OBJECTIVE — questions in mind

- to review experiences from past public health and economic crises and identify possible mechanisms of how the COVID-19 pandemic can affect fertility levels and trends in LAC — How other shocks in LAC countries have affected fertility?

- to assess the possible impact of the pandemic on fertility based on the LAC literature and recent evidence from data on selected countries — Do we expect to see any changes — increasing or decreasing fertility? How Covid-19 is different from other shocks?

- to discuss possible post pandemic effects on fertility - differences where the pandemic hit hardest — crossed effects with morbidity and mortality effects (break in the supply and service chains) — Does data show post-covid-19 effects on proximate determinants and births?

- to provide recommendations for the Population Division to develop assumptions on projecting fertility levels and trends in LAC countries — What are the recommendations regarding fertility estimates in LAC due to Covid-19 and beyond?
How past and present public health and economic crises have affected fertility in LAC countries?

• Shocks (what are the expected impacts in LA – broadly speaking)
  • Economic (recession means fewer births but in LA, generally, good times does not mean increases in fertility – too much instability) - changes in intentions, expectations
  • Health – already a deficient access to primary health care for most population – break on supply chain will have more impact in countries where public providers have a large share
  • Environment disasters – Earthquake, tornados (not one response all times and places)

• Recent examples in LAC:
  • Environment disasters - Haiti – ex. earthquake – broken supply chain of contraception
  • Health - Zika is different – affects birth outcomes (do not threatens women’s lives)

• Covid-19 – will sum up all effects from all types of shocks in LAC, but # among countries
  • Disruption of hospital use – supply chain or access to services broken
  • Pregnant women with higher risk of death (not birth outcomes) - seen later in the 2020
  • Economic effects of Covid-19 (CEPAL, estimates) – recession and increases inequalities
How (in theory) Covid-19 could impact fertility and some of the proximate determinants in the region?

• **Marriage/union**  →  little decrease in fertility
  - Decreases in marriages/union
  - Birth outside marriage/union is common although there are union formation right after pregnancy

• **Contraception/Conception**  →  less access and failures – increases unplanned pregnancies, but fertility depends on abortion practices
  - Expected disruption in the supply chain and access to services (most poorest population)
  - Modern contraception – LARCs (depends most on the duration of the pandemic)
  - Extended access to emergency contraception at pharmacy counter (several countries in LA)
  - Mostly will depend on the provider (public vs private)

• **Abortion**  →  less access would increase fertility (unwanted)
  - Most illegal in LAC, but large unsafe access to pregnancy interruption (outside health system)
  - Use of misoprostol (large use with access from parallel market)

• **Fertility schedule**  →  decreases in fertility – with fast recuperation
  - Early fertility – most below 29. Recuperation (if context allows) –
  - But continuing pandemic (new ones, climate crisis) might decrease youth fertility intentions.
How (in practice) Covid-19 would impact fertility outcomes in LA? There is need for fertility estimates revision soon?

- At most, it will depend on how hard covid-19 impacted the countries in different points in time and how countries responded to the pandemic.
- Many answers are not there yet, but we can consider 3 situations depending on Covid-19 history and data availability:
  1. Covid-19 hit hard the country in the first wave (and more)
     - Countries with some evidences of decrease in fertility
  2. Covid-19 hit hard the country in the first wave (and more)
     - Countries with no data – too early to know
  3. Covid-19 hit hard only in the second wave (with variants)
     - Countries with no data - too early to tell anything
What we can see already in very... very... very preliminary data in some countries in the region?
1. Covid-19 hard hit in the first wave (and more)

Available evidence from covid-19 impact on fertility - Brazil

- Brazil
  - Marriage/union
    - Decreased
  - Contraception
    - No information
  - Abortion
    - No information
  - Fertility schedule
    - Early childbearing with very slow postponement

Will really the ASFR in Brazil change its age pattern as the UN assumptions for the 2030-05?

Green line is the last observed.

Births by month – Brazil, from 2015 to 2020*

Births (x1000 women) by month—Brazil, 2015-2020*

What an instruction from the “above” can do?

• On 16 April, 2021 – Secretary of Primary Health Care at the Ministry of Health says (and this is spread as an avalanche in all medias):

“We know that at the time of Zika, during one, two years, there was a decrease in pregnancy in Brazil, and then it increased. It is normal. It is obvious that we cannot say this to someone who is 42, 43 years old, but for a young woman, who can choose her pregnancy moment a little there, the best thing now is for you to wait a little bit until the situation gets a little calmer “.

When inquired about vaccine and priority groups, he said, they were studying to include all pregnant women in the vaccination campaign as priority groups.

Just a note: there is not ANY national campaign in Brazil, from the Health Minister, about the preventions against Covid-19

The memory of a recent problem (Zika) (with the babies with anencephaly) and the information that the new variant of SarsCov2 appears to be more aggressive to pregnant women (also spread on the news) can have an even bigger impact than the first wave. So, let’s wait until after January 2022 effects on number of births in Brazil.
1- Covid-19 **hard hit in the first wave** (and more)  
**Available evidence** from covid-19 impact on fertility - Chile

- Hard pandemic hit in first wave
- High and early immunization in 2021
- Hard hit of second waves of cases but not as much deaths (the role of vaccines)
- How this will affect births?
- Adolescent fertility - below projected (need review – youth friendly services)

Births by month – Chile, from 2015 to 2020*, 2021**

* preliminary data  ** very preliminary data

Source: Short-Term Fertility Fluctuations (STFF) data series - The Human Fertility Database. [Link here](#).
Fertility indicators, Chile – decreases on adolescent fertility

ASFR for the UN 2019 assumptions probably needs revision for Chile, beyond Covid-19 effects.

Source: Available here
1- Covid-19 **hard hit in the first wave** (and more)

**Available evidence from covid-19 impact on fertility - Mexico**

[1](https://www.gob.mx/salud/documentos/datos-abiertos-152127)
[2](http://www.dgis.salud.gob.mx/contenidos/basesdedatos/bdc_nacimientos_gobmx.html) (not available)

[3](https://www.inegi.org.mx/programas/natalidad/)

Civil Registration recognizes problems and delays in births registration and gives waivers to late registration

[4](http://citasoficialia.edomex.gob.mx/)
2- Covid-19 hard hit since first wave
Still do not know what happened to 2020 birth
No data on birth yet and 2020 round census not available (*)

- Peru
- Ecuador
- Argentina
- Bolivia
- Venezuela
- Dominican Republic
- Panamá
- Colombia (migration from Venezuela?)

Source: Covid-19: https://www.worldometers.info/
3 - Covid-19 hard hit in the second waves or low hit (deaths) 
Too early to tell — effects could be seen later (9 months) — January 2022

• Paraguay
• Uruguay
• Cuba
• Costa Rica

Source: Covid-19: https://www.worldometers.info/
CONCLUDING... CAN WE?

• Past health and environment shocks have show that an immediate birth postponement (or increase in some cases) have happened, but follows a recuperation, not fully, in the following years (depending on fertility schedule).
  • In the case of LA – most fertility happens at early ages - recuperation is feasible and can return to the previous pathway of decline of the already low and declining fertility.

• BUT, in the case of Covid-19 pandemic, we do not know yet, what is the “afterwards” in the region, and the 2021 impacts could be even stronger
  • - vaccination pace takes a major role, and effectiveness, unequal access, etc.

• Preliminary data, available for very few LA countries, indicate that births have decreased in 2020, following previous path, and decreased a little more after November (9 months after the beginning of the pandemic in countries affected hardest in the first covid-19 wave)

• Differences between countries (regions) will depend on access to services and means to contraception/conception (SRHR achievement) and pregnancy interruption
What the evidences confirm for LAC?

• **Boom?** – No, sexual intercourses are separate from reproduction and high LARC and sterilization method use in LAC
  • even with poor family planning access in the past, women in LAC, already have regulated their pregnancy and fertility
  • this would happen only in countries with no reproductive rights in place or broken supply chains and services

• **Bust?** Not quite so far
  • Some signs of a decrease – not quite a “bust”, in some countries
  • Probably a transitory decrease and full or partial recovery soon in countries where COVID-19 hit hardest

• **So, it seems there will be no boom neither bust in most LAC countries in the short period.**
  • fertility would follow the expected path in countries where COVID-19 hit “softly”
  • But need to keep track of the trends due to the pandemic in course and ensure quality data

Too much uncertainty, including a third wave at the corner.
Recommendations on revision of fertility estimates for LA

Revisions due to Covid-19 and beyond (economic depression)
1. For countries with **almost complete birth registration** and that presented a very **high rates of infections and death by Covid-19** should have a correction for the short term, and the most probable change will be downwards.
2. For countries with **incomplete birth registration and no current demographic census**, the Covid-19 pandemic should not be a reason to review countries fertility prospects at short term
3. To perform a **more in-depth review of the assumptions for the next round (in 4 to 5 years)** or when census data became available

Revisions due to other changes
1. **Fertility schedule** - In some countries in LA, such as Brazil, the assumptions of the 2021 prospects for the medium term is **the strong “aging” of fertility schedule should be revised**, mainly in light of the low decrease in adolescent fertility in some countries, but also based on the history of childbearing in the region – **most childbearing at younger ages (no European standards)**
2. **Climate crisis** - the insecurity and changes in behavior due to environmental problems should be **included as scenarios** in the assumptions for the long run, or at least referred in some of the probabilistic scenarios.