



## Greece's health crisis: from austerity to denialism

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Greece's economic crisis has deepened since it was bailed out by the international community in 2010. The country underwent the sixth consecutive year of economic contraction in 2013, with its economy shrinking by 20% between 2008 and 2012, and anaemic or no growth projected for 2014. Unemployment has more than tripled, from 7·7% in 2008 to 24·3% in 2012, and long-term unemployment reached 14·4%. We review the background to the crisis, assess how austerity measures have affected the health of the Greek population and their access to public health services, and examine the political response to the mounting evidence of a Greek public health tragedy.

### The Greek crisis

The Greek economy accumulated severe structural troubles before the crisis. Between entry to the Eurozone and the onset of the crisis, annual economic growth averaged 4·2%,<sup>1</sup> spurred by capital inflows.<sup>2</sup> However, overspending was concealed from public gaze with the help of investment banks<sup>3</sup> and by reporting of inaccurate data.<sup>4</sup>

When the financial crisis hit US banks in 2008, the Greek Prime Minister Kostas Karamanlis pronounced the economy to be “armoured” against the risk of contagion.<sup>5</sup> However, subsequent events moved the country to the epicentre of a financial storm. A new government, elected in 2009, revised the deficit from a projected 3·7% to 15·8% of gross domestic product (GDP).<sup>6</sup> As the scale of economic mismanagement became apparent, borrowing costs shot up to unaffordable levels. Much of the country's debt was held by banks and pension funds in other European countries that were already fragile,<sup>7</sup> and the international community feared that Greece might be forced to default on its debt, with profound implications for the global economy.

By early 2010, the Greek Government was in talks with the international community about a possible bailout. In May, the first package was agreed; in exchange for a €110 billion loan, the government would implement far-ranging austerity measures and structural reforms overseen by the European Commission, the European Central Bank, and the International Monetary Fund (collectively known as the Troika). A second bailout was agreed in October, 2011, demanding further cuts and reforms but providing another €130 billion in funds, and was voted in by an interim government in February, 2012.

### Direct health effects of austerity

#### Background

Two main strategies can reduce deficits in the short term: cutting of spending and raising of revenue. The Greek Government used both at the behest of the Troika, albeit with an emphasis on reduction of public expenditure. 3 years ago, we drew attention to the effects of the austerity measures on the health of the Greek people.<sup>8</sup>

#### Cuts to public health spending

Greece has been an outlier in the scale of cutbacks to the health sector across Europe.<sup>9</sup> In health, the key objective

of the reforms was to reduce, rapidly and drastically, public expenditure by capping it at 6% of GDP. To meet this threshold, stipulated in Greece's bailout agreement, public spending for health is now less than any of the other pre-2004 European Union members.<sup>2</sup> In 2012, in an effort to achieve specific targets, the Greek Government surpassed the Troika's demands for cuts in hospital operating costs and pharmaceutical spending.<sup>10,11</sup> The former Minister of Health, Andreas Loverdos, admitted that “the Greek public administration...uses butcher's knives [to achieve the cuts].”<sup>12</sup> The negative effects of these cuts are already beginning to manifest.

Prevention and treatment programmes for illicit drug use faced large cuts, at a time of increasing need associated with economic hardship. In 2009–10, the first year of austerity, a third of the street work programmes were cut because of scarcity of funding, despite a documented rise in the prevalence of heroin use.<sup>13</sup> At the same time, the number of syringes and condoms distributed to drug users fell by 10% and 24%, respectively.<sup>14</sup> These events had the expected effects on the health of this vulnerable population; the number of new HIV infections among injecting drug users rose from 15 in 2009 to 484 in 2012 (figure 1),<sup>15</sup> and preliminary data for 2013 suggest that the incidence of tuberculosis among this population has more than doubled compared with 2012.<sup>16</sup> Although needle and syringe distribution has since increased,<sup>17</sup> partly in response to media reports and popular pressure, distribution is still well below the minimum target of 200 per drug user per year recommended by the European Centre for Disease Control.<sup>14</sup> In his first act at the end of June, 2013, Adonis Georgiadis, the new Minister of Health (the fourth in a little more than a year), re-introduced a controversial law stipulating forced testing for infectious diseases under police supervision for drug users, prostitutes, and immigrants—a move that is not only unethical but also counterproductive, because it deters marginalised groups from seeking testing during HIV outbreaks.<sup>18</sup> The Joint United Nations Programme on HIV/AIDS has called for the repeal of the law, because it “could serve to justify actions that violate human rights”.<sup>19</sup>

Additionally, drastic reductions to municipality budgets have led to a scaling back of several activities (eg, mosquito-spraying programmes<sup>20</sup>), which, in combination with other factors, has allowed the re-emergence of locally transmitted malaria for the first time in 40 years.<sup>21,22</sup>

Through a series of austerity measures, the public hospital budget was reduced by 26% between 2009 and 2011,<sup>23</sup> a substantial drop in view of the fact that expenditure should have increased through automatic stabilisers.<sup>24</sup> Evidence of the health effects of these cuts, at a time of increasing demand, is scarce, but staff workloads have increased and waiting lists have grown according to some accounts.<sup>8,25,26</sup> Rural areas have particular difficulties, with shortages of medicines and medical equipment.<sup>27</sup>

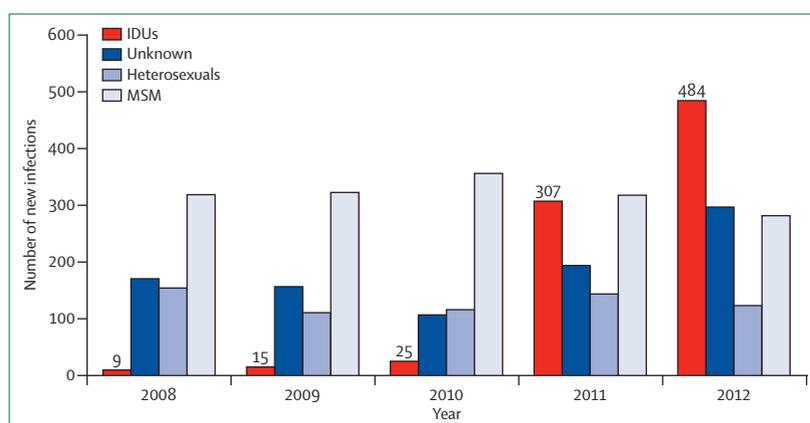
Another key cost targeted by the Troika was publicly funded pharmaceutical expenditure, for which reform was necessary because of very high rates of prescription of branded drugs.<sup>28</sup> The stated aim was to reduce spending from €4.37 billion in 2010 to €2.88 billion in 2012 (this target was met), and to €2 billion by 2014.<sup>29</sup> However, there have been many unintended results and some medicines have become unobtainable because of delays in reimbursement for pharmacies, which are building up unsustainable debts.<sup>30</sup> Many patients must now pay up front and wait for subsequent reimbursement by the insurance fund.<sup>31</sup> Findings from a study<sup>32</sup> in Achaia province showed that 70% of respondents said they had insufficient income to purchase the drugs prescribed by their doctors.<sup>32</sup> Pharmaceutical companies have reduced supplies because of unpaid bills and low profits.<sup>33</sup>

### Cost shifting to patients

Despite the rhetoric of “maintaining universal access and improving the quality of care delivery”<sup>29</sup> in Greece’s bailout agreement, several policies shifted costs to patients, leading to reductions in health-care access.

In 2011, user fees were increased from €3 to €5 for outpatient visits (with some exemptions for vulnerable groups), and co-payments for certain medicines have increased by 10% or more dependent on the disease.<sup>24</sup> New fees for prescriptions (€1 per prescription) came into effect in 2014.<sup>24</sup> An additional fee of €25 for inpatient admission was introduced in January 2014, but was rolled back within a week after mounting public and parliamentary pressure. Additional hidden costs—eg, increases in the price of telephone calls to schedule appointments with doctors—have also created barriers to access.<sup>26</sup>

Another concern is the erosion of health coverage. Social health-insurance coverage is linked to employment status, with newly unemployed people aged 29–55 years covered for a maximum of 2 years. Rapidly increasing unemployment since 2009 is increasing the number of uninsured people. Those without insurance are eligible for some health coverage after means testing, but the criteria for means testing have not been updated to take into account the new social reality.<sup>34</sup> An estimated 800 000 potential beneficiaries are left without unemployment benefits and health coverage.<sup>35</sup> To respond to unmet need, several social clinics (primary care practices staffed by volunteer doctors) have sprung up in urban centres.<sup>36</sup> Médecins du Monde has scaled up operations in



**Figure 1: Instances of HIV infections by transmission category**

IDUs=intravenous drug users. MSM=men who have sex with men. Figure based on data from the European Centre for Disease Prevention and Control and the WHO Regional Office for Europe.<sup>15</sup>

Greece, and reports increasing numbers of Greek citizens receiving health services and drugs from their clinics as the economic crisis deepens;<sup>37</sup> before the crisis, such services mostly targeted immigrant populations.

To examine whether these policies have affected access to health services, we analysed the most recent data from the European Union Statistics on Income and Living Conditions, a nationally representative survey.<sup>38</sup> Compared with 2007 (a pre-crisis benchmark), a significantly increased number of people reported unmet medical need in 2011 (table 1). Inability to obtain care increased most for older people. These changes mostly result from increases in respondents reporting an inability to afford care, or to reach services because of distance or scarcity of transportation (table 2). Difficulty in transportation overlaps with financial reasons, because hikes in the cost of transport affect mobility, especially for the poorest people, and patients who might have afforded private clinics before the crisis now need to travel to access publicly provided services.

### Indirect health effects of austerity

If the policies adopted had actually improved the economy, then the consequences for health might be a price worth paying. However, the deep cuts have actually had negative economic effects, as acknowledged by the International Monetary Fund.<sup>39</sup> GDP fell sharply and unemployment skyrocketed as a result of the economic austerity measures, which posed additional health risks to the population through deterioration of socioeconomic factors.

Mental health services have been seriously affected. Rapid socioeconomic change can harm mental health,<sup>40</sup> unless it is ameliorated by appropriate social policies.<sup>41</sup> However, in Greece public and non-profit mental health service providers have scaled back operations, shut down, or reduced staff; plans for development of child psychiatric services have been abandoned; and state

For the Hellenic Statistical Authority see <http://www.statistics.gr/portal/page/portal/ESYE>

funding for mental health decreased by 20% between 2010 and 2011, and by a further 55% between 2011 and 2012.<sup>42</sup> Austerity measures have constrained the capacity of mental health services to cope with the 120% increase in use in the past 3 years.<sup>42</sup> The available evidence points to a substantial deterioration in mental health status. Findings from population surveys suggest a 2.5 times increased prevalence of major depression, from 3.3% in 2008 to 8.2% in 2011, with economic hardship being a major risk factor.<sup>43</sup> Investigators of another study<sup>44</sup> reported a 36% increase between 2009 and 2011 in the number of people attempting suicide in the month before the survey, with a higher likelihood for those experiencing substantial economic distress. Deaths by

suicide have increased by 45% between 2007 and 2011, albeit from a low initial amount. This increase was initially most pronounced for men, but 2011 data from the Hellenic Statistical Authority also suggest a large increase for women (figure 2).

Greece's austerity measures have also affected child health, because of reduced family incomes and unemployment of parents. The proportion of children at risk of poverty has increased from 28.2% in 2007 to 30.4% in 2011,<sup>45</sup> and a growing number receive inadequate nutrition.<sup>46</sup> A 2012 UN report emphasised that "the right to health and access to health services is not respected for all children [in Greece]".<sup>47</sup> The latest available data suggest a 19% increase in the number of

	All respondents (n=24177)		Age ≤65 years (n=17824)		Age >65 years (n=6353)	
	OR (95% CI)	p value	OR (95% CI)	p value	OR (95% CI)	p value
OR for unmet medical need 2011 relative to 2007	1.47 (1.30-1.66)	<0.0001	1.40 (1.20-1.63)	<0.0001	1.63 (1.32-2.00)	<0.0001
Age 16-81 years*	1.03 (1.03-1.04)	<0.0001	1.03 (1.03-1.04)	<0.0001	1.03 (1.01-1.06)	0.001
Age >65 years relative to age ≤65 years	0.72 (0.58-0.89)	0.003	..	..	..	..
Sex male relative to female	0.83 (0.72-0.94)	0.003	0.80 (0.69-0.94)	0.007	0.89 (0.72-1.10)	0.295
Family status married relative to unmarried	0.90 (0.78-1.04)	0.16	0.87 (0.71-1.07)	0.187	0.95 (0.75-1.21)	0.667
Urbanisation rural relative to urban	0.65 (0.58-0.73)	<0.0001	0.66 (0.57-0.76)	<0.0001	0.63 (0.52-0.77)	<0.0001
Education post-secondary relative to secondary and below	0.76 (0.64-0.91)	0.002	0.84 (0.69-1.01)	0.068	0.39 (0.24-0.65)	<0.0001
Pseudo-R <sup>2</sup>	0.04	..	0.03	..	0.03	..

Analysis based on the European Union Statistics on Income and Living Conditions survey,<sup>38</sup> cross-sectional datasets from 2007 (n=12 346) and 2011 (n=12 641). 24 177 respondents in total provided complete sociodemographic data. We used a dummy variable for the crisis year 2011, age >65 years, sex (male), family status (married), level of urbanisation (rural), and education (post-secondary), and weighted ORs for sampling. Descriptive statistics are provided in the appendix. OR=odds ratio. \*The OR for the age variable is the change in odds of unmet need when age increases by 1 year.

See Online for appendix

**Table 1: Weighted relative ORs for changes in reporting unmet medical need between 2007 and 2011, adjusted for sociodemographic and other factors**

	Could not afford		Waiting list		Could not take time		Too far to travel		Wanted to wait		Other	
	OR (95% CI)	p value	OR (95% CI)	p value	OR (95% CI)	p value	OR (95% CI)	p value	OR (95% CI)	p value	OR (95% CI)	p value
OR for reason for unmet medical need 2011 relative to 2007	1.39 (1.19-1.61)	<0.0001	1.24 (0.83-1.85)	0.297	0.89 (0.58-1.37)	0.595	2.78 (1.64-4.70)	<0.0001	1.32 (0.82-2.10)	0.250	2.36 (1.58-3.51)	<0.0001
Age 16-81 years*	1.03 (1.02-1.03)	<0.0001	1.04 (1.02-1.07)	<0.0001	1.02 (0.99-1.04)	0.176	1.11 (1.07-1.15)	<0.0001	1.04 (1.02-1.06)	0.001	1.05 (1.03-1.08)	<0.0001
Age >65 years relative to age ≤65 years	0.76 (0.58-0.99)	0.043	0.80 (0.37-1.70)	0.555	0.21 (0.080-0.56)	0.002	0.63 (0.26-1.55)	0.319	1.33 (0.61-2.90)	0.480	0.28 (0.14-0.59)	0.001
Sex male relative to female	0.75 (0.65-0.88)	<0.0001	1.08 (0.71-1.64)	0.716	0.98 (0.62-1.53)	0.925	0.73 (0.45-1.19)	0.209	1.21 (0.75-1.95)	0.426	1.07 (0.69-1.67)	0.749
Family status married relative to unmarried	0.85 (0.72-1.02)	0.083	1.21 (0.72-2.02)	0.474	1.90 (1.05-3.44)	0.033	1.20 (0.70-2.06)	0.511	0.86 (0.53-1.39)	0.533	0.74 (0.46-1.17)	0.197
Urbanisation rural relative to urban	0.65 (0.56-0.75)	<0.0001	0.32 (0.21-0.48)	<0.0001	0.67 (0.43-1.04)	0.074	2.98 (1.57-5.63)	0.001	0.84 (0.53-1.35)	0.478	0.63 (0.43-0.93)	0.020
Education post-secondary relative to secondary and below	0.61 (0.49-0.77)	<0.0001	0.67 (0.38-1.17)	0.161	2.60 (1.66-4.07)	<0.0001	0.49 (0.16-1.46)	0.201	0.32 (0.12-0.83)	0.020	1.43 (0.84-2.46)	0.190
Pseudo-R <sup>2</sup>	0.034	..	0.062	..	0.046	..	0.18	..	0.064	..	0.047	..

Analysis based on the European Union Statistics on Income and Living Conditions survey.<sup>38</sup> Descriptive statistics are provided in the appendix. OR=odds ratio. \*The OR for the age variable is the change in odds of unmet need when age increases by 1 year.

**Table 2: Weighted relative ORs for changes in reason for unmet medical need during the past 12 months between 2007 and 2011**

low-birthweight babies between 2008 and 2010.<sup>23</sup> Researchers from the Greek National School of Public Health reported a 21% rise in stillbirths between 2008 and 2011, which they attributed to reduced access to prenatal health services for pregnant women.<sup>48</sup> The long-term fall in infant mortality has reversed, rising by 43% between 2008 and 2010,<sup>49</sup> with increases in both neonatal and post-neonatal deaths. Neonatal deaths suggest barriers in access to timely and effective care in pregnancy and early life, whereas postneonatal deaths point to worsening of socioeconomic circumstances.<sup>50,51</sup>

In summary, although the adverse economic effects of austerity were miscalculated, the social costs were ignored, with harmful effects on the people of Greece.<sup>36,52,53</sup>

### Denialism

The cost of adjustment is being borne mainly by ordinary Greek citizens. They are subject to one of the most radical programmes of welfare-state retrenchment in recent times, which in turn affects population health. Yet despite this clear evidence, there has been little agreement about the causal role of austerity. There is a broad consensus that the social sector in Greece was in grave need of reform, with widespread corruption, misuse of patronage, and inefficiencies,<sup>24,54–58</sup> and many commentators have noted that the crisis presented an opportunity to introduce long-overdue changes. Greek Government officials, and several sympathetic commentators, have argued that the introduction of the wide-ranging changes and deep public-spending cuts have not damaged health<sup>59,60</sup> and, indeed, might lead to long-term improvements. Officials have denied that vulnerable groups (eg, homeless or uninsured people) have been denied access to health care, and claim that those who are unable to afford public insurance contributions still receive free care.<sup>36,61,62</sup>

However, the scientific literature presents a different picture. In view of this detailed body of evidence for the harmful effects of austerity on health, the failure of public recognition of the issue by successive Greek Governments and international agencies is remarkable. Indeed, the predominant response has been denial that any serious difficulties exist, although this response is not unique to Greece; the Spanish Government has been equally reluctant to concede the harm caused by its policies.<sup>63</sup> This dismissal meets the criteria for denialism, which refuses to acknowledge, and indeed attempts to discredit, scientific research.<sup>64</sup>

During the first years of the crisis the international community was largely silent about this issue, giving its tacit support to the austerity pursued by successive Greek Governments. One exception has been the European Centre for Disease Control, which has long been concerned about the health hazards of austerity.

The experience of other countries in dealing with crises could have helped to guide policy makers. For example, after Iceland's acute crisis in 2008, the country rejected

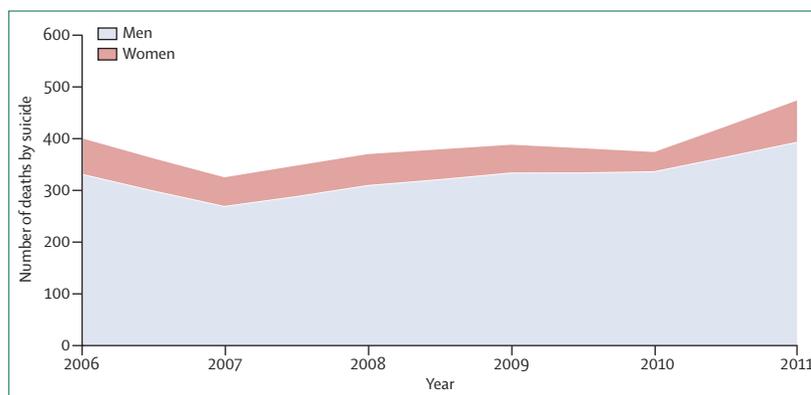


Figure 2: Recorded deaths by suicide by year

Figure based on data provided by the Hellenic Statistical Authority.

advice from the International Monetary Fund to slash its health-care and social services budget and instead opted to maintain welfare policies crucial to support its citizens, with no discernible effects on health.<sup>2</sup>

### Ending the Greek health crisis

Recently, the European Commission has begun to meet its Treaty obligation to assess the health effect of all policies, including those of the Troika; it has the necessary skills to do so in its Directorate General for Health, but needs wholehearted support from the entire Commission, especially its president.<sup>65</sup> Two developments hold promise. In July, 2013, the Greek Government signed an agreement with WHO for support in the planning of health sector reforms;<sup>66</sup> the government needs to use the skills of WHO with the urgency demanded by the present health situation. In September, 2013, the government launched a new health voucher programme financed from European Union structural funds to cover 230 000 beneficiaries for 2013–14.<sup>67</sup> The programme was designed to address some health needs of very poor patients losing access to care, especially the growing number of people unemployed for 2 years or more. Uninsured individuals can apply for a voucher that can be used for up to three visits for a predetermined set of primary care services in a 4-month period, and includes prenatal examinations for pregnant women.

Alternative responses to the crisis would have allowed Greece to pursue difficult structural reforms, while preventing devastating social consequences. Experiences from other countries that have survived financial crises (eg, Iceland and Finland) suggest that by ring-fencing health and social budgets, and concentrating cuts elsewhere, governments can offset the harmful effects of crises on the health of their populations. At the time of writing, the Troika was in Athens to assess the implementation of the bailout conditions, and €2.66 billion in cuts were announced to the health and social security budget for the following year.<sup>68</sup> Although the Greek health-care system had serious inefficiencies

before the crisis, the scale and speed of imposed change have constrained the capacity of the public health system to respond to the needs of the population at a time of heightened demand. The foundations for a well functioning health-care system need structures for comprehensive accountability, effective coordination and performance management, and use of the skills of health-care professionals and academics—not denialism. The people of Greece deserve better.

#### Contributors

AK, MK, and DS designed and wrote the Health Policy. MM contributed to the design and interpretation of the findings. AR provided background data and feedback. All authors have seen and approved the final version of the report.

#### Declaration of interests

After this article was accepted for publication, 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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