


## Spijker and Gumà confirm that during the economic crisis there was an improvement in health indicators in Spain

Spijker y Gumà confirman que durante la crisis económica en España hubo una mejora de indicadores de salud

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Jeroen Spijker and Jordi Gumà<sup>(1)</sup> analyze changes in a subjective indicator of health in three surveys carried out in 2006, 2010 and 2014 in Spain; according to Eurostat, the unemployment in the country rate reached a minimum of 6.1% in March 2007 and during the crisis reached a maximum of 26.3% in July 2013. Spijker and Gumà compare three situations: 2006, when the economic expansion, due mostly to the boom in the construction sector (known as *ladrillazo*) was reaching its end; 2010, when the recession was in full bloom and unemployment reached 20%; and 2014, when the crisis began to remiss. The surveys Spijker and Gumà use are part of the European Union Statistics on Income and Living Conditions (EU-SILC), in which the sampling unit consisted of homes selected probabilistically to ensure the samples would be representative of the Spanish population. Nevertheless, Spijker and Gumà excluded from their analysis those born outside of Spain, a rapidly growing minority of the population with Spanish nationality.

Spijker and Gumà begin by affirming that “the relationship between adverse economic contexts and health” has not been clearly established and speculate that if a crisis compromises the public health infrastructure, this situation could affect the health of those who require care and cannot receive the same services as before. In reality, multiple studies show an improvement in health during recessions, for example in Argentina,<sup>(2)</sup> and attributing an intense and immediate influence of health services on population health is something epidemiologists in general view with skepticism.<sup>(3)</sup> Indeed, during recessions health services often deteriorate while mortality declines,<sup>(4)</sup> which does not seem to be compatible with a decisive influence of medical care in population health.

The results of Spijker and Gumà, in my judgment, correspond to yet another study that confirms that in established market economies, periods of recession coincide with improvements in health. Although this relationship is particularly obvious when health is evaluated through mortality,<sup>(5)</sup> which increases in expansions and reduces in crises, studies like this and others are examples that indicators of morbidity or wellbeing also tend to improve during crises<sup>(6,7)</sup> even as mental health appears to deteriorate and in recession years suicides generally increase. Unfortunately, even though such results have been found in repeated studies, many epidemiologists continue to take into account the studies of Harvey Brenner and Ralph Catalano as if they proved the contrary. With obscure methods that have not been able to be replicated and that have received numerous criticisms, Brenner supposedly demonstrated that crises make mortality rise after a time lag, the duration of which he never clarified. Catalano, after initially maintaining a position similar to that of Brenner, supposedly went on to demonstrate that recessions have no observable effect on mortality, although this has also been refuted.<sup>(8)</sup> Many epidemiologists place too much emphasis on income level and employment situation as key determinants

of health. Certainly there is a mortality gradient by income level: people with lower incomes have a higher hazard of death and, in general, the unemployed have worse health than those who are employed. But other factors like diet, physical activity, civil status, level of social integration and exposures in the work environment greatly influence the hazard of death. Spijker and Gumà do not mention the influence of labor conditions on health, to which the great majority of the adult population tends to be exposed eight hours a day, five days a week and often substantially more. A 40-hour workweek and a month-long annual vacation were “the norm” in Spain in the 1980s and 1990s, but precarization and successive labor reforms (agreed upon by the unions or imposed despite their resistance) led to longer and more flexible hours that without a doubt were extended so as to respond to the market demands in the years of *ladrillazo*. Unfortunately, epidemiologists have paid little attention to working conditions, which clearly depend on the phase of the economic cycle given that, for example, the number of hours worked and the frequency of injuries increase in economic expansions and decrease in recessions.

The most significant of Spijker and Gumà's results is that poor self-perceived health diminishes in all groups of men and women in the first phase of the crisis, from 2006 to 2010, and in almost all groups – except a few in which weak increases are seen – in the second phase of the crisis, from 2010 to 2014. This is not compatible with a harmful effect of the crisis on health, but it is compatible with a beneficial effect, which Spijker and Gumà are reluctant to admit.

Spijker and Gumà present as a research hypothesis that differences in the level of health among people with greater or lesser education levels or between the employed and the unemployed increased as a result of the crisis: “If this were so, it would be possible to understand why at the population level the effects of the crisis on health are not visible, given that one part of the population [...] would be affected, but not another.”<sup>(1)</sup> Nevertheless, when discussing their results they

never indicate whether or not this hypothesis was confirmed.

In 2006, 38.3% of unemployed men considered that they did not have good health while 20.1% of employed men indicated the same; in 2014 the corresponding proportions were 24.3% and 12.7%. In this way, supposing that the crisis began in 2007, after seven years of crisis, the proportion of those who said they had poor health had been reduced almost by half in both groups and the unemployed/employed ratio that in 2006 was almost twofold ( $38.3/20.1 = 1.9$ ) remained the same in 2014 ( $24.3/12.7 = 1.9$ ). Among unemployed and employed women, the ratio in 2016 was  $29.6/21.1 = 1.4$  and in 2014,  $28.4/15.5 = 1.8$ ; although there was also an improvement in both groups, the difference widened. Among those with employment, the proportion that reported not having good health in 2006 was 20.1% in males and 21.1% in females, but in 2014 it was 12.7% in males and 15.5% in females. An improvement was seen in both groups, but in 2014 poor self-perceived health was more frequent among women while in 2006 it was more frequent in men.

Among groups defined by educational level, self-perceived health differences also appear to increase slightly. In this way poor self-perceived health in men with only mandatory education completed as compared to those with university education was  $28.1/15.8 = 1.8$  in 2006 and increased to  $21.4/10.5 = 2.0$  in 2014. These data suggest an increase in self-perceived health differences among socioeconomic and demographic groups during the crisis, which would contradict the decline in mortality during the crisis, especially among groups with worse socioeconomic situations.<sup>(9)</sup>

In men and women classified according to their difficulty to make ends meet, the proportion of those who did not report good health reduced between 2006 and 2010 and again between 2010 and 2014 with one exception: men who did not report financial difficulties, among whom self-perceived poor health surprisingly increased between 2010 and 2014. This appears to be similar to what

Kondo *et al.*<sup>(10)</sup> observed in Japan, where the 1990s crisis significantly affected the health of managers and executives but not that of lower staff and sales personnel.

Perhaps it is worth mentioning that the intense reduction in the proportion of unemployed men with poor self-perceived health between 2006 (38.3%) and 2010 (25.2%) can be easily explained as a dilution effect. Likely in 2006 there were many unemployed men with poor health who had trouble finding work despite the strong labor market with a 6% unemployment rate, extremely low for Spain. In 2010, the unemployment rate had tripled and without a doubt among the millions of unemployed the proportion with poor health had been reduced because many healthy men had lost their jobs due to companies closing or massive layoffs.

Something to highlight in this work is the huge difference in the change profile among men and women shown in the article's Figure 1.<sup>(1)</sup> In this and many other studies, it can be seen that macroeconomic changes affect women much less than men.

This study offers very useful information regarding the evolution of a health indicator during the crisis in Spain. One limitation is that it is based on information obtained from a sample of less than 0.1% of the Spanish population. A sample of this type, even if selected with care in order to be representative, always implies the possibility of important biases to which mortality studies using all registered deaths, for example, are not exposed.

## REFERENCES

1. Spijker J, Gumà J. The effect of the economic crisis on health in Spain according to educational level and employment status: Does the duration of the crisis also matter? *Salud Colectiva*. 2018;14(4):655-670. doi: 10.18294/sc.2018.1297.
2. Abdala F, Geldstein RN, Mychaszula SM. Economic restructuring and mortality changes in Argentina: Is there any connection? In: Cornia GA, Panicià R, (eds.). *The mortality crisis in transitional economies*. New York: Oxford University Press; 2000. p. 328-350.
3. McKinlay JB, McKinlay SM, Beaglehole R. Trends in death and disease and the contribution of medical measures. In: Freeman HE, Levine S, (eds.). *Handbook of medical sociology*. 2nd ed. Englewood Cliffs, NJ: Prentice Hall; 1989. p. 14-45.
4. Tapia Granados JA, Rodriguez JM. Health, economic crisis, and austerity: A comparison of Greece, Finland and Iceland. *Health Policy*. 2015;119(7):941-953.
5. Tapia Granados JA. Macroeconomic effects on mortality: Issues, controversies, and directions for research. In: Scott R, Buchmann M, (eds.). *Emerging trends in the social and behavioral sciences 2017*. New York: John Wiley; 2017. p. 1-16.
6. Ruhm CJ. Healthy living in hard times. *Journal of Health Economics*. 2005;24(2):341-363.
7. Tapia Granados JA, Christine PJ, Ionides EL, Carnethon MR, Diez Roux AV, et al. Cardiovascular risk factors, depression, and alcohol consumption during joblessness and during recessions in CARDIA young adults. *American Journal of Epidemiology*. 2018;187(11):2339-2345.
8. Tapia Granados JA, Ionides EL. Statistical evidence shows that mortality tends to fall during recessions: A rebuttal to Catalano and Bruckner. *International Journal of Epidemiology*. 2016;45(5):1683-1685.
9. Regidor E, Vallejo F, Tapia Granados JA, Viciano-Fernández FJ, Fuente L, Barrio G. Faster mortality decline in low socioeconomic groups during the economic crisis in Spain: A cohort study of 36 million people. *Lancet*. 2016;388:2642-2652.
10. Kondo N, Subramanian SV, Kawachi I, Takeda Y, Yamagata Z. Economic recession and health inequalities in Japan: Analysis with a national sample, 1986-2001. *Journal of Epidemiology and Community Health*. 2008;62(10):869-875.

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