

Erectile dysfunction and coronary artery disease: the cardiac window opens

There is now a large body of evidence linking erectile dysfunction (ED) and coronary artery disease (CAD) (1). The common pathophysiology is endothelial dysfunction and with ED being recognised as a predominantly vascular disease the recognition that ED may present 2–5 years before cardiac symptoms has opened the window of opportunity to use ED as a marker of silent CAD and a means, therefore, to use the onset of ED to develop an aggressive risk reduction strategy to minimise the impact of any subsequent CAD event (2–4). As ED and CAD share the same risk factors, the opportunity for risk reduction is the conventional CAD risk reduction strategy tackling weight, exercise, lipids, blood pressure, etc. (5).

What is new is the slowly developing awareness of the importance of identifying ED in cardiac patients presenting to cardiologists. Cardiologists, with notable exceptions, have in general been slow to appreciate the importance of ED and left the management to urologists, psychosexual medicine specialists, family doctors and nurses and diabetologists. Hopefully this recognition by cardiologists will accelerate with the publication of the European Society of Cardiology Textbook of Cardiovascular Medicine – Second Edition (edited by A. John Camm, Thomas F. Lüscher and Patrick W. Serruys), which contains for the first time in any major cardiac text a chapter on ED which the editors kindly asked me to write.

It is accepted that managing ED involves a multidisciplinary approach, and as ED is mainly a vascular disease, cardiologists need to be active partners in the team. Men (and women) with cardiac disease should be routinely advised on sexual activity as part of a comprehensive approach to rehabilitation, and men with ED and no cardiac symptoms should have their cardiac risk status thoroughly evaluated and treated (4,6).

There is no randomised trial comparing outcomes in men with organic ED and no cardiac symptoms with regard to aggressive risk reduction versus usual care. The problem is the identification in the presence of normal exercise ECGs of abnormalities on multi-detector computer tomography of the coronary arteries (7). How can we justify not treating the risks when disease is clearly documented and several studies have shown the time window from ED to a CAD event to be 2–5 years? Should all men with organic ED be on a statin and aspirin – almost certainly, but lifestyle advice (exercise and weight) and blood pressure control are also essential.

As the cardiac window opens, the opportunity presents itself – it is time for the cardiologists to seize the opportunity. The combination of treating ED and preventing a coronary event is the reward for rising to the challenge.

Disclosure

None.

G. Jackson Editor

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EDITORIAL

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Economic crisis and mortality

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The economic crisis that began on Wall Street and the European banking sector and spread across the globe has

become a social crisis that is hitting hard the well-being of ordinary people in both rich and poor countries.

There is no randomised trial comparing outcomes in men with organic ED and no cardiac symptoms

It would be indefensible if the world's most vulnerable are left to bear the burnt of this crisis

The principle pathway through which economic crisis diminishes health status and increases mortality risk is through its poverty effects including rising rates of unemployment, prices, currency instability, household debt and reduced personal assets, lost health insurance and cuts in health spending. Many of these commonly reduce access to effective healthcare in any given population. They may also lead to malnutrition, hunger, increased levels of stress and depression, changes in personal habits such as alcohol and tobacco use and contribute to cardiovascular disease, respiratory infections, chronic liver disease and violence.

Beyond the particular severity, intensity and longevity of any given crisis, two variables affecting outcomes are pre-existing levels of vulnerability and the quality of responses to the crisis – at the individual and household level, as well as community and national levels.

In low-income countries it is estimated that between 53 (1) and 200 million people (2) will become impoverished by today's crisis and, according to the World Bank, an average of 200,000–400,000 more children a year, or a total of 1.4–2.8 million, may die. About 40 countries are 'highly exposed to poverty effects and another 80 are 'moderately exposed'. The UN estimates that incomes in Africa will decline by 20% and, that there will be up to 100 million new cases of malnutrition globally leading to more illness and mortality (3). These estimates are on top of last year's food and fuel crisis, which impoverished 100 million and resulted in 44 million cases of malnutrition.

Conditions that lead to greater mortality risk in developing countries are pre-existing high levels of poverty and fragile economies. High burden of disease, weak infrastructure and very limited resources means poor countries are especially vulnerable to economic crisis. They are structurally vulnerable to external forces over which they have little control including declining exports, foreign investment, access to capital, remittances and most critically, declining levels of development aid. With respect to the latter, poor countries are chronically exposed to rich countries' failure to deliver on aid pledges even during times of prosperity; during economic recession disbursement rates tend to shrink still further. At the G20 London summit, the world's economic powers which had committed US\$5 trillion to their own economies, had nothing to say about poverty, hunger and stress and cuts to public health spending in less affluent nations.

In contrast, rich countries are relatively protected from the most egregious aspects of economic shock thanks to high standards of living, good public infrastructure, and access to effective healthcare and education – the very factors that gave rise to high rates of life expectancy. Yet healthcare systems and social safety nets (SSNs) (as measured in social transfers such as family allowances, disability and sickness benefits, formal day care provision and unemployment insurance) vary widely in rich countries. In Europe evidence suggests that SSNs are softening the effects of the crisis (4) while in the United States, the only rich country without universal healthcare and a limited SSN, ordinary citizens are especially vulnerable to the crisis.

Not surprisingly, access to affordable healthcare has become a critical aspect of the crisis for many Americans either because job loss often means loss of health benefits or because household budgets are increasingly strained. According to one survey, more than half of chronically ill adults did not obtain 'recommended care, fill prescriptions, or see a doctor when sick because of costs' (5). A new Kaiser Foundation poll shows that 6 in 10 Americans have taken steps to delay or skip healthcare over the past year (6). This poll together with a spate of other studies show that ordinary Americans are turning to home remedies, overthe-counter drugs, pill-splitting, not filling a prescription, skipping screening, cancelling appointments or avoiding medical advice entirely (7). American family physicians report that this shift in health-seeking behaviour is resulting in substantive health problems that could have been prevented and increased emergency hospitalizations including diabetes, chronic lung disease and cardiovascular disease (8).

These trends will not lead to increases in national mortality rates; they will however increase health inequalities, especially those defined by race, ethnicity and place of residence. In a cluster of southern states, for example, where infant mortality rates are two to three times higher than the national average and on par with many poor countries, and prevalence rates of diabetes, obesity and hypertension are highest, mortality could increase; female-headed households are especially vulnerable.

The quality of response to the crisis also determines health outcome. In poor countries the most vulnerable, women and children, depend on effective response by their government and the donor community to protect them from economic crisis - both of which have a poor track record. When Zambia was hit by economic crisis in the 1970s and 1980s, the International Monetary Fund (IMF) and the World Bank persuaded government to cut spending, advice that did not include taking steps to protect the poor. Public health sector spending was cut by 50%; the way these cuts were applied had a deleterious affect on the poor: rural expenditure was cut by 50% while urban care remained relatively protected; primary healthcare was cut in favour of curative care; and drug and supplies were cut in favour of salaries. Case fatality rates (CFRs) for acute respiratory infection increased by 65% and doubled for diarrhoeal disease, malaria and malnutrition during the 1980s. The rise in CFRs was explained by reduced quality of healthcare and delay in seeking treatment due to rising direct and indirect costs. The proportion of children dying before reaching the age of 5 increased from 150 to 191 deaths per 1000 live births (9).

In Indonesia during the East Asian Financial Crisis (1997-1999) the government was persuaded by the IMF and the donor community to cut spending in order to repay western banks; this led to a 25% cut in primary healthcare spending upon which the poor depended while donors increased their support of hospitals by selling them western goods and equipment (used by the non-poor). The percentage of childhood vaccinated against tuberculosis (with BCG), diphtheria, pertussis, tetanus (DPT), poliomyelitis and measles fell by 25% and the use of services such as clinics and health centres used by the poor fell between 26% and 47%. Spending on drugs fell 25% as prices increased due to currency devaluation. After decades of steady improvement in life expectancy, infant mortality increase in 22 of 26 provinces by an average of 14% between 1996 and 1999 (10).

In the United States, response to the financial crisis has evolved. Initially, state and local governments confronted with massive deficits and no more room to aggressively raise taxes responded by cancelling bold proposals to expand health insurance coverage, cutting existing services and implementing cost containment actions were taken such as pharmacy control, benefit reduction, eligibility cuts. Medicaid, the state-federal health programme intended to deal directly with the nation's large health disparities, was cut in 19 states this past fiscal year and more and larger cuts are scheduled for this year (11). The Obama administration has sought to reverse these some of these trends by expanding the child health insurance programme (CHIP), protecting access to healthcare by the newly unemployed (COBRA), targeting stimulus funds at state healthcare systems and promoting a universal healthcare agenda.

In this issue, Falaga and others review the literature which describes the influence of economic crisis on mortality. Their findings and today's current crisis ought to be of concern to public health officials and decision-makers in terms of what the outcomes might have been had more effective and equitable social policy been in place before the crisis, had immediate and effectives steps been taken during the crisis and the lessons that can be learned to inform future policy.

As to the way forward, governments and the international community first need to avoid past mistakes that have typically led to cuts in public health spending aimed at groups with little or no voice or political

power and instead focus on financing essential healthcare services that target vulnerable populations. Second, more reliable data, better monitoring, research and analysis are needed to track country situations and guide responses. Third, issues of good governance that challenge some developing countries and all international financial institutions need to be addressed; their democracy deficit and lack of accountability, transparency and dialogue undermine their credibility upon which they depend. Fourth, in this, the most serious downturn since the Great Depression, social protection measures that protect income and the wellbeing of those at greatest risk are essential and ought to be a priority. Fifth, donors need to meet their commitments and resist pressure to cut aid in favour of athome priorities. This is more likely if there is political leadership and cooperation between Ministries of Health, Finance and regional and global health institutions as well as academia and civil society.

It would be indefensible if, in the end, the world's most vulnerable who are the least to blame for this crisis are left to bear its brunt through the death of two million children while rich countries, whose greed and imprudence led to this crisis (by their own account), walk away relatively unscathed and only vaguely aware of the misery left in their wake.

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that there will
be up to 100
million new
cases of
malnutrition
globally
leading to
more illness
and mortality

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EDITORIAL

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Going back to the bladder basics

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Every now and then we read something that brings us back to the basics and reminds us of what to do, or what we should be doing. Such is this month's article 'Practical aspects of lifestyle modifications and behavioural interventions in the treatment of overactive bladder and urgency urinary incontinence' by Wyman et al. (1). It should be of no surprise to those who know me that I am fascinated by the world of urologic disease. Granted, my wife and kids think that may be a little strange and may not want to tell their friends, but I like it. With regard to bladder control, I think it is fantastic that we now have over half a dozen medications for the patient suffering from overactive bladder (OAB). This means lots of options before a patient has to see a urologist and possibly undergo more complex and invasive treatment. No disrespect to my urologic colleagues but as far as I am concerned the treatment of OAB starts in the office of the primary care provider (PCP) and only the refractory case goes to the specialist (2). But after reading the article I have to stop and remind myself that medications are not always the correct first choice. Yes, medications may be the 'scalpel' of the PCP and appropriate in a large number of the patients, but is not education the first intervention we should offer in most diseases? We must remember, although the prevalence of OAB is high, not everybody wants pharmaceutical intervention. What they want is to understand and make lifestyle changes if those are possible. They want the provider to explain the disease and give them the list of opportunities on how to fix it; this may include medications or maybe just behavioural interventions. In my experience, most, if not all patients want to feel as if they have some control of the own health.

In this comprehensive and superb piece, three of the foremost OAB specialists in the world remind us that behavioural interventions are the cornerstone of treatment in this disease. In the article, they use patient-empowering words and statements such as restore, train, easy, early recognition and patient preference. They do not discount medications at all, yet they show us how to use non-invasive intervention alone or in synergy with pharmaceuticals to optimize outcomes. As I read this the first time, I kept thinking maybe I should spend a little more time with the symptomatic patient and really focus on the things that they could do.

Oops, wakeup call! I do not have more time as I am already bulging at the seams. Isn't just writing a medication the best thing to do, the old 'treat "em" and street "em"? Wyman et al. seemed to anticipate my visceral reaction by preparing a few patient handouts that can assist me with this. Let us be honest, none of us have huge slabs of time to discuss things, but we do have the time to hand out a very instructive piece to our patient. They feel good that we explained the problem to them and gave them some self-help opportunities. I then feel good because I am not just a prescription-writing machine and there is additional value added to my interaction. Another pearl that they offer is the tremendous benefit to having an ancillary staff member who can promote these lifestyle and behavioural changes. I have had the honour of working with Diane Newman for years and long ago she taught me the value of having my nurse practitioner becoming the educator in this regard. I can comfortably say I believe I have the most competent and patient educating nurse practitioner in the Midwest with regard to bladder control. Ms. Page (the NP who works with me) does this education that the authors suggest in the office and this 1-2 punch is a tremendous benefit to the patient.

There are always naysayers in the world and I am sure some exist who question the value of behavioural changes in OAB and bladder control. I thought about that as I read this expert piece and I could not help but think about my mother. According to her all the members of my family were child prodigies as regards potty training as we had her as a fabulous coach. There were four of us and she got better and better with each new addition to the family. In fact, legend tells us that she

Not everybody wants pharmaceutical intervention