

Recife innovates in the use of health data for early identification of violence against women



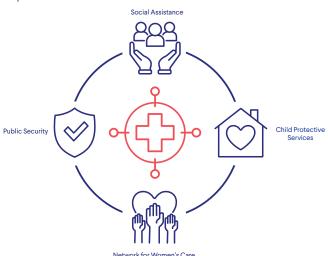
The context in Recife

Violence is being reported too late.

Approximately 74% of the notifications of violence issued between 2016 and 2023 were filed in hospitals, when the victim had already suffered more serious injuries that required hospitalization. However, before they get to that point, these women leave clues that they are victims of violence throughout their interactions with public services – for example, the increased frequency of visits to basic healthcare units to treat minor injuries or mental health issues.

The fight against violence must be multisectoral to reduce risks and save lives.

The healthcare network needs to be sensitized, trained and have active channels to swiftly engage other protection services.



The innovation behind the investigation: it is possible to immediately halve underreporting.

Recife adopted an innovative approach by applying a data matching methodology developed by Vital Strategies. The project's unique feature is the incorporation of Artificial Intelligence and semantic analysis tools that are able to interpret open-text fields in electronic medical records.

With the integration of several sources – such as visits to Primary Health Care Units, hospitalizations, notifications of violence and death records –, it became possible to reconstruct the trajectory of the victims and identify recurring patterns in cases of violence against women.

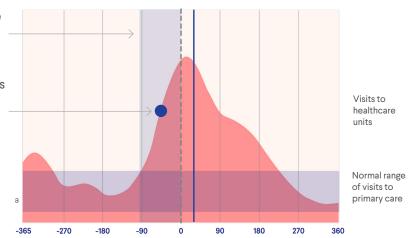
Notifications and referrals could have occurred up to three months earlier, gaining time for preventive measures.

92 days prior to the reported episode of violence, victims tend to seek healthcare services more often.

In this period, the victim already speaks openly and in details to healthcare professionals about the violence experienced.

Violent Incident

Death



Number of days relative to the day of notification of violence

What the data reveals

- 16% of women who attended primary health care in 2022 were potential victims of violence not identified by the system.
- Women with a notification of violence who were not referred to services are twice as likely to die from external causes.
- Women experiencing violence are 20 times more likely to die from external causes compared to the female population of the municipality.
- More than half of all femicides occurred up to 30 days after a formal notification of violence.
- Consistent signs of violence were already present, on average, 92 days prior to the notification.

Next steps

- The detailed data of the project are being delivered to the Municipal Secretariat of Health (SESAU).
- An interactive dashboard on underreporting has been developed to support surveillance and health promotion strategies and will be implemented on the city's servers.
- In the future, the project encompasses the creation of an alert system integrated into the electronic medical record, which will warn health professionals about possible signs of violence, encouraging early notification and preventive action.

This progress will be accompanied by trainings with the purpose of sensitizing professionals, improving the quality of records and contributing to a more effective response to violence against women.

Partners





