level of care (in clinics and polyclinics). However, the limitation in public transport can impact access to the second level of care (hospitals). Prevention of mother-to-child transmission of HIV and syphilis has not been interrupted by the response to the pandemic. Access to contraceptive methods, for sale in community pharmacies, is not affected by the pandemic.

Dominican Republic

March: Saturation of health services. Lack of personal protective equipment for health personnel. Concern about the possibility of contagion in health facilities for pregnant women and people with HIV, tuberculosis, or other conditions that require attention. Economic slowdown due to the reduction in tourism and remittances from Europe and the United States and due to the impact on small and medium-sized companies, which are the large formal employers of the population. Significant economic impact in poor households headed by women are expected, in particular because they are the caregivers of the sick, disabled, or elderly. Discrimination against people with COVID-19. May: Impact on immunization services, prenatal and postnatal care, pediatric care, essential services for people with HIV, including the distribution of antiretrovirals, counseling, and CD4 and viral load tests. Relocation of around 30% of medical and nursing staff to care for COVID-19 cases. Designation of around 40% of the 170 public hospitals to care for COVID-19 cases, which threatens the continuity of essential services for children and pregnant women. Lack of processing of health services production indicators during the pandemic, meaning that the information is very limited and can only be obtained directly from some key actors in the health system. Impact on chronic malnutrition, which has been stable at 2%. Impact on nutrition services in health facilities and in the community (nutritional counseling, breastfeeding support, growth monitoring, distribution of micronutrients and fortified foods) due to movement restrictions and to the reduction of health personnel who are older, chronically ill, or reassigned to COVID-19 care.





Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Obstetric care, emergency obstetric care, water, sanitation and hygiene services in health care facilities

< 10% Essential newborn care

10-25% Antenatal check-ups, immunization, home fortification with multiple micronutrient powders, nutrition programs for adolescent girls and boys, nutrition support for pregnant and lactating women.

25-50% Postnatal care, contraception, clinical care for gender-based violence victims, other emergency care, other health-related community services, protection and promotion of breastfeeding programs and appropriate complementary feeding. **50-75%** Wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations).

April: Maintained: in-kind food vouchers and cash transfers.

May: Immunization programs partially suspended.

El Salvador

Limitation of community health workers to visit homes, including for immunization. Continuation of immunization services in primary care centers. Lack of access to information on the discontinuation of health services. Shift from school feeding to household feeding. Violation of the International Code of Marketing of Breastmilk Substitutes related to the response to the pandemic.

Percentage of the drop in the coverage of health services:

10-25% Protection and promotion of breastfeeding programs and appropriate complementary feeding.

April: Maintained: cash transfers.

Extended: in-kind food vouchers.

The follow-up of pregnant women and children in health services has been lost, which leads to the lack of continuity of care for pregnant women with HIV, syphilis, or other sexually transmitted infections, to the lack of verification of adherence to treatment, as well as to the lack of monitoring of early childhood development and immunization programs. The limited access to home visits has reduced the scope of community actions.

Ecuador

March: Additional pressure on a health care system weakened by the austerity measures implemented a few months before the pandemic, with a particular impact on health personnel. Fear of the capacity of the health sector to respond to other health conditions and to provide comprehensive care. Suspension of children's and educational centers to avoid infections, but with the consequent burden on women to care for children at home.

May: Impact on immunization services, prenatal and postnatal care, pediatric and nutritional care, protection and promotion of breastfeeding. Lack of public information available from the Ministry of Health. Violation of the International Code of Marketing of Breastmilk Substitutes related to the response to the pandemic.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Water, sanitation and hygiene services in health care facilities.

< 10% Emergency obstetric care, other emergency care.

25-50% Antenatal check-ups, obstetric care, postnatal care, essential newborn care, immunization, wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), other health-related community services, protection and promotion of breastfeeding programs and appropriate complementary feeding, vitamin A supplementation, deworming prophylaxis, nutrition programs for school-going children, nutrition support for pregnant and lactating women.

50-75% Contraception (sexual and reproductive health services).

April: Maintained: cash transfers.

New measures are introduced: in-kind food vouchers.

May: Immunization programs partially suspended.

Guatemala

March: Closing of activities (March 22). Fear of limited institutional capacity. Closing of children centers.

May: Lack of existence of guidelines from the Ministry of Health for health personnel on how to proceed in the face of the pandemic. Impact on all public programs, such as immunizations, prenatal care, HIV and tuberculosis, early childhood development, growth monitoring, early identification of acute malnutrition, counseling on adequate feeding of infants and young children, and communication for behavior change. Violation of the International Code of Marketing of Breastmilk Substitutes related to the response to the pandemic.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Other emergency care.

10-25% Postnatal care, HIV and TB treatment.

25-50% Protection and promotion of breastfeeding programs, vitamin A supplementation, Home fortification with multiple micronutrient powders

50-75% Protection and promotion of appropriate complementary feeding, deworming prophylaxis, nutrition programs for adolescent girls and boys, nutrition support for pregnant and lactating women, early detection and treatment of child wasting/severe acute malnutrition.

April: Maintained: school feeding programs and cash transfers

May: Immunization programs maintained.





Guyana

March: Activation of the National Center for Emergency Operations to provide inter-sectoral support. **May:** Immunization programs partially suspended.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Obstetric care, emergency obstetric care, essential newborn care, clinical care for gender-based violence victims, other emergency care, water, sanitation and hygiene services in health care facilities.

< 10% Antenatal check-ups, postnatal care, immunization, contraception, HIV treatment, NCD treatment services (dialysis, physical therapy), protection and promotion of breastfeeding programs, deworming prophylaxis.

10-25% Wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), protection and promotion of appropriate complementary feeding, home fortification with multiple micronutrient powders, nutrition programs for adolescent girls and boys, nutrition support for pregnant and lactating women, early detection and treatment of child wasting/severe acute malnutrition. 25-50% Nutrition programs for school-going children.

50-75% Other health-related community services.

50-75% Other health-felated community service

Haiti

April: Maintained: cash transfers.

New measures are introduced: in-kind food vouchers.

May: Immunization programs partially suspended.

Honduras

March: Lack of impact on health care. Among first deaths, all had late diagnosis. Discrimination against people with COVID-19. May: Decrease in all health services due to lack of demand for care due to isolation. Impact on community monitoring meetings for children under 2 years of age. Difficulty aggravated by the dengue epidemic that existed pre-pandemic that had a great impact on the population under 15 years of age.

April: Maintained: school feeding programs and cash transfers.

New measures are introduced: in-kind food vouchers.

May: Immunization programs partially suspended.

The health system is collapsed. The population fears going to health centers because of the risk of infection and those who go to the emergency room have difficulty in receiving care due to the overload of health services. Supplies have been prioritized for the response to the pandemic to the detriment of supplies necessary for pre-pandemic care. The health system has little capacity to prevent mother-to-child transmission of HIV and syphilis, and access to HIV and syphilis tests has been difficult. The cost of contraceptive methods is a barrier to access. The established distancing measures and the fear of contracting COVID-19 limit the demand for vaccines by the population and the community activities of the immunization service by health personnel. Despite the fact that the health facilities are open, the immunization services of some facilities are closed because, with the lack of provision of personal protective equipment for the vaccinators, there is a reluctance of the personnel to vaccinate or because it has not been possible to replace the vaccinators over 60 years of age or who do not have private transportation to travel to the facility.

Jamaica

March: Declaration of national disaster by the prime minister (March 13), with the consequent restriction of population movement. Fear of over-saturating an already overwhelmed health system. Confidence of the population in the government due to early political decision-making and strong preparation. Closing of schools, with the consequent overburdening of childcare for women and possible impact on access to employment, food, and medical care. Discrimination against families with members with COVID-19. Fear of the increase in gender violence and other forms of domestic violence due to the restriction of movement.

April: Maintained: cash transfers.

New measures are introduced: in-kind food vouchers.

There is a lack of clarity on the part of the Ministry of Health about the health services most affected and that require strengthening. Prevention of mother-to-child transmission of HIV and syphilis, monitoring of early childhood development, and immunization programs have been made worse by the lack of monitoring of pregnant women and children. Community information and outreach activities are not being conducted.

Mexico

March: No activity. Cases of gender violence associated with confinement are reported.

May: Impact on non-communicable or chronic disease care services and postponement of many surgeries. Lack of official information from the Ministry of Health due to its almost exclusive dedication to attending to the pandemic. Impact on maternal, infant, and young children nutrition counseling. Impact on school nutrition and health programs. Violation of the International Code of Marketing of Breastmilk Substitutes related to the response to the pandemic.

Percentage of the drop in the coverage of health services:

10-25% Nutrition support for pregnant and lactating women.

25-50% Protection and promotion of breastfeeding and of appropriate complementary feeding.

75-100% Nutrition programs for school-going children and for adolescent girls and boys

April: Maintained: school feeding programs and cash transfers.





May: Immunization programs maintained.

The population with greater social exclusion lacks information on the options to access health services. Prenatal control, timely delivery care and access to health services, lack of information about people's health and ensuring that pregnant women diagnosed with HIV, syphilis, or other sexually transmitted infections continue to be in contact with health services are great challenges in a context of structural social inequality.

Nicaragua

March: Preparation of a national contingency plan by the Ministry of Health with the support of the Pan American Health Organization.

May: Immunization programs maintained.

Panama

March: Cancellation of outpatient care and non-urgent surgeries; it includes the cancellation of prenatal care, sexual and reproductive health services, pediatric monitoring, and preventive consultations. Closure of child and educational centers, with the following overload for women to care for children at home. Dispensing of prescriptions for 3 and 6 months to reduce visits to health centers. Supermarkets limited to 50 people. The population demands economic measures. Lack of income and lack of food purchases for people in the informal sector, with a greater impact on women. Distribution of food and vouchers for supermarkets, but without clarity on their quantity and frequency. Fear that domestic violence services will not work. Demand from some population groups requesting the closure of borders to prevent migration to the country; more than 2,500 migrants who arrived from Colombia cannot continue their passage to Costa Rica and, among them, 27% are minors, the majority under 5 years of age. Prohibition of visiting minors' reception centers and juvenile detention centers. **May:** Suspension of nutrition programs for children who go to school due to them being closed.

Percentage of the drop in the coverage of health services:

75-100% Home fortification with multiple micronutrient powders.

April: New measures are introduced: school feeding programs.

May: Immunization programs maintained.

Paraguay

March: Prioritization of emergency services. The control of healthy and at-risk children, prenatal care, and chronic diseases are not interrupted but take a back seat. Fear of increased mortality from preventable causes, especially maternal, neonatal, and cardiovascular mortality. Fear of declining immunization coverage and food security. Provision of food kits and cash transfers to families in vulnerable situations through payments in digital format (Ñangareko Program). Implementation of a call center of the Ministry of Health staffed by ministry officials and last year medical and dental students for self-reports, queries, and complaints. Implementation of home delivery of food, cleaning products, pharmacy, and other products by medium and small companies communicated through social networks. Medical consultations via WhatsApp and/or Facebook to avoid going to health centers and to avoid leaving home. Distribution of packages of school snacks for periods of 10 days. Continuation of the prevention and care protocol for women who are survivors of violence. Report of 2,028 complaints of family violence in the month of March, 200 more cases than in March 2019. Discrimination against people with COVID-19.

May: Decrease in prenatal care services due to restrictions imposed by the government and the population's fear of being infected in health facilities. Lack of diagnostic tests for obstetric pathologies, which results in increased maternal and neonatal morbidity and mortality. Lack of sexual and reproductive health services and contraception, leading to a higher number of unwanted pregnancies and, in particular, adolescent pregnancy. Lack of official national data. Potential impact on the monthly distribution of fortified milk from the Comprehensive Nutritional Food Program for children under 5 years of age at nutritional risk and for underweight pregnant women due to restrictions imposed by the government.

Percentage of the drop in the coverage of health services (0% indicates no impact):

0% Postnatal care, emergency obstetric care, essential newborn care, immunization, HIV and TB treatment, other health-related community services, water, sanitation and hygiene services in health care facilities, protection and promotion of breastfeeding programs and appropriate complementary feeding, nutrition programs for school-going children, nutrition support for pregnant and lactating women.
 10-25% Wellness checks for children and/or adults (growth monitoring, routine visits, vaccinations), contraception (sexual and reproductive health services).

April: Maintained: cash transfers. Extended: in-kind food vouchers.

Peru

March: Cancellation of outpatient care (immunization, prenatal, obstetric, contraception, pediatric, adult, nutrition), health promotion activities, and home visits (for example, to administer meningococcal vaccines to people over 60 years of age in peri-urban areas of Lima due to lack of personal protective equipment). Maintenance of emergency services. Maintenance of response services to family and gender violence, with a specific line for violence against children, with a communication campaign to alert the population about these services.

May: Immunization programs partially suspended.

Suriname

March: The government, with the support of PAHO and UNICEF, establishes a list of decisions to take 24 hours, 48 hours, and the first week after the diagnosis of the first case. Joint mobilization between the government and the United Nations country team to establish a response plan and request resources from local banks and the private sector given the difficulties in mobilizing donor resources. Immunization schedule disruption: DTP-Hep-HibB1 vaccine administration decreases from 71% to 52% between February 15 and March 15.





May: Immunization programs maintained.
Uruguay
March: Continuation of the functioning of the health system, except for the postponement of non-urgent surgeries. Technological innovation for communication through social networks.
April: Maintained: school feeding programs and cash transfers.
May: Immunization programs maintained.
Venezuela
March: Collapse of a health system already weakened before the pandemic. Maintenance of immunization and emergency services. Restriction of prenatal, obstetric, contraceptive, pediatric, and adult preventive care, treatment of HIV and tuberculosis, treatment of non-communicable diseases (such as dialysis and physical therapy), nutrition and food distribution services, and child care.
April: Maintained: cash transfers. New measures are introduced: in-kind food vouchers.
May: Immunization programs maintained.
repared by the author based on four sources: in blue, the UNICEF COVID-19 Monthly Survey conducted in March and May 2020 and provided by the Public Partnerships Unit

Source: Prepared by the author based on four sources: in blue, the UNICEF (OVID-19 Monthly Survey conducted in March and May 2020 and provided by the Public Partnerships Unit of UNICEF's Regional Office for Latin America and the Caribbean (12); in green, from the report Preventing the COVID-19 consist from becoming a food crisis: Urgent measures against hunger in Latin America and the Caribbean, from ECLAC and FAO (31); in yellow, from PAHO's Results from the Third Survey on the NIP Situation in the Region of the Americas, conducted in May 2020 (32); and, in orange, from a survey conducted by the author between April and May 2020 among key informants from different countries (13).

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Referencias

1. ECLAC, PAHO. Health and the economy: A convergence needed to address COVID-19 and retake the path of sustainable development in Latin America and the Caribbean. Available at: www.cepal.org/en/publications/45841-health-and-economy-convergence-needed-address-covid-19-and-retake-path. Santiago: Economic Commission for Latin America and the Caribbean and Pan American Health Organization.; 2020. 24 p.

2. Castro A. Response to the COVID-19 pandemic in urban slums and rural populations in Latin America. Available at: www.latinamerica.undp.org/content/ rblac/en/home/blog/2020/respuesta-a-la-pandemia-de-covid-19-en-poblaciones-urbano-margin.html. In: Lustig N, Tommasi M, editors. COVID-19 and the social protection of poor and vulnerable groups New York: UNDP Latin America and the Caribbean.; 2020.

3. Johns Hopkins University. COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). Available at: coronavirus.jhu.edu/map.html. 2020.

4. IHME. COVID-19 Projections. Available at: www.healthdata.org/covid. Seattle: University of Washington; 2020.

5. United Nations. World Population Prospects 2019. Available at: population.un.org/wpp/Download/Standard/Population. New York: Department de Economics and Social Affairs of the Uni ed Nations; 2020.

6. López-Calva LF. A greater tragedy than we know: Excess mortality rates suggest that COVID-19 death toll is vastly underestimated in LAC. Available at: www.latinamerica.undp.org/content/rblac/en/home/presscenter/director-s-graph-for-thought/a-greater-tragedy-than-we-know--excess-mortality-ratessuggest-t.html. New York: United Nations Development Program; 2020.

7. The Economist. Tracking covid-19 excess deaths across countries. Available at: www.economist.com/graphic-detail/2020/07/15/tracking-covid-19-excess-deaths-across-countries. 2020.

8. Roberton T, Carter ED, Chou VB, Stegmuller AR, Jackson BD, Tam Y, et al. Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. The Lancet Global Health. 2020.

9. Riley T, Sully E, Ahmed Z, Biddlecom A. Estimates of the Potential Impact of the COVID-19 Pandemic on Sexual and Reproductive Health In Low- and Middle-Income Countries. International Perspectives on Sexual and Reproductive Health. 2020;46:73-6.

10. Phillips DE, Bhutta ZA, Binagwaho A, Boerma T, Freeman MC, Hirschhorn LR, et al. Learning from Exemplars in Global Health: a road map for mitigating indirect effects of COVID-19 on maternal and child health. BMJ Glob Health. 2020;5(7).





11. Independent Accountability Panel for Every Woman Every Child Every Adolescent. 2020 Report: Caught in the COVID-19 storm: women's, children's and adolescents' health in the context of UHC and the SDGs. Available at: www.everywomaneverychild-lac.org/e/wp-content/uploads/2020/07/IAP-2020-Full-Report-3.pdf. Geneva: World Health Organization; 2020.

windbiede. www.everywonnaneveryenna lae.org/e/wp content/apiodas/2020/07/1/ar 2020 Fair hepore 3.pair. Geneval wond

12. UNICEF. COVID-19 Monthly Survey. New York: UNICEF; 2020.

13. Castro A. Cuestionario. Desafíos en la salud materna, infantil y adolescente durante la pandemia en América Latina y el Caribe [Questionnaire. Challenges for maternal, child, and adolescent health during the pandemic in Latin America and the Caribbean]. Available at: docs.google.com/forms/d/litPacOEDpwlgcQNI3WABMcU6jj17tXe0eLpHBgFJBcU/edit. 2020.

14. WHO. Global status report on preventing violence against children 2020. Available at: apps.who.int/iris/rest/bitstreams/1280976/retrieve. Geneva: World Health Organization; 2020.

15. Peterman A PA, O'Donnell M, Thompson K, Shah N, Oertelt-Prigione S, van Gelder, N. Pandemics and Violence Against Women and Children. Center for Global Development Working Paper 528. Available at: <u>www.cgdev.org/publication/pandemics-and-violence-against-women-and-children</u>. Washington, DC: Centre for Global Development; 2020.

16. Cousins S. COVID-19 has "devastating" effect on women and girls. The Lancet. 2020;396(10247):301-2.

17. Plan International. COVID-19: alarmante aumento de la violencia contra las niñas y las mujeres en América Latina y El Caribe [COVID-19: alarming increase in violence against girls and women in Latin America and the Caribbean]. Available at: <u>plan-international.org/es/pressrelease/2020-05-19-covid-19-alarmante-aumento-de-la-violencia-contra-las-ninas-y-las-mujeres</u>.

18. FILAC. The indigenous peoples in the face of the COVID-19. First regional report. Available at: indigenascovid19.red/archivos/13360. La Paz: Fondo para el Desarrollo de los Pueblos Indígenas de América Latina y El Caribe; 2020.

19. Hallal PC, Hartwig FP, Lessa Horta B, Silveira MF, Struchiner CJ, Vidaleti LP, et al. Remarkable Variability in SARS-CoV-2 Antibodies across Brazilian Regions: Report on Two Successive Nationwide Serological Household Surveys. SSRN Available at: ssrn.com/abstract=3640428. 2020.

20. Castro A, Savage V, Kaufman H. Assessing equitable care for Indigenous and Afrodescendant women in Latin America. Rev Panam Salud Publica. 2015;38(2):96-109.

21. ECLAC. Measuring the impact of COVID-19 with a view to reactivation. Available at: www.cepal.org/en/publications/45477-measuringimpact-covid-19-view-reactivation. Santiago, Chile: Economic Commission for Latin America and the Caribbean.

22. Cáceres C, Castro A. Will Peruvians' Access to Health Care Improve? Latin America Advisor. 2020; July 23, p. 3.

23. ECLAC. The 2030 Agenda for Sustainable Development in the new global and regional context. Scenarios and projections in the current crisis. Available at: <u>repositorio.cepal.org/bitstream/handle/11362/45338/4/S2000207</u> en.pdf. Santiago, Chile: Economic Commission for Latin America and the Caribbean; 2020.

24. EWEC. Ensuring continuity in the provision of essential sexual, reproductive, maternal, neonatal, child, and adolescent health services for the population in the context of COVID-19. Available at: www.everywomaneverychild-lac.org/e/wp-content/uploads/2020/05/Ensuring-essential-healthservices-during-COVID-19_EWEC-LAC.pdf. New York: United Nations; 2020.

25. Countdown Equity Analysis G, Boerma JT, Bryce J, Kinfu Y, Axelson H, Victora CG. Mind the gap: equity and trends in coverage of maternal, newborn, and child health services in 54 Countdown countries. The Lancet. 2008;371(9620):1259-67.

26. Wehrmeister FC, Barros AJD, Hosseinpoor AR, Boerma T, Victora CG. Measuring universal health coverage in reproductive, maternal, newborn and child health: An update of the composite coverage index. PLoS One. 2020;15(4):e0232350.

27. WHO. Primary health care on the road to universal health coverage: 2019 monitoring report. Available at: apps.who.int/iris/bitstream/handle/10665/328913/WHO-HIS-HGF-19.1-eng.pdf?ua=1. Geneva: World Health Organization; 2019.

28. UNICEF. The State of the World's Children 2019. Available at: www.unicef.org/reports/state-of-worlds-children-2019. New York: UNICEF; 2019.

29. PAHO. Universal Health in the 21st Century: 40 Years of Alma-Ata. Report of the High-Level Commission. Available at: <u>www.paho.org/en/</u> <u>documents/universal-health-21st-century-40-years-alma-ata-report-high-level-commission-revised</u>. Washington DC: Pan American Health Organization; 2019.

30. PAHO. Core Indicators 2019: Health Trends in the Americas. Available at: <u>iris.paho.org/handle/10665.2/51542</u>. Washington DC: Pan American Health Organization; 2019.

31. ECLAC and FAO. Preventing the COVID-19 crisis from becoming a food crisis: Urgent measures against hunger in Latin America and the Caribbean. Available at: <u>www.cepal.org/en/publications/45726-preventing-covid-19-crisis-becoming-food-crisis-urgent-measures-against-hunger</u>. Santiago, Chile: Economic Commission for Latin America and the Caribbean; 2020.

32. PAHO. Results from the Third Survey on the NIP Situation in the Region of the Americas. 26 May 2020. Washington, DC: Pan American Health Organization; 2020.

33. PAHO. Health in the Americas. Available at: www.paho.org/salud-en-las-americas-2017. Washington DC: Pan American Health Organization; 2017.





34. IDB. El impacto del COVID-19 en las economías de la región. La pandemia de COVID-19 en Centroamérica, Haití, México, Panamá y República Dominicana [The impact of COVID-19 on the economies of the region. The COVID-19 pandemic in Central America, Haiti, Mexico, Panama, and the Dominican Republic. Available at: <u>dx.doi.org/10.18235/0002279</u>. Washington, DC: Inter-American Development Bank; 2020. 57 pp.

35. Más Bermejo P, Vidal Ledo MJ, Baldoquín Rodríguez W, Seuc Jo AH, Guinovart Díaz R, Noriega Bravo V. Lucha anti epidémica en la COVID-19 en Cuba. Organización de la investigación epidemiológica. Información para Directivos de la Salud. 2020;32.

36. PAHO. Just Societies: Health Equity and Dignified Lives - Report of the Commission of the Pan American Health Organization on Equity and Health Inequalities in the Americas. Available at: <u>iris.paho.org/handle/10665.2/51571</u>. Washington DC: Pan American Health Organization; 2019.

37. Bambra C, Riordan R, Ford J, Matthews F. The COVID-19 pandemic and health inequalities. J Epidemiol Community Health. 2020.

38. Santos DS, Menezes MO, Andreucci CB, Nakamura-Pereira M, Knobel R, Katz L, et al. Disproportionate impact of COVID-19 among pregnant and postpartum Black Women in Brazil through structural racism lens. Clin Infect Dis. 2020.

39. UNICEF and Tulane University. Health Equity Report 2016: Report on Reproductive, Maternal, Newborn, Child, and Adolescent Health Equity in Latin America and the Caribbean to Inform Policy Making. Available at: www.unicef.org/lac/sites/unicef.org.lac/files/2018-03/20161207 LACRO APR Informe sobre equidad en salud EN LR 0.pdf. Panama City, Panama: UNICEF; 2016. 145 p.

40. United Nations. Transforming Our World: The 2030 Agenda for Sustainable Development. Available at: <u>sustainabledevelopment.un.org/content/</u> <u>documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf</u>. New York: United Nations; 2015.

41. Fore HH. A wake-up call: COVID-19 and its impact on children's health and wellbeing. The Lancet Global Health. 2020.

42. Bearak J, Popinchalk A, Alkema L, Sedgh G. Global, regional, and subregional trends in unintended pregnancy and its outcomes from 1990 to 2014: estimates from a Bayesian hierarchical model. The Lancet Global Health. 2018;6(4):e380-e9.

43. UNICEF, Johns Hopkins University. LIST Data Dashboard. Nueva York: UNICEF; 2020.

44. ISLAC Project. COVID-19 in Latin America and the Caribbean. Impact on the health services for women, children, and adolescents. Tulane University, University of Santiago de Chile, Every Woman Every Child, and Bernard van Leer Foundation. Information available at: <u>www.islaccovid.org</u>.

45. Takemoto MLS, Menezes MO, Andreucci CB, Nakamura-Pereira M, Amorim MMR, Katz L, et al. The tragedy of COVID-19 in Brazil: 124 maternal deaths and counting. Int J Gynaecol Obstet. 2020.

46. WHO, UNICEF, UNFPA, World Bank, United Nations Population Division. Trends in Maternal Mortality: 2000 to 2017. Available at: <u>www.who.int/reproductivehealth/publications/maternal-mortality-2000-2017/en</u>. Geneva: World Health Organization; 2019.

47. WHO. Q&A: Breastfeeding and COVID-19. Available at: www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answershub/g-a-detail/q-a-on-covid-19-and-breastfeeding. Geneva: World Health Organization; 2020.

48. UNICEF. Adoption of breastfeeding recommendations in the context of COVID-19. Key findings from an online survey in low- and middle-income countries. New York: UNICEF; 2020.

49. UNICEF. Otros 6,7 millones de niños menores de 5 años podrían sufrir de emaciación este año debido a la COVID-19, según UNICEF [Another 6.7 million children under the age of 5 could suffer from wasting this year due to COVID-19, according to UNICEF]. Available at: www.unicef.org/nicaragua/comunicados-prensa/otros-67-millones-de-ni%C3%B1os-menores-de-5-a%C3%B1os-podr%C3%ADan-sufrir-de-emaciaci%C3%B3n-este. New York: UNICEF; 2020.

50. Akseer N, Kandru G, Keats EC, Bhutta ZA. COVID-19 pandemic and mitigation strategies: implications for maternal and child health and nutrition. Am J Clin Nutr. 2020.

51. Headey D, Heidkamp R, Osendarp S, Ruel M, Scott N, Black R, et al. Impacts of COVID-19 on childhood malnutrition and nutrition-related mortality. The Lancet. 2020.

52. Fore HH, Dongyu Q, Beasley DM, Ghebreyesus TA. Child malnutrition and COVID-19: the time to act is now. The Lancet. 2020.

53. Miranda MC, Nóbrega FJ, Sato K, Pompéia S, Sinnes EG, Bueno OFA. Neuropsychology and malnutrition: a study with 7 to 10 years-old children in a poor community. Revista Brasileira de Saúde Materno Infantil. 2007;7:45-54.

54. Fernández NAR. Deficiencia de hie ro en niños escolares y su relación con la función cognitiva. Salus. 2006;10(2):10-6.

55. Kar BR, Rao S, Chandramouli BA. Cognitive development in children with chronic protein energy malnutrition. Behavioral and Brain Functions. 2008;4(31):1-12.

56. McEwen B, Stellar E. Stress and the individual: mechanisms leading to disease. Arch Intern Med. 1993;153:2093-101.

57. Shonkoff J, Garner AS, et al. The lifelong effects of early childhood adversity and toxic stress. Pediatrics. 2012;129(1):e232-46.

58. WHO, UNICEF. Immunization coverage: Are we losing ground? Available at: <u>data.unicef.org/wp-content/uploads/2020/07/WUENIC-Immunizationcoverage-are-we-losing-ground-brochure-2020.pdf</u>. New York: UNICEF; 2020.





59. PAHO. Summary of the Status of National Immunization Programs during the COVID-19 Pandemic, July 2020. Available at: iris.paho.org/ handle/10665.2/52544. Washington DC: Pan American Health Organization; 2020.

60. Roberts L. Pandemic brings mass vaccinations to a halt. Science. 2020;368(6487):116-7.

61. Guttmacher Institute. Adding It Up: Investing in Sexual and Reproductive Health in Low- and Middle-Income Countries. Available at: www.guttmacher.org/fact-sheet/adding-it-up-investing-in-sexual-reproductive-health. New York: Guttmacher Institute; 2019.

62. Roberton T, Carter ED, Chou VB, Stegmuller AR, Jackson BD, Tam Y, et al. Supplement to: Roberton T, Carter ED, Chou VB. Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. The Lancet Global Health. 2020.

63. Nuguer V, Powell A. Policies to Fight the Pandemic: 2020 Latin American and Caribbean Macroeconomic Report. Available at: <u>flagships.iadb.org/en/MacroReport2020/Policies-to-Fight-the-Pandemic</u>. Washington, DC: Inter-American Development Bank; 2020.

64. Ghebreyesus TA, Fore HH, Kanem N, Watkins K. Winning the War Against Maternal and Child Deaths. Available at: www.project-syndicate.org/commentary/covid19-defend-progress-on-maternal-child-mortality-by-tedros-adhanom-ghebreyesus-et-al-2020-05. Project Syndicate, May 21. 2020.

65. World Bank. Global Economic Prospects, June 2020. Available at: <u>www.worldbank.org/en/publication/global-economic-prospects#overview</u>. Washington, DC: World Bank; 2020.

66. WHO. Maintaining essential health services: operational guidance for the COVID-19 context. Interim guidance. 1 June 2020. Available at: www.who.int/publications/i/item/10665-332240. Geneva: World Health Organization; 2020.

67. Hale T, Phillips T, Petherick A, Kira B, Angrist N, Aymar K, et al. Lockdown rollback checklist: Do countries meet WHO recommendations for rolling back lockdown? Version 4.0. Available at: www.bsg.ox.ac.uk/research/publications/lockdown-rollback-checklist. Oxford: Blavatnik School of Government, University of Oxford; 2020.

68. EWEC. Immediate Steps to Safeguard Progress for Every Woman, Child and Adolescent. Available at: www.everywomaneverychild.org/wp-content/uploads/2020/06/EWEC-HL-Roundtable-Outcome-Document.pdf. New York: United Nations; 2020.

69. Ministry of Health of Brazil. Nota Técnica [Technical Note] Nº 16/2020-COSMU/CGCIVI/DAPES/SAPS/MS. Available at: sxpolitics.org/ptbr/wpcontent/uploads/sites/2/2020/06/1591269873 ministerioaborto.pdf. Brasilia: Ministry of Health of Brazil; 2020.

70. Buss PM. De pandemias, desenvolvimento e multilateralismo [On pandemics, development, and multilateralism]. Available at: <u>diplomatique.org.br/de-pandemias-desenvolvimento-e-multilateralismo</u>. Le Monde Diplomatique Brasil, April 3, 2020. 2020.

71. CLAP. Cuidados del recién nacido en épocas de la COVID-19 [Neonatal care in times of COVID-19]. Available at: www.paho.org/clap/images/PDF/alianzaneonatal/Webinar_RN_consolidada.pdf. Montevideo:: Latin American Center for Perinatology, Women and Reproductive Health (CLAP); 2020.

72. UNFPA. Provision of Sexual and Reproductive Health care and Family Planning during the COVID-19 pandemic health emergency in Latin America and the Caribbean. Available at: <u>lac.unfpa.org/sites/default/files/pu-pdf/3-Covid-SSRyPF_ENG%20%281%29.pdf</u>. 2020.

73. UNFPA. Sexual and Reproductive Health and Rights, Maternal and Newborn Health & COVID-19. Available at: <u>www.unfpa.org/sites/default/files</u> resource-pdf/COVID-19 Preparedness and Response - UNFPA Interim Technical Briefs Maternal and Newborn Health -23 March 2020 .pdf. New York: UNFPA; 2020.

74. UNFPA. Sexual and Reproductive Health and Rights: Modern Contraceptives and Other Medical Supply Needs, Including for COVID-19 Prevention, Protection and Response. Available at: www.unfpa.org/sites/default/files/esource-pdf/COVID-19 Preparedness and Response - UNFPA Interim

Technical Briefs Contraceptices and Medical Supplies 23 March.pdf. New York: UNFPA; 2020.

75. UNFPA. Adolescents and Young People & Coronavirus Disease (COVID-19). Available at: <u>www.unfpa.org/resources/adolescents-and-young-peoplecoronavirus-disease-covid-19</u>. New York: UNFPA; 2020. 3 pp p.

76. UNFPA. Impact of the COVID-19 Pandemic on Family Planning and Ending Gender-based Violence, Female Genital Mutilation and Child Marriage. Available at: <u>www.unfpa.org/sites/default/files/ esource-pdf/COVID-19_impact_brief_for_UNFPA_24_April_2020_1.pdf</u>. New York: UNFPA; 2020.

77. IAWG. Programmatic guidance for sexual and reproductive health in humanitarian and fragile settings during COVID-19 pandemic. Available at: <u>cdn.iawg.rygn.io/documents/IAWG-Full-Programmatic-Guidelines.pdf?mtime=20200410142450&focal=none#asset:30551</u>. New York: Inter-Agency Working Group on Reproductive Health in Crisis; 2020.

78. PAHO. The Immunization Program in the Context of the COVID-19 Pandemic Version 2: 24 April 2020. Available at: <u>iris.paho.org/bitstream/handle/10665.2/52056/PAHOFPLIMCOVID19200008_eng.pdf?sequence=5&isAllowed=y</u>. 2020.

79. WHO. Guiding principles for immunization activities during the COVID-19 pandemic. Available at: <u>apps.who.int/iris/bitstream/handle/10665/331590/WHO-2019-nCoV-immunization_services-2020.1-eng.pdf</u>. Geneva: World Health Organization; 2020. 3 pp p.

80. PAHO. Promoting health equity, gender and ethnic equality, and human rights in COVID 19 responses: Key considerations. Available at: <u>bit.ly/LEquidad202010</u>. Washington, DC: Pan American Health Organization; 2020.

81. UNFPA. Implications of COVID-19 for indigenous people in Latin America and the Caribbean. Available at: <u>lac.unfpa.org/sites/default/files/pub-pdf/1-Covid-Indigenas-ENG.pdf</u>. New York: UNFPA; 2020.





82. UNFPA. Gender Equality and Addressing Gender-based Violence (GBV) and Coronavirus Disease (COVID-19) Prevention, Protection and Response. Available at: www.unfpa.org/sites/default/files/esource-pdf/COVID-19 Preparedness and Response - UNFPA Interim Technical Briefs Gender Equality and GBV 23 March 2020 .pdf. New York: UNFPA; 2020.

83. UNFPA. COVID-19: A Gender Lens. Protecting sexual and reproductive health and rights, and promoting gender equality. Available at: www.unfpa.org/resources/covid-19-gender-lens. New York: UNFPA; 2020.

84. Ministry of Public Health of the Dominican Republic. Directrices para prevención y manejo de enfermedad respiratoria por coronavirus (COVID-19) en embarazadas y recién nacidos (abril de 2020) [Guidelines for the prevention and management of respiratory disease due to coronavirus (COVID-19) in pregnant women and newborns (April 2020)]. Available at: repositorio.msp.gob.do/bitstream/handle/123456789/1758/9789945621013.pdf?sequence=1&isAllowed=y. Santo Domingo: Ministry of Public Health; 2020.





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