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Editorial

Cardiovascular disease risk status during the years of the financial crisis: The Greek case

Financial crisis started in the late 2000s in the US, Europe, and several other countries worldwide, also known as the "global financial crisis," has created conditions that have affected various aspects of the societies. This crisis is considered by many economists as the most serious financial crisis since the Great Depression of the 1930s. Greece is one of the countries that have been most severely affected by this economic downturn. The Greek economy suffered the longest recession of any advanced capitalist economy to date. The Greek financial crisis led to a series of reforms and austerity measures that led to impoverishment and loss of income and property. A global financial crisis like this one has also significant implications for the health systems and the spending plans of national governments. It is expected that the poor and vulnerable were the first to suffer. However, and because of the difficulty in obtaining accurate data about what has happened with regard to the health status in Greece during this period, any conclusions are difficult to be made. Many reports, mainly by journalists, described the health status as a "Greek tragedy," with an increasing unmet need for health care, increasing suicides, etc. However, others dismissed these concerns, arguing that "*there is no evidence that it has affected health*" or that the budget cuts could be considered as "a positive result of improvements in financial health management".[1,2]

Greece has been for many years among those countries in which the inhabitants have the "privilege" of having good health, mainly due to the adoption of a healthy lifestyle that included consumption of healthy foods, low rates of depression, and anxiety. However, the recent increase in the unemployment rates, work insecurity, and income reduction, i.e., some of the major consequences of the Greek financial crisis, seems to have a significant impact on population's health. In an overview study by Laliotis et al, it was highlighted that although overall mortality continued to decline after the onset of the financial crisis, this was at a lower rate than the one before the crisis; the latter was more evident for the older people.[3] Moreover, deaths from suicides increased after the onset of the crisis. Additionally, based on the Global Burden of Disease reports, cardiovascular disease (CVD) was and remains to be the leading cause of mortality in Greece, and it leads to major complications and disabilities. With regard to the prevalence of CVD-related risk factors, compared to a decade earlier, i.e., before the financial crisis emerged, several behavioral characteristics such as unhealthy dietary habits, depression, and anxiety are now on the top risk factors for the Greek population. It has been suggested that unemployment is often accompanied by mental disorders; addiction problems; and adoption of unhealthy lifestyle behaviors such as smoking, alcohol drinking, and low nutritional value diets.[4] Thus, the dramatic increase in unemployment rate in Greece, especially among the younger population, may be an explanation for the aforementioned increase in lifestyle-related behaviors. Moreover, several metabolic factors such as high blood pressure, high fasting plasma glucose, and high body mass index continued to increase during the past 10 years, a fact that can also be considered as a result of the adoption of unhealthy behaviors.[5] Public deficits and unemployment also exert a massive pressure on the budgets of health insurance and health care systems, which may also result in a series of difficulties in serving individuals' needs.[6]

Because of the financial crisis, the socioeconomic status of Greek people has also been altered. Results from a large-scale, population-based longitudinal study conducted from 2005 to 2017, in approximately 3000 older adults, living in more than 30 Mediterranean islands, i.e., the MEDIS study, highlighted that after the financial crisis, fewer people were classified in the high socioeconomic status group compared to those recruited before the beginning of the crisis; this had adverse consequences to their dietary habits and other lifestyle-related behaviors, i.e., physical activity levels, but not smoking habits, which seemed to reduce during the preceding years.[7] Considering the findings from the 10-year follow-up (2002-2012) of the ATTICA epidemiological study, in which it was observed that middle-aged people classified in the low socioeconomic status group experienced a 2.7-fold higher risk of CVD than those classified in the high socioeconomic status group,[8] it could be speculated that the population deprivation due to the financial crisis may have led to a considerable increase in CVD incidence, in Greece.

Apart from the financial crisis, population aging is a global phenomenon affecting almost all regions of the world. At the same time, the aged population in Greece is at the highest rate ever before, mainly because of the declining fertility rates and the increase in life expectancy. Longevity and successful aging, i.e., living a long and health life, are both complex phenomena, which may depend on not only genetic but also environmental factors.[9] Actually, aging, particularly, aging successfully, presents challenges and opportunities for the societies and health systems. Primary health care, long-term care, trained workforce, and age-friendly environments are among those needs that are of major importance for older adults.[10] However, financial crisis affects national priorities, hence reducing available resources and consequently affecting the health care sector, including access to services and medicines,[11]

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both of which are fundamental for older people living longer and better.

In a recently published paper in Hellenic Journal of Cardiology, the authors investigated the impending impact of financial crisis on patients who underwent diagnostic cardiac catheterization and evaluated the potential trend changes of the established CVD factors.[12] It was reported that the Greek financial crisis affected the burden as well as the prevalence of CVD and related risk factors. Specifically, the prevalence of traditional risk factors (i.e., smoking, hypertension, and dyslipidemia) was decreased, as well as the incidence of coronary artery disease; however, obesity and the number of women who were referred for cardiac catheterization or examination were increased.[12] It has been suggested (in another Mediterranean country also affected by the financial crisis, i.e., Spain) that the prevalence of CVD risk factors—mainly obesity and diabetes and, to a lesser extent, dyslipidemia and hypertension—has worsened because of the high stress levels that people are experiencing.[13] The finding by Sanidas et al that CVD prevalence was decreased during the past years, together with other cardiometabolic factors, could be attributed to the continuous improvements of primary prevention strategies held in Greece and the continuous efforts on education of health scientists. As it has been noted by Tousoulis, incidence of CVD morbidity and mortality has decreased not only because of the improvements of preventive measures but also because of the advances in interventional techniques.[14]

Undoubtedly, financial crisis affected Greek population in various ways, including health status. The incidence and prevalence of CVD mortality in Greece have decreased during the past years,[15] including the years of the financial crisis; however, the rates of CVD morbidity and the prevalence of CVD-related risk factors are questionable. The analysis of the findings from nationwide studies that have been conducted during the past years, like the Hellenic National Nutrition and Health Study,[16] or the HYDRIA study, would give a definite answer to these questions. Nevertheless, the health consequences of a financial crisis could be considered as an opportunity to improve health care plans and strategies, as well as the performance of health care systems, by eliminating expensive and inefficient policies, by achieving better performance of health promotion programs, and by minimizing health inequalities.

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