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Can Routine Primary Care Records Help to Detect Suicide Risk? A case study in Barcelona

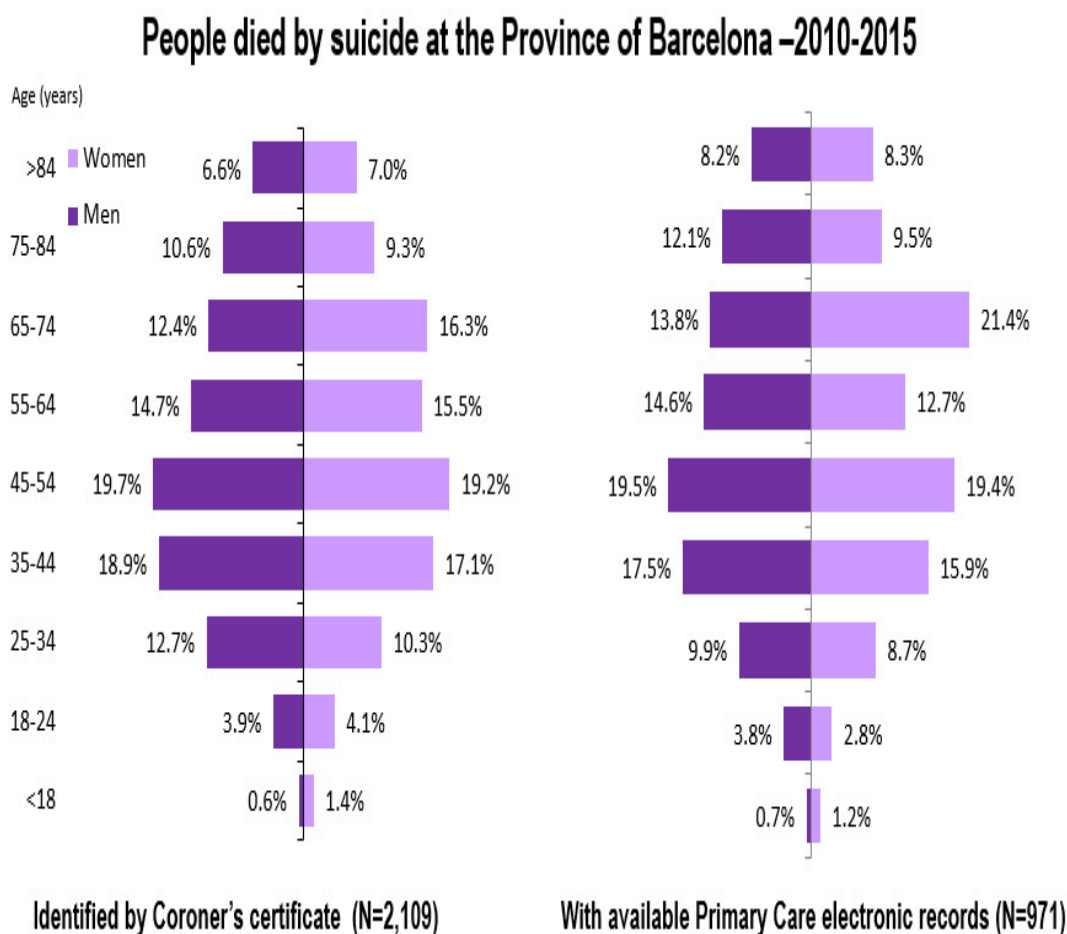


Suicide is a serious public health problem that has increased in recent decades, and this has led to the creation of different intervention programs that aim to identify and help the affected person. In this article, a group of medical researchers presents the summary of a study they conducted, using electronic records of the health system, to find the factors which could help to identify patients with a high risk of suicide. One of the first conclusions is that many of them are routinely collected in these registries, which is a good starting point for developing prevention strategies.

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Suicide is a global and severe public health problem affecting all countries and people from all ages. Increased efforts to improve prevention are required because of the progressive increase of its incidence. Different intervention programs aimed to prevent suicide have been created and implemented. In these, the detection of patients at high risk of suicide is one of the key elements to success, and required to optimize the strategies of prevention. However, the detection of persons with high risk of suicide becomes also one of the major challenges, since these do often not express situation and may not directly ask for help. In the context of a primary care consultation, it can be very difficult to identify them.

In this research we have obtained the information about the 2,109 cases of death from suicide that were certified by Coroners in the Province of Barcelona during the years 2010-2015. We have searched electronic records on their previous interactions with the sanitary system from the available healthcare databases. We have compared their data with that of persons of similar age, sex and address, in order to identify characteristics that may allow to differentiate, and therefore to identify, the persons who may eventually die by suicide.



At least 971 (46%) of the persons who died by suicide had Primary Care electronic records which we could retrieve. Approximately 60% of them died during the month following their last contact, and only one of every three of these persons was referred to a Mental Health specialist. Comparing their data with those of 19,420 similar persons (controls), we saw that information on several known risk factors for suicide are often available in the clinical histories of the patients, and these risk factors do associate with increases of risk of dying by suicide, as compared to persons who do not commit suicide.

These risk factors include a previous attempt of suicide, several mental health diagnostics, alcohol and tobacco use, and some sociodemographic variables. We have identified some additional factors that are associated with an increased risk of death for suicide; these include a high frequency of certain interactions with the healthcare system, some situations of sick leave or temporary disability, and certain patterns of use of drugs used to treat mental disorders, such as anxiolytics, or recent discontinuation of antipsychotics or antidepressant drugs, among others.

The main conclusion of the study is that information on many known risk factors of dying by suicide are available in the electronic medical records routinely used in our setting. This represents an opportunity for healthcare professionals to identify persons at high risk of dying by suicide when they are visited, through alerts created by techniques of automatic learning or other means. These may avoid that high risk persons pass unnoticed by primary care, so that they can be helped and receive timely preventive measures when required.

Marc Fradera¹, Dan Ouchi², Oriol Prat², Rosa Morros^{2,3}, Carles Martin-Fumadó^{5,6}, Diego Palao^{1,7,8}, Narcís Cardoner^{1,7,8}, Maria Teresa Campillo⁹, Víctor Pérez-Solá^{8,9}, Caridad Pontes³

¹Institut d'Investigació i Innovació Parc Taulí- I3PT, Universitat Autònoma de Barcelona

²Institut Universitari d'Investigació en Atenció Primària Jordi Gol, Barcelona.

³Departament de Farmacologia, de Terapèutica i de Toxicologia de la Universitat Autònoma de Barcelona

⁵Institut de Medicina Legal i Ciències Forenses de Catalunya,

⁶Universitat Internacional de Catalunya.

⁷Servei de Salut Mental de l'Hospital Universitari Parc Taulí;

⁸Departament de Psiquiatria i de Medicina Legal de la Universitat Autònoma de Barcelona

⁹ Institut de Neuropsiquiatria i Addiccions de l' Hospital del Mar, Institut Municipal d'Investigació Mèdica
caridad.pontes@uab.cat

References

Marc Fradera, Dan Ouchi, Oriol Prat, Rosa Morros, Carles Martin-Fumadó, Diego Palao, Narciso Cardoner, M^aTeresa Campillo, Víctor Pérez-Solà, Caridad Pontes. **Can routine Primary Care Records Help in Detecting Suicide Risk? A Population-Based Case-Control Study in Barcelona** *Arch Suicide Nada*. 2021 Apr 24:1-15. doi: [10.1080/13811118.2021.1911894](https://doi.org/10.1080/13811118.2021.1911894).

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