14. Legido-Quigley H, Otero L, La Parra D, Alvarez-Dardet C, Martin-Moreno JM, McKee M. Will austerity cuts dismantle the Spanish healthcare system? BMJ. 2013;346:f2363.

15. Lopez Bernal JA, Gasparrini A, Artundo CM, McKee M. The effect of the late 2000s financial crisis on suicides in Spain: an interrupted time-series analysis. European Journal of Public Health. 2013;23(5):732-736.

16. Bartoll X, Palència L, Malmusi D, Suhrcke M, Borrell C. The evolution of mental health in Spain during the economic crisis. European Journal of Public Health. 2013. DOI:10.1093/eurpub/ckt208.

17. Urbanos-Garrido RM, Lopez-Valcarcel BG. The influence of the economic crisis on the association between unemployment and health: an empirical analysis for Spain. European Journal of Health Economics. 2014. DOI:10.1007/s10198-014-0563-y.

18. Gili M, Roca M, Basu S, McKee M, Stuckler D. The mental health risks of economic crisis in Spain: evidence

from primary care centres, 2006 and 2010. European Journal of Public Health. 2013;23(1):103-108.

19. Rajmil L, Medina-Bustos A, Fernández de Sanmamed MJ, Mompart-Penina A. Impact of the economic crisis on children's health in Catalonia: a before-after approach. BMJ Open. 2013;3(8):e003286. DOI:10.1136/bmjopen-2013-003286.

20. Novoa AM, Ward J, Equip de recerca Sophie. Habitatge i salut en població vulnerable. In: Llar, habitatge i salut acció i prevenció residencial. Barcelona: Caritas Diocesana de Barcelona; 2013. Col-lecció Informes No.2.

CITATION

Borrell C, Rodríguez-Sanz M, Bartoll X, Malmusi D, Novoa AM. The suffering of the population in the economic crisis of the Spanish State. Salud Colectiva. 2014;10(1):95-98.

The complex relationships between economic crisis and health: general mortality decreases, but the problem is not solved

Las complejas relaciones entre crisis económica y salud: La mortalidad general disminuye pero el problema no está resuelto

Facchini, Luiz Augusto¹; Nunes, Bruno Pereira²

¹PhD in Medicine. Associate Professor, Department of Social Medicine, Postgraduate Programme in Epidemiology, Federal University of Pelotas, Brazil. luizfacchini@gmail.com

²PhD student in Epidemiology. Department of Social Medicine, Postgraduate Programme in Epidemiology, Federal University of Pelotas, Brazil.

Discussion of: Tapia Granados JA.The economic crisis and health in Spain and Europe: Is mortality increasing? Salud Colectiva. 2014;10(1):81-91.

Jose Antonio Tapia Granados' article entitled "The economic crisis and health in Spain and Europe: Is mortality increasing?" (1) is of undeniable merit, spurring debate about the effects of the prolonged world economic crisis on population health and wellbeing. The historical interest of this subject is not only based on the frequency and the seriousness of the economic crises in the history of contemporary societies, but also from the political and social relevance of the most affected countries, especially in Europe and the US.

In this discussion of Tapia Granados' article, we highlight his contributions and critically analyze the questions that were raised, searching for a better understanding of the dilemmas, enigmas and controversies regarding the effects of the economic crisis on the health and wellbeing of the population.

When commenting upon the social effects of the economic crisis started in 2007, the author contradicts the theory that negative effects are already being observed in the health of the European population, especially where austerity policies are applied more intensely. Tapia highlights the current economic crisis as an expression of the irregular cycle of expansion-recession of market economies, and rejects comparing it with the increase in mortality - which reached 30% in Russia - during the crisis that dismantled the Soviet Union and the European socialist bloc in the 1990s. The economic crisis that determined the complete reorganization of the mode of production and the sociopolitical systems of Eastern Europe was contextually and historically different from the current crisis (2,3).

One of the contributions of the article is to reinforce the understanding that economic crises may differ from one another, and so do their effects on the health of the population. In contextual and historical terms, it is important to emphasize the relevance of the stage of capitalist development as well as that of the accumulation of goods and wealth in each nation in order to define the duration and intensity of the economic crisis and its effects on the health of the population (4-6).

The effects of the crisis on societies where most of the population is in the middle-income bracket and, despite the crisis, manage to maintain their social position, can differ widely from the effects on societies where the collapse of the sociopolitical system, which increased citizenship rights and the coverage of public services, suddenly left the greater part of population in poverty and without assistance of the State. Cutbacks in public spending, barriers to access, and other austerity measures used by governments of all shades are one thing when the population has an established social infrastructure that is maintained despite the complications. Another very different thing is the dismantling of a network of social protection and solidarity and the privatization of the social health and welfare services.

In contrast, the author states that in capitalist economies, the periods of economic crisis do not necessarily harm the health and well-being of the population, but they might even have positive effects (7-10). Likewise, he rejects the theory that the quality of health care may be associated to significant changes in mortality in the short term (11). Tapia highlights that, despite the increase in unemployment, crude mortality decreased and life expectancy increased during the Great Depression of 1930 in the US, during the oil crisis between 1975 and 1978 in Italy and Spain, and also in the Asian crisis between 1976 and 2003. The tendency is repeated in the present economic crisis, even in the countries of the former soviet bloc, which suffered the increase in mortality in the crisis of the 1990s.

For the author, in the capitalist nations of the Americas, Europe and Asia, health has evolved better in the recessions than in the periods of economic expansion. In accordance with different authors, Tapia affirms that there exists no evidence of harmful effects of the crisis on general mortality in European countries, including those with serious economic problems (12,13). Therefore, it is relevant to contemplate a possible positive effect of

the economic crisis on mortality in high-income countries – but this does not necessarily equate with a beneficial effect on health. As a result, generalizing a positive effect of the crisis and unemployment on population health is misleading.

Mortality has a complex network of determinants that contemplate the whole life cycle, from conception to the health of the elderly (14). The impossibility of analyzing mortality in every country according to individual characteristics, such as economic class, profession, morbidity and life habits, complicates the use of this indicator for assessing more deeply the health of the population and the ensuing consequences during economic crises. Thus, the author's findings do not eliminate the need to understand the possible negative effects that may be manifested in other areas of health, in its bio-psycho-social complexity.

According to Tapia and other authors (15,16), short-term effects of the economic crises on mortality are small and may be confused with the historical decreasing trend in all-cause mortality, a phenomenon observed even before the development of effective sanitary measures in European countries and the US. From a long-term perspective, economic growth is related to decreases in mortality (16). Thomas Mckeown (6,17) attributes the increase in the world population from 1700 onwards to great social and economic changes more than to public health actions or medical interventions (17).

The meaning of economic crises in a context of significant poverty is quite different from a context where prosperity is the rule for most of the population. In poorer countries, the evidence suggests an increase in mortality, even in the primary causes (18). In countries with deep social inequalities and with a large part of the population living in poverty, the effects of economic growth and social development are positive for the health and well-being of the population, including food security and health services access, especially if a stratification of the population is carried out according to essential socioeconomic and demographic characteristics (19). Facing a circumstantial crisis widely differs from living in a state of chronic crisis where prosperity does not exist even as an exception.

As a consequence, from the discussion of Tapia's article, different questions arise regarding more suitable conceptual models, dimensions and indicators to test the effects of the crises on the health and well-being of the population, controlling the effect of health services and systems.

The author highlights that total crude mortality rates are easy to understand and their large variations in the short term may provide a rough indication of the evolution of the health of the population. The study of vital statistics presents several advantages related to the continuous flow of information, the ease in obtaining such information and the ability to carry out international comparisons. Obtaining information on disease incidence is much more difficult.

Nonetheless, mortality may present problems related to the quality of the information and the excessive aggregate data, without precisely expressing the deterioration in the health situation of the population as the crisis may be better characterized by chronic and acute morbidity and by the use of hospital and ambulatory health care services (20). As asserted by the author, in order to finely estimate the evolution of population health, crude mortality rates are not enough since they are significantly influenced by the population age structure. A society undergoing an aging process may generate a high mortality rate, although health conditions are good. Furthermore, the negative effects of the crisis on health, including mortality, may be more evident in more remote and poor municipalities and in populations with lower income and educational levels, and in immigrants, Blacks and Latinos (5).

Therefore, not finding a negative effect of the economic crises on general mortality does not imply the lack of negative effects. On the contrary, this may indicate that the study of mortality (crude rate) and well-being (life expectancy) measures of large contextual aggregates, normally countries and total population, may hide the particular effect of the crises, against the historical trend of mortality decrease and life expectancy increase.

In this respect, the value of population surveys with a wide scope and detail capacity that may collect data and produce results rapidly is highlighted. Primary data surveys are more suitable to detail the effects of the crisis, in the short-term and long-term, in different socioeconomic, occupational, age, ethnic and education groups, among other relevant characteristics. By controlling the potential fallacy of ecological research studies (21), there is more probability of identifying the negative effects of the crisis that will certainly be more evident among the poorest and the most vulnerable. They also permit the assessment of the differences among the comparison groups, increasing our understanding related to the crisis capacity of worsening inequalities. Despite the difficulties and costs, longitudinal studies are also recommended to show the crisis effects in the long term (15).

Tapia Granados' article delves into the discussion of the crisis effects on mortality decrease when observing the tendency of mortality rates in Spain and comparing their oscillations in different countries and crises from 1930 onward. The hypothesis stating that the crisis produces positive effects on mortality seems well justified. However, it does not cover all possibilities of a more detailed study, which may permit the understanding of the uncertain, ambiguous, surprising and unexpected aspects shown in the text.

BIBLIOGRAPHIC REFERENCES

1. Tapia Granados JA. La crisis y la salud en España y en Europa: ¿Está aumentando la mortalidad? Salud Colectiva. 2014;10(1):81-91.

2. Cornia GA, Paniccià R. The mortality crisis in transitional economies. New York: Oxford University press; 2000.

3. Stillman S. Health and nutrition in Eastern Europe and the former Soviet Union during the decade of transition: A review of the literature. Economics and Human Biology. 2006;4(1):104-146.

4. Facchini LA. Por que a doença? A inferência causal e os marcos teóricos de análise. In: Buschinellim JTP, Rocha LE, Rigotto RM. Isto é trabalho de gente?: Vida, doença e trabalho no Brasil. São Paulo: Vozes; 1993. p. 33-55.

5. Navarro V. Race or class versus race and class: mortality differentials in the United States. Lancet. 1990;336(8725):1238-1240.

6. McKeown T. The modern rise of population. New York, NY: Academic Press; 1976.

7. Ruhm CJ. Are recessions good for your health? Quarterly Journal of Economics. 2000;115(2):617-650.

8. Gerdtham UG, Ruhm CJ. Deaths rise in good economic times: evidence from the OECD. Economics and Human Biology. 2006;4(3):298-316.

9. Tapia Granados JA. Increasing mortality during the expansions of the US economy, 1900-1996. International Journal of Epidemiology. 2005;34(6):1194-1202.

10. Ruhm CJ. A healthy economy can break your heart. Demography. 2007;44(4):829-848.

11. McKinlay JB, McKinlay SM, Beaglehole R. Trends in death and disease and the contribution of medical measures. In: Freeman HE, Levine S, editors. Handbook of Medical Sociology. 2a ed. Englewood Cliffs, NJ: Prentice Hall; 1989. p. 14-45.

12. Ogburn WF, Thomas DS. The influence of the business cycle on certain social conditions. Journal of the American Statistical Association. 1922;18(139):324-340.

13. Tapia Granados JA, Ionides EL. The reversal of the relation between economic growth and health progress: Sweden in the 19th and 20th centuries. Journal of Health Economics. 2008;27(3):544-563.

14. Galobardes B, Lynch JW, Smith GD. Is the association between childhood socioeconomic circumstances and cause-specific mortality established?: Update of a systematic review. Journal of Epidemiology and Community Health. 2008;62(5):387-390.

15. Khang YH, Lynch JW, Kaplan GA. Impact of economic crisis on cause-specific mortality in South Korea. International Journal of Epidemiology. 2005;34(6):1291-1301.

16. Rolden HJ, van Bodegom D, van den Hout WB, Westendorp RG. Old age mortality and macroeconomic cycles. Journal of Epidemiology and Community Health. 2014;68:44-50.

17. Colgrove J. The McKeown thesis: a historical controversy and its enduring influence. American Journal of Public Health. 2002;92(5):725-729.

18. Falagas ME, Vouloumanou EK, Mavros MN, Karageorgopoulos DE. Economic crises and mortality: a review of the literature. International Journal of Clinical Practice. 2009;63(8):1128-1135.

19. Facchini LA, Nunes BP, Motta JVS, Tomasi E, Silva SM, Thumé E, Silveira DS, Siqueira FV, Dilélio AS, Saes MO, Miranda VIA, Volz PM, Osório A, Fassa AG. Insegurança alimentar no Nordeste e Sul do Brasil: magnitude, fatores associados e padrões de renda per capita para redução das iniquidades. Cadernos de Saúde Pública. 2014;30(1):161-174.

20. Kim H, Chung WJ, Song YJ, Kang DR, Yi JJ, Nam CM. Changes in morbidity and medical care utilization after the recent economic crisis in the Republic of Korea. Bulletin of the World Health Organization. 2003;81(8):567-572.

21. Rothman KJ, Greenland S. Modern epidemiology. 2a ed. Philadelphia: Lippincott-Raven; 1998.

CITATION

Facchini LA, Nunes BP. The complex relationships between economic crisis and health: general mortality decreases, but the problem is not solved. Salud Colectiva. 2014;10(1):98-101.

The translation of this article is part of an interdepartmental collaboration between the Undergraduate Program in Sworn Translation Studies (English < > Spanish) and the Institute of Collective Health at the Universidad Nacional de Lanús. This article was translated by Eliana Capizzi and Braian Castaño, reviewed by Pamela Vietri and modified for publication by Vanessa Di Cecco.

The Great Recession, a cause of health improvement? A reply to my critics

¿La Gran Recesión como causa de mejoras de la salud? Respuesta a mis críticos

Tapia Granados, José A.¹

¹Physician, PhD in Economics. Associate Professor, Department of Politics, Drexel University, Philadelphia, US. jat368@drexel.edu

Reply to the debate on: Tapia Granados JA. The economic crisis and health in Spain and Europe: Is mortality increasing? Salud Colectiva. 2014;10(1):81-91.

My affirmation (1) that the economic crisis has paradoxically had a positive effect on health in Europe has provoked responses ranging from qualifications and clarifications (2,3) to the more or less outright rejection of those who suggest that I am irresponsible for saying such a thing (4) or who state that "generalizing a positive effect of the crisis is mistaken" (2). In this text, I will reply to the specific criticisms.

La Parra and Álvarez-Dardet (3) criticize that in my work the possible relation between health and the economic crisis "is not analyzed through any bivariate or multivariate analysis technique," in spite of which I affirm that there exists a "positive correlation between changes in unemployment and gains in life expectancy at birth." This criticism is surprising, since my work