

Risk Model to Indentify Domestic Violence Hot Spots in Mexico

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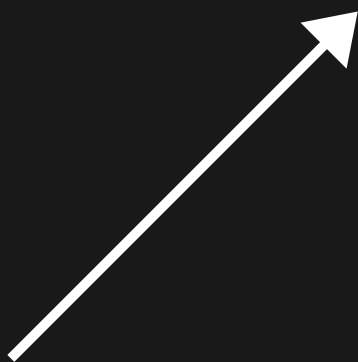
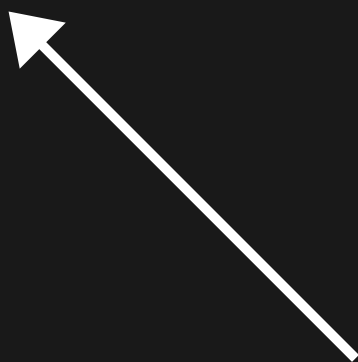
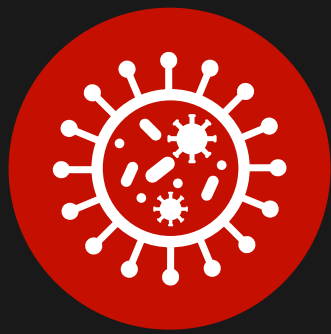




In **Latin America**, 1 out of 3 women (35%) between 15 and 46 years old have been sexually or physically abused by an intimate partner (PAHO, 2019).



In **Mexico**, 10 women are killed every day 66% of women over 15 years old have suffered one incident of emotional, economic, physical or sexual violence throughout their lives (ENDIREH, 2016).

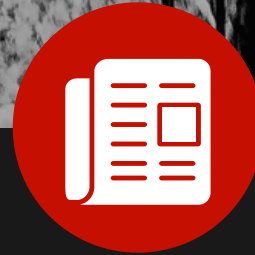


What has been done about the problem?



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Legal framework to protect women who experience violence



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Campaigns to promote use of support and report services



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Support of civil society initiatives/programmes



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Emergency hotlines for survivors of gender-based violence

The challenges of gaining insights



The **culture of silence and underreporting** are relevant issues. Survivors do not report incidents or ask for institutional support.



Data collection is difficult & unsafe: Direct methods (e.g. interviews) are not advisable during pandemic/lockdown contexts.



Data availability is limited: Reliable data sources are mainly available for Mexico City and not for other regions.

"The use of data to visualize the areas of greatest risk for women and girls represents an opportunity to strengthen the government's strategy for a life free of violence."

Dulce Colín

Coordinadora General de Igualdad y Atención a la Violencia de Género, Secretaría de las Mujeres de la Ciudad de México

In detail we need to

- better understand when and where women and girls are at risk
- better understand what the drivers of violence are

However, during times of social distancing and lockdowns, safe data collection efforts became almost impossible.





Our solution:

Create data-driven insights into how existing data sources can be combined in new ways to provide relevant information for decision makers, activists and many more

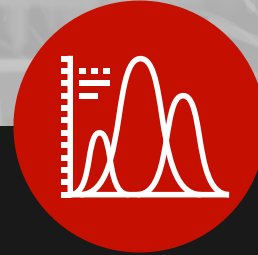
... but done the right way!

Developing a risk model



Stage 1:

Map the prevalence of violence
against women and girls



Stage 2:

Measure impact of risk
factors



Stage 3:

Extrapolate risk model to
more regions



Stage 1:

Mapping the prevalence of violence against women and girls

Administrative records of domestic violence against women are usually collected by the security, health and/or women's ministries.

In Mexico City's case, there are two publicly available databases that have allowed us to map the prevalence of domestic violence against women and girls:

1. The Línea Mujeres helpline
2. The Crime Records for the Attorney General's Office

The data



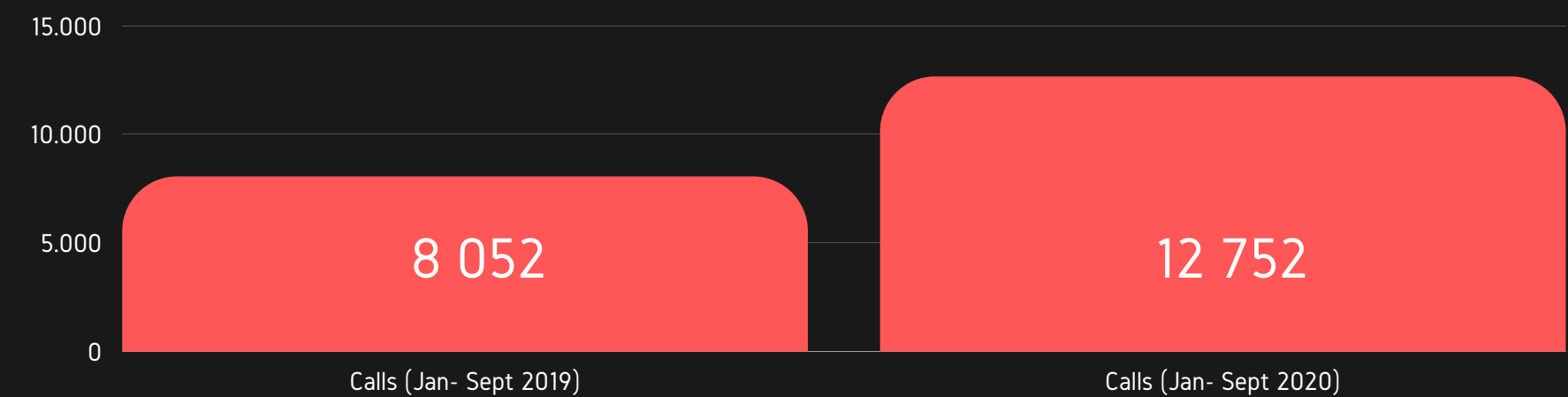
Línea Mujeres Helpline

- National helpline, which provides orientation and counseling under three categories



Crime Reports from the Attorney General's Office in Mexico City

- These reports contain a large number of crime categories





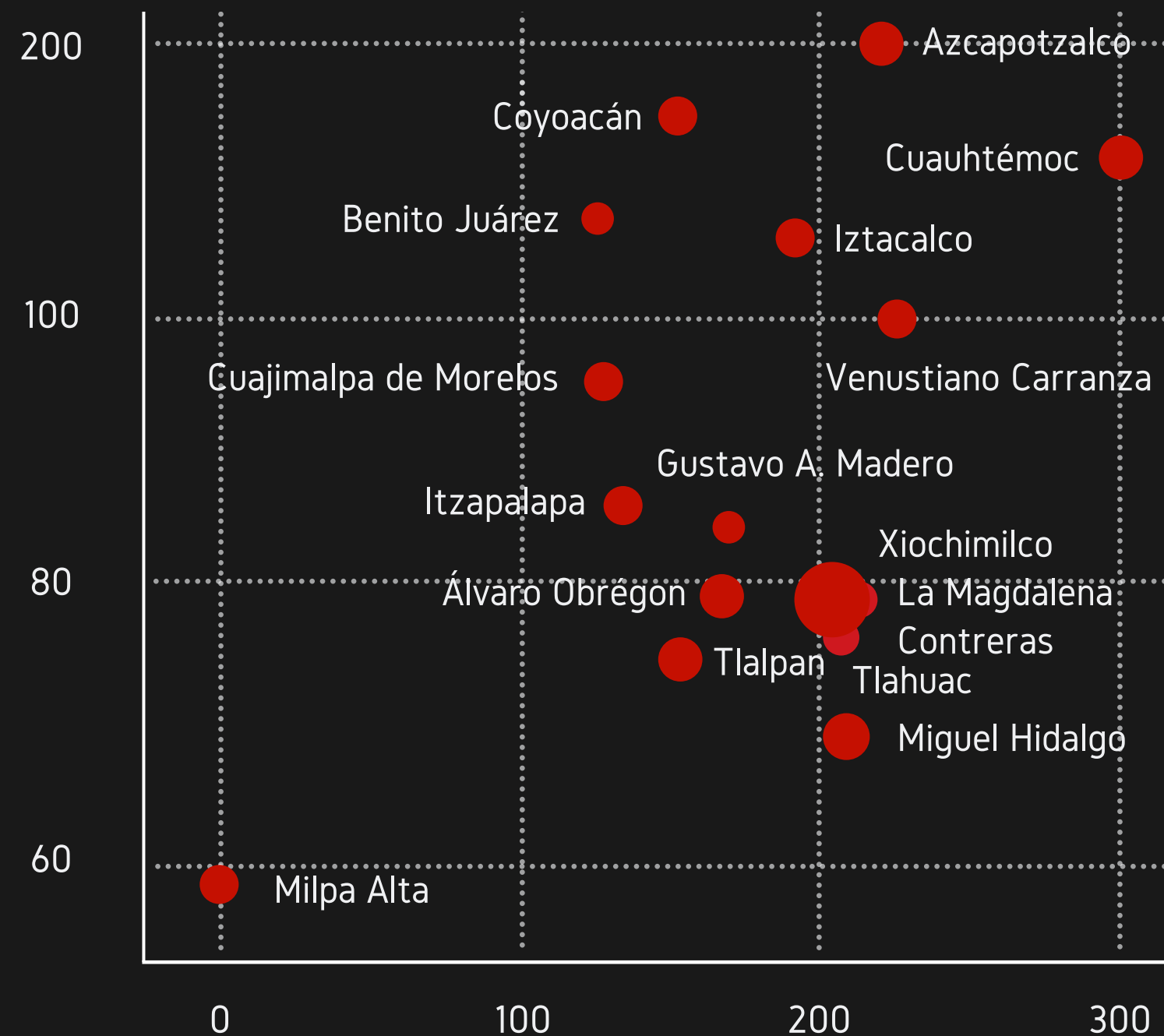
Stage 2:

Measuring the impact of risk factors

Some of the factors studied and included as factors of risk map are:

- Age
- Marital status
- Education level
- Power asymmetry
- Economic asymmetry
- Financial independence
- Social cohesion
- Access to institutional support services
- Trust in institutions
- Human mobility
- COVID-19 epidemiological curve

Helpline Calls



Crime Reports

Stage 2:

Measuring the impact of risk factors

- Number of helpline calls, crime reports and Covid cases by 100,000 inhabitants
- Aggregated from March 2020 to September 2020 (during the different levels of lockdown)

Covid Cases



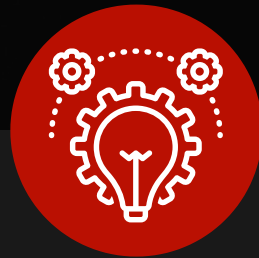


Stage 3:

Measuring the impact of risk factors

- We use the insights we gained in Mexico City to develop probabilistic algorithms to estimate & predict the prevalence of domestic violence
- As soon as the model is trained, we extrapolate it from Mexico City to other municipalities of the country
- The goal is to learn from these experiences and to replicate the model across Latin America

Ensuring upholding of highest ethical standards: Council for the Orientation of Development and Ethics



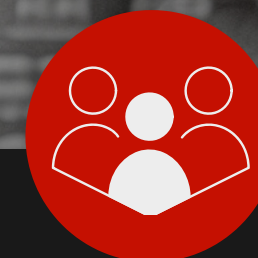
Relevance



Ethics



Data Protection



Community



Visibility

The CODE provides advice and counsel for the development and deployment of the experiment, within the scope of 5 functions. The council includes members from 10 organizations across sectors (UN Women, UNODC, Fondo Semillas, EQUIS Justicia para las mujeres, UNAM, INEGI, Secretariat of Women).

The road from Paris



Short term:

Finalize and validate the insights generated by the model and make sure that the data has impact:

- encourage data use
- formulate policy recommendations
- leverage data for potential advocacy campaigns



Long term:

Apply the concept at different places in Latin America to improve data availability and produce insights about risk factors in many contexts



Scaling/expansion

The UNIDAS network, an initiative supported by GIZ, already replicates the project in Bogotá and Sao Paulo with support of Data-Pop Alliance.

DO IT ELSEWHERE

DO IT RIGHT

DO IT BETTER

THANK YOU!

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What are we precisely talking about?

