

Strong evidence that the economic crisis caused a rise in suicides in Europe: the need for social protection

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We are grateful for the interest our study has generated. Previous research reveals a sharp rise in suicides across Europe coinciding with the financial crisis,^{1,2} particularly in the worst-affected economies. In our recent short report we show a clear, statistically significant association of the economic crisis with the total number of suicides and suicide attempts due to economic reasons in Italy.³ One key advance of this study is that Italy's data can be disaggregated by causes of suicide, enabling us to reveal differential patterns. While there was a statistically significant rise in suicides due to the economic crisis, suicides due to non-economic reasons remained stable. Unfortunately, in their response, Fountoulakis and colleagues neglect these data, continuing to dismiss the growing evidence of a causal link between recession and suicides in Europe.⁴

First, they erroneously claim that 'total suicidal rates remained stable' in Italy. In fact, on an average there was a downward trend in the precrisis years (falling by about 7.9 suicides per year from 2000 to 2007), followed by a rise in the crisis

years (rising by about 110 suicides per year from 2008 to 2010). This increasing suicide rate is a statistically significant departure from past trends ($\chi^2(1)=23.1$, $p=0.001$). Yet without any statistical evidence, Fountoulakis and colleagues assert that the observed changes are 'so small that they fall outside statistical significance'. Further, we report statistical inference tests that reveal that suicides due to economic reasons and suicide attempts due to economic reasons rose significantly ($p=0.016$ and $p=0.009$, respectively), but suicides and suicide attempts due to non-economic reasons remained stable ($p=0.582$).

Second, they argue that our data does not cover Italy's period of unemployment and economic crisis. This is incorrect. Italy's seasonally adjusted Gross Domestic Product (GDP) began falling in the second quarter of 2008, continuing to decline through the end of 2009. Overall Italian unemployment rates, as shown by Fountoulakis and colleagues in table 1,⁵ rose by 39.3% between 2007 and 2010. In Italy, as across Europe, total suicides began to rise when unemployment increased. However, we agree that it is unfortunate that Italy's government has not made more recent data available.

Third, they argue that Italy's Italian National Institute of Statistics data are invalid for assessing suicide trends because 'the reported completed suicidal rates are almost identical with those of attempted suicide'. In fact, total suicides are consistently lower than total attempted suicides in Italy. While it is well known that suicide data may be under-reported in Southern Europe,

invalidating simple cross-national comparisons of the level of suicides, it is valid to assess fluctuations over time within countries.

Evidence has shown that an increase in suicides is a historically recurrent but potentially avoidable response to economic downturns.⁶ Public health researchers should seek to understand why certain societies such as Sweden have succeeded in mitigating mental health risks of recessions and rising unemployment, while other societies including Spain have not. There is an urgent need to implement effective social protection to prevent further rise in suicides in Italy and Europe. And the first step is to recognise that there is a problem.

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