Estimation of Excess Deaths in Turin from COVID-19 and other causes, October to November 2020

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Introduction:
Understanding the effect of COVID-19 on mortality during this emergency and evaluating unexplained increases in deaths due to nonspecific outcomes can provide a more complete picture of this period and give better instrument to deal with the pandemy in the future.

Objective:
The aim is to evaluate in the city of Turin the excess in the number of deaths from October to November 2020.

Methods:
The number of excess deaths was defined as the difference between the deaths observed in the pandemic period of 2020 and the deaths expected for the years 2014-2019.

Results:
There were approximately 2047 total all causes deaths in Turin October 1 to November 30 2020, representing 630 more deaths than would typically be expected at that time of year. This excess was higher between men than in women. The number of excess all cause death was higher in 80 years old, less evident between 60-79 years old and very few between under 60 years old. Regarding the place of death, the number of excess all cause death was higher in hospital or in some health institutions for old people. Regarding the causes of deaths the explanation of these excess of deaths was COVID-19 infection only for a part of deaths and there are some excess of deaths not caused by COVID-19. The cause of excess of death not COVID-19 seems to be due to cardiovascular diseases, respiratory diseases, psychiatric disorders, neurological diseases, diabetes or nephrological diseases and to other undefined causes.

Conclusions:
The results showed during pandemic an increase of mortality respect to the expected mortality. Only a part of this excess deaths is due to COVID-19 but there is a relevant percentage of excess of deaths apparently not due to COVID-19 but probably due to other causes. A better knowledge of these phenomena could help to improve any gaps in territorial assistance and provide indications for the future management of the pandemic in Europe.

Key messages:
- Increase of mortality in pandemic respect to the expected mortality.
- There is an excess of deaths apparently not due to COVID-19.