Statistical Authority,[2] the average suicide rate increased by 18% in men for 2009–11 compared with 2006–08, whereas it decreased non-significantly in women by 7%.

Rather than a fragmentary selective measure, a systematic analysis of all available national data is required to provide solid facts and figures to determine the magnitude of the consequences of austerity on health and for the design of effective public health policy strategies.

We declare that we have no competing interests.

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1 Kentikelenis A, Karanikolos M, Reeves A, McKee M, Stuckler D. Greece's health crisis: from austerity to denialism. *Lancet* 2014; **383:** 748–53.
2 Hellenic Statistical Authority. http://www.statistics.gr/portal/page/portal/ESYE (accessed March 1, 2014).
3 Vlachadis N, Kornarou E. Increase in stillbirths in Greece is linked to the economic crisis. *BMJ* 2013; **346:** f1061.
4 Vlachadis N, Kornarou E, Ktenas E. The preterm births epidemic in Greece. *Acta Obstet Gynecol Scand* 2013; **92:** 1231.
5 Vlachadis N, Iliodromiti Z, Creatsas G, Vrachnis N. Preterm birth time trends in Europe: the worrying case of Greece. *BJOG* 2014; **121:** 372–73.

Not everyone will agree with the views of Kentikelenis and colleagues[1] about the effects of austerity on Greece's health system—namely, that hospital budgets have dropped after a period of inefficiency and corruption. The need for cuts was clear long before the financial crisis, but there is a reluctance to introduce reforms, mainly due to the political cost.

The effect of hospital cuts is difficult to estimate and records can be inaccurate. No national cancer registry existed in Greece after 2005 following an administrative reform.

Expenditure on drugs in Greece is misrepresented in the media. Although the use of generics should be encouraged, in many cases only the branded version is available.

However, expensive drugs represent a high proportion of pharmaceutical expenditure and it is uncertain whether they are all prescribed according to good medical practice. Surveillance is practically difficult; overprescription and off-label prescription are common. Restricting drugs for only licensed indications is internationally encouraged[2] but not done in practice in Greece.[3] According to the Greek Medicines Agency, the cost of all off-label prescriptions given special permission for reimbursement was roughly €100 million in 2013 (of the €2·2 billion of total spending on drugs).

Although not helped by the financial crisis, many people believe that the problems began well before the present period of austerity.[3]

I declare that I have no competing interests.

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1 Kentikelenis A, Karanikolos M, Reeves A, McKee M, Stuckler D. Greece's health crisis: from austerity to denialism. *Lancet* 2014; **383:** 748–53.
2 Radley DC, Finkelstein SN, Stafford RS. Off-label prescribing among office-based physicians. *Arch Intern Med* 2006; **166:** 1021–26.
3 Sissouras A. Greek crisis fallout is an opportunity for health. *Bull World Health Organ* 2014; **92:** 8–9.

Kentikelenis and colleagues[1] accurately describe the effect of the Greek financial crisis on health and the health system. The data supporting their assertions are many and undisputable. Thus, the term "tragedy" in their initial article[2]—although perhaps an exaggeration at first—now seems justified.

However, we disagree with the authors' claim that ending the Greek health crisis might come from two recent developments that hold promise. The first concerns a signed agreement (July, 2013) with WHO for support and planning of health reforms, and the second is a new health voucher programme (September, 2013) to address some health needs of poor patients.

Uninsured individuals face extremely strict prerequisites to benefit from the voucher, resulting in most of them being excluded from the beginning.[3]

Regarding the help from WHO, this resulted in the Greek Government ignoring proposals from the domestic scientific community and the largest primary health care provider (known as EOPYY), and abolishing existing public services in February, 2014. This led 5000 physicians and 3000 other health professionals to the government's availability scheme (in which the employee's wage is reduced to 75%) and professional uncertainty.

We refuse to believe that WHO technical specialists are advocates of privatisation of the Greek health system. We hope that they will consider proposals from health professionals and academics[4] for policies based on equity and efficiency, which will help the recovery of Greece's health system.

We declare that we have no competing interests

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1 Kentikelenis A, Karanikolos M, Reeves A, McKee M, Stuckler D. Greece's health crisis: from austerity to denialism. *Lancet* 2014; **383:** 748–53.
2 Kentikelenis A, Karanikolos M, Papanikolas I, Basu S, McKee M, Stuckler D. Health effects of financial crisis: omens of a Greek tragedy. *Lancet* 2011; **378:** 1457–58.
3 Ministry of Health. Health voucher program. www.healthvoucher.gr/showPage.aspx?id=1&cat=1 (accessed Feb 23, 2014; in Greek).
4 Niakas D. Greek economic crisis and health care reforms: correcting the wrong prescription. *Int J Health Serv* 2013; **43:** 597–602.

Authors' reply

We welcome the interest in our analysis of the health effects of the Greek economic crisis.[1] Fountoulakis and Theodorakis critique our paper but their choice of data is selective and misleading. First, by contrast with

their claims, the latest available data from the Hellenic Centre for Disease Control show that tuberculosis incidence is rising (appendix),[2] including in people of Greek origin.[2] Second, they contend that rising HIV infections are "almost entirely" driven by intravenous drug users; we also noted the importance of this group but also the near tripling of infections without a transmission mode classification between 2010 and 2012, suggesting possible miscoding across other categories. Third, they cite preliminary estimates of suicide rates[3] suggesting that there was a significant decrease in 2012. The official data by the Hellenic Statistical Authority show a 6·5% increase compared with 2011.[4] Fourth, we agree that the important issue is not the magnitude of the cut to health-care spending per se but its effect on health-care access and quality. For example, we have previously noted that budget reductions have been accompanied by a 47% increase in unmet health-care needs. Indeed, in a recent speech in the Greek Parliament,[5] the Minister of Health conceded that between 2 million and 3 million people—ie, 18–27% of the Greek population—now lack health insurance.

Fifth, the authors suggest that childhood poverty did not rise substantially, but overlook Eurostat data revealing that both severe material deprivation rates in children younger than age 6 years and prevalence of households reporting an inability to afford nutritious food for their children more than doubled between 2008 and 2012 (appendix).

Turning to infant mortality rates, we cite WHO data demonstrating that long-term decreases in infant mortality rates reversed in 2009. Fountoulakis and Theodorakis contend that this increase was due to perinatal disorders and congenital malformations. Their observation is surely sufficient justification for concern about access to health services.

Vlachadis and colleagues argue that we used "fragmentary selective measures", and propose comparing the 4 years before crisis with the same period since its onset. However, taking a simple average of crisis years can mask year-to-year changes as socioeconomic conditions have worsened. In their own analysis of the same indicators, they still find that the indicators we used are "temporarily or partly associated with austerity".

Konstantopoulos falsely attributes statements to our team. We agree that the Greek health system suffered inefficiencies before the crisis and called for expanding access to generic medicines. However, as we note, the scale and speed of change made it difficult for hospitals to adapt appropriately to changing circumstances.

Finally, Kontodimopoulos and colleagues question our optimism concerning the health voucher programme and recent collaborations between the Greek Ministry of Health and WHO. At the time of writing, it was too early to ascertain their effects. However, this supports our call to monitor closely the situation of vulnerable groups and the untested policy experiments taking place on the health of the Greek population.

AK was invited, as part of an expert team, to provide technical advice to WHO on the issue of health-care provision to those without insurance in Greece. The other authors declare that they have no competing interests.

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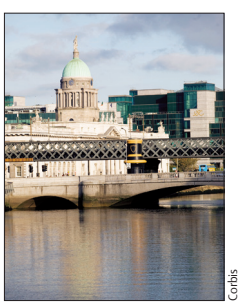
1 Kentikelenis A, Karanikolos M, Reeves A, McKee M, Stuckler D. Greece's health crisis: from austerity to denialism. *Lancet* 2014; **383:** 748–53.
2 Spala G. Epidemiological data for tuberculosis in Greece. Athens: Hellenic Centre for Disease Control and Prevention (KEELPNO), 2013.
3 Michas G. Suicides in Greece: a light at the end of the tunnel. *BMJ* 2013; **347:** f6249.
4 Hellenic Statistical Authority (ELSTAT). Press release: causes of deaths, 2012. http://www.statistics.gr/portal/page/portal/ESYE/BUCKET/A1605/PressReleases/A1605_SPO09_DT_AN_00_2012_01_F_GR.pdf (accessed April 14, 2014; in Greek).
5 Hellenic Parliament. Response to parliamentary question by Mr. A. Georgiadis. Hellenic Parliament. 2014. http://www.hellenicparliament.gr/Vouli-ton-Ellinon/ToKtirio/Fotografiko-Archeio/#63c7c8df-0843-45f6-8cdf-74f520b4101e (accessed March 21, 2014).

See **Online** for appendix

The Irish health-care system and austerity: sharing the pain



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As Ireland exits its bailout, the experience of the Irish health system provides valuable insights into the opportunities and pitfalls of managing austerity. Ireland is being held up for prudent adjustment and austerity. Yet 6 years into the crisis, Ireland's economy is only just emerging from its second bout of recession, its debt to GDP ratio stands at about 120%, and its fiscal deficit, although falling, is still above the 3% European Union guideline.[1] It is revealing to sift through the evidence and see how the Irish health system has adjusted to this macroeconomic environment, providing lessons for those who must embrace austerity.

The Irish health system has endured radical resource cuts. From 2009 to 2013 financing of the Health Service Executive fell by 22%, which amounted to almost €3·3 billion less in public funding.[2] Staffing of public services has also fallen by 12 200 whole time equivalents or 10% of total staffing from its peak in 2007.[2] A major concern at the beginning of the crisis was that the Irish health-care system would not be able to sustain cuts and maintain services and quality. Nevertheless, many indicators of performance suggest better outputs with fewer resources. There are now more day cases in the hospital sector, more attendances and admissions at

For the **Eurostat database** see http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database