Effect of Economic Crises on Suicide Rates

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Abstract

Economic crises can cause adverse health effects, such as an increase in the prevalence of mental disorders and suicide rates. Nevertheless, these effects might vary across countries. While some countries successfully decouple economic crises from adverse mental health outcomes, in others the suicide rates increase due to economic crises. The differential impact of the economic crises on suicide may depend on some of the policies taken to tackle the financial downturn. Some of the mechanisms that underlay the association between suicide and economic crisis are increased unemployment, job insecurity, decreased earnings, personal debt and sudden bankruptcy. Several measures can be taken in order to prevent or decrease the negative effects of economic downturns on suicide, such as reducing the barriers to accessing health care, improving the quality of treatment of mental disorders with special attention to depression, raising the price of spirits, providing support to tackle financial problems, investing in labour market programmes and encouraging social support.

The question of whether economic crises increase the incidence of suicide cannot definitely be answered with a yes or no. Suicide is a complex phenomenon and it has a wide spectrum of risk factors. Periods of economic recession are tough times that may impact differently on individuals and societies. Individual factors such as

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© Springer International Publishing Switzerland 2016
P. Courtet (ed.), *Understanding Suicide: From Diagnosis to Personalized Treatment*, DOI 10.1007/978-3-319-26282-6_15

vulnerability and resilience may modulate the impact of economic crises on mental health. Besides, at the country level, different policies adopted to combat the financial crisis may have a different impact on the global health of the society (Arie 2013). As a result, the suicide studies that focus on economic crisis provide different results (Luo et al. 2011).

15.1 Suicide and Economic Cycles: A Look Back to History

At the end of the nineteenth century Émile Durkheim (1897), already pointed out the importance that the economic factors had on suicide and stated that serious readjustments in the social order, either due to sudden growth or an unexpected catastrophe, make individuals more inclined to self-destruction. Data from the United States supported this hypothesis by showing that suicide rates vary directly as the rate of change of the economic situation, independently of the direction of the change (Pierce 1967). Other studies show that economic growth can be followed by a decrease in suicide rates, but if economic growth is not accompanied by adequate infrastructures for mental health services, suicide rates might trend up (Blasco-Fontecilla et al. 2012). Therefore, the health policies and the investment in health seem to be better predictors of suicidal behaviour than the economic situation of the country.

A correlation between business depressions and suicides was already found at the beginning of the twentieth century in the United Kingdom, France, the United States and also later in Taiwan. Li (1971) postulated that this association might be explained by the fact that during periods of economic hardship, people suffer a loss of status and suicide might be a way to escape from it. During the years of the Great Depression, there was a significant increase in the proportion of suicide deaths in the United States, rising from 18.1 suicides per 100,000 population in 1929 to 21.6 per 100,000 population in 1932 (Stuckler et al. 2012). The economic crisis that started in the former Soviet Union in the early 1990s had devastating consequences on population health, with a reduction in life expectancy and a dramatic increase in mortality (Stuckler and Basu 2013). In Asia, there was also an increase in the suicide rates during the Southeast Asian crisis that took place in the years 1997 and 1998; Japan, Korea and Hong Kong had an increment in the number of suicides during that period (Chang et al. 2009).

15.2 Differential Impact of the 2008 Financial Recession on Suicide across Countries

As shown in Fig. 15.1, there is evidence that the global financial crisis that started in 2008 is causing adverse health effects, such as an increase in the prevalence of mental disorders and suicide rates (Karanikolos et al. 2013; Wahlbeck and McDaid 2012). Nevertheless, these effects might vary across countries. The World Health

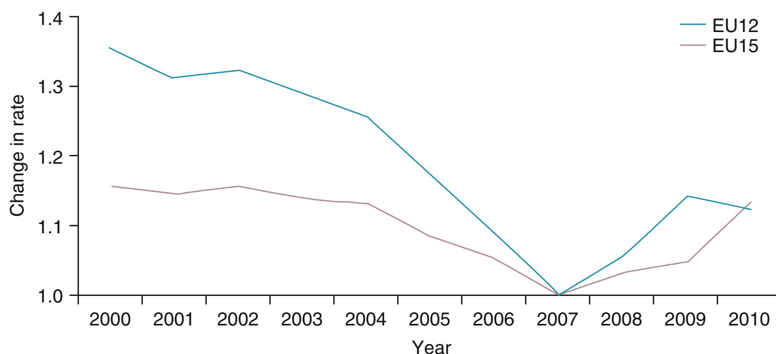

Fig. 15.1 Suicide rates before and after 2007 in the 12 post-2004 (EU12) and 15 pre-2004 (EU15) countries of the European Union (Reprinted from *The Lancet*, 383(9918):748–53, Copyright (2013), with permission from Elsevier (Karanikolos et al. 2013))

Organization (2014) has reported that the global age-standardized suicide rate has fallen to 26 % (23 % in men and 32 % in women) during the 12-year period from 2000 to 2012. Although the reasons for these changes are unknown, it might be associated to the improvement in global health care over that decade (World Health Organization 2014). But this global analysis masks country-specific changes in suicide rates. Among the 172 member states with populations of over 300,000, the 2000–2012 change in age-standardized suicide rates ranged from a decline of 69 % in Maldives to an increase of 270 % in Cyprus (World Health Organization 2014).

In the United States, the suicide rates have increased during the recent economic recession (Reeves et al. 2012). In Europe, the negative impact on health of the economic crisis differs among countries. Iceland's population health improved during the recession years, and in Finland and Sweden, the suicide rate declined during times of economic crisis (Stuckler et al. 2009). On the other hand, in Greece, the most affected country by the economic recession in Europe, there was a sharp rise, with suicides rising by more than 60 % since 2007 (Kentikelenis et al. 2011), despite being the country with the lowest suicide rate in Europe before the recession (Economou et al. 2013; Kentikelenis et al. 2014). In the United Kingdom, the rate of suicides before the economic crisis, from 2000 to 2007, was declining by 57 suicides per year (95 % confidence interval 56–58) in men. In contrast, there was a rise in the number of suicides during the crisis, with 846 more suicides among men than would have been expected if the trend found in the first part of the decade had continued in the period 2008–2010 (Barr et al. 2012). The evidence available for Spain shows mixed results. Although some studies have reported an association between the 2008 financial crisis and a relative increase in suicides (Lopez Bernal et al. 2013), other studies have not identified a strong suicide effect directly linked to the 2008 financial recession (Ayuso-Mateos et al. 2013; Salvador-Carulla and Roca 2013; Fountoulakis et al.

2014). A study comparing the prevalence of suicidal ideation and attempts in Spain during the economic crisis (in 2011–2012) with the prevalence 10 years before, a moment of economic prosperity, found that the prevalence was similar (Miret et al. 2014).

Despite the available evidence that the economic recession is a risk factor for suicide (Luo et al. 2011), the differences across countries cannot be completely explained yet. One possible explanation of the different impact that the crisis had in different countries is related to the policies adopted to respond to the economic downturn. Countries with fiscal austerity policies leading to cuts in public spending in health-care and welfare services might have increases in suicide rates and impairments in health (Arie 2013). This might explain why countries like Iceland and Finland did not suffer an increase in suicide rates, since they did not reduce their health budgets (Arie 2013).

15.3 Is the Impact of Economic Crises on Suicide the Same for Everyone?

There are some inequalities within each country regarding the risk of suicide associated with the economic downturn. The changes in health coverage and the austerity measures imposed on the health-care services in some countries mean that the effects might be higher in the weakest and most vulnerable members of society (Karanikolos et al. 2013). Evans-Lacko et al. (2013) analysing 27 European countries found that following the onset of the 2008 economic recession, the gap in unemployment rates between individuals with and without mental health problems significantly widened, showing that the economic downturn had a greater impact on people with mental health problems.

15.4 How Can Economic Crises Affect Suicide Rates?

Several mechanisms might underlay the association between suicide and economic crises. One of the most devastating consequences of the economic crises is the increase in unemployment. Although being unemployed can be less stigmatizing when the situation is shared by many others in the country, the poor prospects of finding a new job and the limited access to social services and medical treatment due to the austerity measures that might be implemented can make losing the job particularly harmful in times of economic crisis (Norstrom and Gronqvist 2015). Individual or family unemployment increases the risk of major depression (Legido-Quigley et al. 2013). Furthermore, observational and prospective studies also show that unemployed people are at a higher risk of suicide (Agerbo 2005; Dooley et al. 1994; Gunnell et al. 2004). The association between the increases in suicide after the crisis and the increases in unemployment particularly occurs in men (Chang et al. 2013) and in countries where the unemployment level before the crisis was relatively low (Hawton and Haw 2013; Chang et al. 2013). Male

suicide increases are significantly associated with each percentage point rise in male unemployment, by 0.94 % (95 % CI: 0.51, 1.36) (Kentikelenis et al. 2014). Long-term unemployment is associated with a greater risk of both suicide and attempted suicide than being unemployed for shorter periods (Haw et al. 2014). As stated above, vulnerable populations, such as patients with mental disorders, are more prompt to lose their jobs during economic crises (Evans-Lacko et al. 2013). However, in people with no record of serious mental illness, unemployment is still associated with about a 70 % greater suicide risk (Agerbo 2005). Although increased unemployment has led to higher suicide rates in some countries (Reeves et al. 2012; Barr et al. 2012), this has not been proved to be the case in other countries, such as Portugal (Ayuso-Mateos et al. 2013) and the Baltic states (Stankunas et al. 2013). In the United States, the rise in unemployment during the recession is associated with a 3.8 % increase in the suicide rate (Reeves et al. 2012). There is a need for longer observation to ascertain the association between suicide rates and unemployment across countries.

Job loss is not the only stress during economic crises. Other factors that have been linked to an increase of suicide are job insecurity and decreased earnings (Jenkins et al. 2008; Reeves et al. 2012). Job insecurity has been associated with 33 % more risk of having a common mental disorder (Stansfeld and Candy 2006). Sudden bankruptcy has also been found to be a risk factor for suicide (Haw et al. 2014), whereas in Hong Kong it was found that 24 % of all suicides in 2002 concerned people in debt (Yip et al. 2007).

Losing a job, home foreclosure and financial problems lead to an increase in the risk of suicide through comorbidity with other risk factors such as depression, anxiety and increased alcohol consumption (Hawton and Haw 2013), conditions that are associated with a higher risk of suicide. This relationship may be mediated by individual vulnerability and resilience factors, which could explain why some individuals are at a higher risk, while others seem more resilient to economic shocks (Kentikelenis and Papanicolas 2012).

15.5 Can the Effects of Economic Crises on Suicide Be Prevented?

Several measures can be taken in order to prevent or reduce the negative effects that economic downturns might have on suicide. As previously stated, the differential impact of the economic crises on suicide risk may depend on some of the policies taken to tackle the financial downturn. The fact that some societies have successfully decoupled economic crises from adverse mental health outcomes raises hope to eliminate the association of economic shocks and suicidality (Reeves et al. 2014). Although Kentikelenis et al. (2014) pointed out that the important issue is not the magnitude of the cut in health-care spending per se but its effect on health-care access and quality. Societies in which there is a protection on the access to health-care and welfare services are less likely to have health consequences, whereas in countries without comprehensive health-care provision, people most in need of

mental health services may be less inclined to access them because of the costs involved. Countries that have implemented policies that shift costs from the state to the patient are now facing the fact that more people do not have access to the medicines or procedures they need because they cannot afford them (Arie 2013). Conversely, a more universal health coverage should ameliorate the health consequences of the economic crises. Reducing the barriers to accessing health care is essential. Timely and effective access to health care is crucial to reduce the risk of suicide (World Health Organization 2014). Investing in primary care services for the early detection and treatment of common mental disorders and the assessment and management of patients presenting with suicidal behaviour is also a key measure (Haw et al. 2014).

Not augmenting the costs of antidepressants, keeping accessibility to them, rationalizing their use and improving the quality of treatment of depression can be cost-effective measures to reduce the incidence of suicide during crisis periods (Miret et al. 2014). Another cost-effective policy is to raise the price of spirits, since it reduces the harm done by heavy drinking (Anderson et al. 2009; Karanikolos et al. 2013; Wahlbeck and McDaid 2012; World Health Organization. Regional Office for Europe 2011).

Support to tackle financial problems is also a key area. Policy actions to prevent people from becoming over-indebted, as well as to make it easier for them to pay off their debts, can help people who are suffering from the stress of excessive debt (Wahlbeck and McDaid 2012; World Health Organization. Regional Office for Europe 2011). A generous unemployment protection might weaken the detrimental impact on suicide of the increasing unemployment during times of crisis (Norstrom and Gronqvist 2015). Investments in active labour market programmes have been shown to be effective (Stuckler et al. 2009). Since unemployed individuals are at a higher risk, policies should support them and their families. Higher levels of social capital can enhance resilience among vulnerable groups, buffering the impacts of the economic crisis on mental health (Reeves et al. 2015). Therefore, encouragement of social support can also have a protective effect (Haw et al. 2014).

15.6 Concluding Thoughts

Economic recessions, as they relate to cases of individual adversity through job or financial loss, can be associated with individual suicide risk (World Health Organization 2014). Nevertheless, increases in suicide are not inevitable during recessions. Although the correlation between recessions and suicide has been repeatedly reported, there is evidence that some societies have successfully overcome the adverse mental health outcomes of the economic crises. It is essential to identify the factors that lead to an increase in mental health problems and suicide risk during periods of financial hardship in order to adopt policies that protect individuals from the harm of recessions. The long-term effects of the recessions may last into the period of economic recovery. It is important that governments consider how to reduce the fatal consequences of economic recessions and of policy decisions on tackling such crises (Hawton and Haw 2013).

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