# Can We Learn From History? Policy Responses and Strategies to Meet Health Care Needs in Times of Severe Economic Crisis

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**Abstract:** The current economic crisis appears to be the worst since the Great Depression. Severe problems in the financial sector have spread to the rest of the economy and resulted in falling exports, rising unemployment, government budget deficits and economic contraction in many countries. Research has shown a significant relationship between unemployment and poor health at both the level of the population and the individual. We can learn from the history of past economic crises in terms of the following: changes in patterns of health risk; differential impact of economic crisis on the health of more vulnerable social groups; changes in demand for health services, and thus formulate appropriate policy responses and strategies to mitigate the negative impact on health.

Keywords: Health policy, economic crisis.

# **INTRODUCTION**

The current economic crisis that first began in the United States (and spread quickly to other nations such as Iceland and Britain) appears to be the worst since the Great Depression of the late 1920s and the 1930s. Severe problems in the financial sectors of various nations have resulted in a "credit crunch" and this has spread to the rest of the real economy, thus resulting in falling exports, rising unemployment, government budget deficits and significant economic contraction as measured by a decrease in conventional measures such as the Gross National Product (GNP). The impact on low-income developing countries is expected to be severe [1].

Research has shown a significant relationship between unemployment and poor health at both the level of the population and the individual. For example, at the population level, M. Harvey Brenner's pioneering research beginning from the early 1970s show a negative impact of bad macroeconomic conditions on various measures of mental as well as physical health. Some of the negative effects of unemployment may occur only after a time lag [2-5].

At the individual level, other pioneering researchers such as Catalano and Dooley and their associates have studied the impact of unemployment and its effects on mental and physical health [6].

More recent research on the health effects of unemployment support the findings of Brenner and Catalano and his co-researchers. For example, an Austrian study carried out by health economists concluded that job loss increases spending on antidepressants and for hospitalizations related to mental health problems for men [7]. Stuckler *et al.* [8] concluded that increases in unemployment lead to significant short-term increases in premature mortality from intentional violence. Uutela's [9] literature review led to the conclusion that unemployment is linked to increases in premature deaths from intentional violence such as suicides in the European Union as well as in East Asian countries (during the Asian economic crisis of the late 1990s) although these can be mitigated somewhat by public policies.

Can we learn from the history of previous economic crises in terms of their impact on the following?

- Changes in patterns of health risk during times of severe economic crisis, e.g. alcoholism and other forms of substance abuse, domestic violence, suicides and parasuicides, malnutrition, immunization levels, homelessness, utilization of health services
- Differential impact of economic crisis on the health of more vulnerable groups such as ethnic minorities, the poor, single women with children, the elderly, the disabled
- Changes in demand for health services from the public sector during times of severe economic crisis
- Impact on the private health sector (e.g. as indicated by the experience of nations such as South Korea, Indonesia, Thailand and Malaysia during the Asian economic crisis of the late 1990s)
- Policy responses and strategies from public sector authorities as well as non-governmental organisations (NGOs) and the private sector that appear to work in terms of helping to meet the needs of particular groups of people, e.g. targeted feeding programmes for children at risk, and the pioneering introduction of a prepaid plan for medical care at Baylor Hospital in Dallas, Texas in 1929 during the Great Depression [10].

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# CHANGES IN PATTERNS OF HEALTH RISK IN TIMES OF SEVERE ECONOMIC CRISIS

Based on the research literature and the historical record (such as the Great Depression of the late 1920s and 1930s, and the Asian economic crisis of the late 1990s), we can expect changes in patterns of health risk and the health of the public as economic conditions worsen, i.e. as business failures increase and the number of jobless people increases in tandem [11-14]. At the very least, we can expect more poverty, more foreclosures on houses, more homelessness and related housing problems, higher rates of alcoholism and other forms of substance abuse [4], more cases of domestic violence, larger numbers of parasuicides and suicides [15], and higher rates of malnutrition such as micronutrient deficiency [16]. We may also witness signs of reduced access to health services such as drops in levels of immunization of children. This occurred in the former Soviet Union in the late 1990s when its economic problems were severe, resulting in a significant rise in the number of cases of diphtheria [17]. There could also be lower enrollment of children in school as families move around in search of work - like during the Great Depression in the USA - or as children drop out of school in order to work and help supplement the income of the family. In countries like the USA where health insurance coverage is linked strongly to employment, higher rates of unemployment will also result in higher numbers of uninsured people.

Homelessness is a health risk in that a homeless person is exposed to the elements as well as to a higher possibility of being robbed, sexually assaulted or physically assaulted by unfriendly people (especially at night). Related forms of housing problems such as overcrowding – because people lose their homes through foreclosures/repossessions or are forced out because of inability to keep up with rental payments and therefore have to move in to stay with relatives or friends – can increase the risk of transmission of infectious disease as well as increase stress.

The findings from research indicate that the state of the economy is linked to the mental health of the population [18]. Alcohol, tobacco and illicit drugs may be abused by economically-distressed people in attempts to cope with their predicament [19]. The financial and psychological stresses (including self-esteem problems) arising from prolonged unemployment may increase the likelihood of domestic violence within affected families. There is a significant relationship between unemployment and poor health at both the level of the population and the individual. For example, at the population level, M. Harvey Brenner's pioneering research dating back to the early 1970s show a relationship between high unemployment and deterioration in mental health (e.g. alcoholism) [4] as well as physical health (e.g. infant mortality rate and mortality from heart disease). Some of the negative effects of unemployment may occur only after a significant time lag [2-3, 5]. An example of a more recent study is that done by Chang et al. [15] which concluded that the Asian economic crisis of the late 1990s and its resulting increase in unemployment is linked to increases in male suicide in Japan, Hong Kong and South Korea (but not in Taiwan, Singapore and Thailand). At the individual level, other pioneering researchers such as Catalano and Dooley have studied the impact of unemployment on mental and physical health [6, 19, 20]. Business failures are linked to a higher risk of suicides and attempted suicides. There is also evidence that job insecurity by itself can be a threat to the health of individuals [21]. On the other hand, during times of economic crisis, morbidity from injuries may actually decline, e.g. there may be less occupational injuries as factories close down or as work-related driving decreases [22].

Severe economic crises – like the Great Depression of the late 1920s and 1930s - can result in higher rates of malnutrition as income levels drop. Existing programmes of the government and non-governmental organisations designed to provide a healthy diet to the needy may be inadequate to meet the demand arising from the higher numbers of distressed people. As in the Great Depression, people who experience prolonged unemployment may migrate in the hope of getting a job. Their family members may also have to migrate with them. This may result in lower levels of immunization [17] and school enrollment/completion for children who come from such families. Children – especially females – may have to drop out from school in order to work and help supplement the family income. This will affect the welfare of such children in the short term as well as the long term.

In countries like the USA, health insurance coverage is linked strongly to employment. Thus, job loss can also result in loss of health insurance coverage. This can affect the wellbeing of the individual as well as other dependent family members because healthcare is expensive in the USA. Medical debts as well as medical bill-related personal bankruptcies are threats to the financial well-being of Americans [23]. Lack of health insurance is also associated with delay in care-seeking and worsening of health problems in American children [24].

#### DIFFERENTIAL IMPACT ON SOCIAL GROUPS

In normal times, certain socioeconomic groups are already at risk of experiencing worse health than others, e.g. ethnic minorities and indigenous peoples, the poor, single mothers (and their children), the disabled etc. [25]. During bad economic times, their risks are compounded. As the economy deteriorates, these social groups are likely to experience higher rates of unemployment and underemployment as well as bear the brunt of cutbacks in government spending on social services. Access to health and other social services is likely to decrease and this will affect the disability, morbidity and mortality rates associated with these groups.

# CHANGES IN DEMAND FOR HEALTH SERVICES AND ITS IMPACT ON THE PUBLIC SECTOR AND THE PRIVATE SECTOR

During the Asian economic crisis of the late 1990s – with Malaysia, Thailand, Indonesia and South Korea being hit especially hard – there was a reduction in access to health services in most countries [16, 26, 27] coupled with a shift in the pattern of demand for medical services from the private sector to the public sector in affected countries. In other words, in countries like Malaysia, there was an increase in demand for free or highly subsidised health care from the

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public sector as economic pressures influence people to cut down on all forms of discretionary spending. Thus, one can predict that middle class people who used to seek care from private sector healthcare providers in the past will be more likely to seek care from public sector providers as economic conditions worsen in countries where the government is a significant provider of medical services. This may be because they are uncertain about the security of their jobs and want to ensure that they have enough financial resources to withstand a severe economic recession. This is especially true of hospital care (as compared to primary care) since bills from hospitalization in the private sector may be much higher compared to bills from the public sector. In the poorer countries of the developing world, economic crisis may force governments to cut back drastically on health spending, forcing poor patients to seek care from NGOs, delay careseeking, self-medicate or even go without care completely [16].

Learning from the Asian Economic Crisis of the late 1990s, one can also predict that private medical centres are likely to face significant financial challenges as demand drops for their services: foreign patients are likely to decrease in number as medical tourism declines, locals seek care from cheaper sources and demand also drops for discretionary services such as plastic surgery for cosmetic purposes.

In developed countries with social health insurance schemes such as those of Western and Northern Europe, prolonged economic crisis would increase demand for health services funded by the schemes (e.g. funded mental health services) while, at the same time, reducing funds available for the social health insurance schemes because employers who go out of business and employees who lose their jobs would no longer be able to pay into the scheme. In the case of the National Health Service in Britain which is funded by general tax revenue, prolonged economic crisis would generate pressure (as well as the political opportunity) to cut spending on social services such as health in order to reduce the size of the budget deficit in spite of rising demand for such services. This appears to be the situation under the Conservative-Liberal government of Prime Minister David Cameron [28].

### POSSIBLE POLICY RESPONSES AND STRATEGIES

How should governments, other public authorities and NGOs respond to the health challenges arising from severe economic distress? Here are some possibilities:

#### Alcoholism and Other Forms of Substance Abuse

The 4Es of prevention can be used to reduce consumption of alcohol and other legal substances that are detrimental to health, i.e. economic measures, enforcement, environmental modification and education. Action can be taken to increase the street price of alcohol and other legal substances such as tobacco [29] that can be abused, e.g. by raising government taxes steeply on these. This is a good strategy because research findings indicate that significant price increases tend to reduce consumption of alcohol and tobacco [30, 31]. Enforcement of alcohol control and tobacco control laws can also be stepped up in order to reduce consumption, e.g. strictly enforcing laws that forbid sale of the legal substance to people below a certain age. The legal age for drinking alcohol and buying tobacco can also be raised in order to reduce consumption. The environment can be modified to lower access, e.g. banning the selling of alcohol and tobacco through the use of vending machines and restricting sales of alcohol to specially-licensed shops.

### **Domestic Violence**

There appears to be a link between unemployment and domestic violence [32]. Mental health programmes could be introduced in order to lower the risk of domestic violence, e.g. counseling programmes and anger management programmes for unemployed workers. Shelters and psychological support services for victims of domestic violence can also be established for humanitarian reasons.

### **Suicides and Parasuicides**

Suicide prevention programmes aimed at economicallydistressed people can be launched. These should incorporate substance abuse treatment [33] and can also include antisuicide telephone hotlines that offer confidential help to people considering suicide. Since financial worries and pressures often go together with prolonged periods of unemployment in countries without a good system of unemployment compensation, suicide prevention programmes also need to take this into account, e.g. by providing advice on management of personal finances and by providing referral to other social services such as housing assistance.

# Malnutrition

The government can actively encourage people to grow food in food gardens or community gardens (like the "liberty gardens" and "victory gardens" of the past in America) [34]. They can also be encouraged to raise poultry or fish in their backyards. This may require the modification or temporary suspension of relevant public health laws. Food-for-work programmes can be started in order to prevent hunger as well as provide socially useful employment. Targeted feeding programmes aimed at more vulnerable groups such as pregnant women, children and elderly from poor families can be established. An example would be school lunch programmes for poor children at risk of hunger and malnutrition. Food fortification [35], food subsidy and Kerala-style controlled price food shop or rationing programmes (especially with respect to basic foods and foods commonly consumed by the poor) can also be introduced [36]. Income support programmes to preserve purchasing power for food can be launched, e.g. reductions in government fees and taxes, extended unemployment compensation, wage subsidies to save jobs in the private sector, and microcredit schemes [37].

#### **Immunization Levels**

Stepped-up vaccination campaigns (including campaigns aimed at migrant families) may be necessary during periods of severe economic downturn in order to maintain high levels of immunization among vulnerable groups such as children. This is because severe economic downturn is usually accompanied by increased migration as some of the unemployed and their families move in search of jobs to other areas of the country. Compulsory immunizations as a requirement for participation of economically-distressed people in government and NGO social welfare programmes can be introduced, e.g. like the Brazilian Bolsa Familia programme that requires low income parents to get their kids vaccinated in return for receiving monetary payments every month [38].

#### Homelessness

Government anti-foreclosure programmes should be launched quickly so that fewer people who own homes will become homeless if a "credit crunch" accompanies a collapse in the housing market during a severe economic recession. If the number of people who are homeless increases, the government should work hand-in-hand with NGOs to provide more emergency shelters and transitional housing for homeless people. Programmes to reduce homelessness and disguised homelessness (such as people moving in with relatives or friends) can be used to provide temporary shelter in the short run, notwithstanding criticism of such short-term measures [39]. Perhaps publicly funded schemes that provide accommodation in return for work done rehabilitating abandoned houses or building new public housing can be introduced (this will also help to increase the housing stock in the community).

### **Vulnerable Groups**

Public health and medical care programmes specially designed to meet the needs of groups such as disadvantaged ethnic minorities, the poor, single women with children, the elderly, the disabled etc. should be launched.

# Alternative Ways of Funding Medical Services (to Preserve Access)

Prepayment schemes for employed people that promote risk-pooling should be promoted to reduce the possibility of reduced access because of financial reasons. Barter trade or in-kind payments for medical services rendered by private sector health care providers or NGOs can be encouraged. The government can engage in negotiations with pharmaceutical companies to reduce the prices of proprietary drugs sold by the latter within the country [40]. If talks fail, the government may need to engage in parallel imports or compulsory licensing of specific proprietary pharmaceutical drugs in order to force down high drug prices. Waters et al. [27] compared the impact of the Asian Economic Crisis on access to health services in Indonesia and Thailand. They found that access was negatively affected in Indonesia (i.e. there was substantial reduction in utilisation of health services) but not in Thailand because the Thai government expanded health insurance coverage for the population. In fact, utilisation of healthcare services actually increased in Thailand. User fees can be eliminated for poor people who seek primary care at public medical facilities since there is evidence that user fees tend to reduce care-seeking at government clinics [41]. Other innovative schemes can also be started, e.g. one possibility could be an IOU scheme for more expensive services provided by public sector providers whereby the medically indigent person can be treated at a government hospital in return for signing a legally-binding document stating that he

or she owes the government and will have to pay this back when he or she gets a job or experiences better financial circumstances later on.

#### CONCLUSION

The current economic crisis is a challenge for many governments. Among the developed countries, some have been hit harder than others, e.g. Greece, Spain, Portugal, Ireland and Iceland. Some nations that trade extensively with China have been less seriously affected or even managed to avoid going into economic recession altogether. By attempting to learn from the history of past economic crises and their impact on the health of ordinary people, governments and NGOs may be able to make health policy and strategy changes that can help to mitigate some of the negative impact on health arising from the ongoing economic crisis. These negative impacts include increased morbidity and mortality from alcoholism and other forms of substance abuse, domestic violence, suicides and parasuicides, malnutrition, drops in immunization levels, homelessness, and so on. Thus, Ramesh [37; page 2] argues that "The social impacts of the 1997 economic crisis in Asia were deep ... (but) ... turned out to be less severe than initially projected due to social protection programs put in place amidst the cisis." These social protection programmes include the ones discussed in this article.

### REFERENCES

- International Monetary Fund. The implications of the global financial crisis for low-income countries. Washington, DC: IMF. 2009. [Accessed 2009 June 20] Available from: http:// www.imf.org/external/pubs/ft/books/2009/globalfin/golbalfin.pdf
- Brenner MH. Economic changes and heart disease mortality. Am J Pub Health 1971; 61(3): 606-11.
- Brenner MH. Fetal, infant and maternal mortality during periods of economic instability. Int J Health Serv 1973; 3(2): 145-59.
- [4] Brenner MH. Trends in alcohol consumption and associated illnesses. Some effects of economic changes. Am J Pub Health 1975; 65(12): 1279-92.
- [5] Brenner MH. Mortality and the national economy. A review, and the experience of England and Wales 1936-1976. Lancet 1979; 2(8142): 568-73.
- [6] Catalano R, Dooley CD. Economic predictors of depressed mood and stressful life events in a metropolitan community. J Health Soc Behav 1977; 18(3): 292-307.
- [7] Kuhn A, Lalive R, Zweimuller J. The public health costs of job loss. J Health Econ 2010; 28(6): 1099-115.
- [8] Stuckler D, Basu S, Suhrcke M, Coutts A, McKee M. The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis. Lancet 2009; 374(9686): 315-23.
- [9] Uutela A. Economic crisis and mental health. Curr Opin Psychiatry 2010; 23(2): 127-30.
- [10] Baylor Health Care System. Baylor University Medical Center then and now. BUMC Proc 2003; 16:70-72. [Accessed 2009 June 20] Available from: http://www.baylorhealth.edu/proceedings/ 16\_1/16\_1\_bumc\_history.pdf
- [11] Morris JK, Cook DG, Shaper AG. Loss of employment and mortality. BMJ 1994; 308: 1135-9.
- [12] Dooley D, Fielding J, Levi L. Health and unemployment. Annual Rev Pub Health 1996; 17: 449-65.
- [13] Horton R. The global financial crisis: an acute threat to health. Lancet 2009; 373: 355-6.
- [14] Marmot M. How will the financial crisis affect health? BMJ 2009; 338: b1314.
- [15] Chang SS, Gunnell D, Sterne JA, Lu TH, Cheng AT. Was the economic crisis 1997- 1998 responsible for rising suicide rates in East/Southeast Asia? A time-trend analysis for Japan, Hong Kong,

South Korea, Taiwan, Singapore and Thailand. Soc Sci Med 2009; 68(7): 1322-31.

- [16] Australian Agency for International Development. Impact of the Asian financial crisis on health. Macfarlane Burnet Centre for Medical Research 2000.
- [17] Vitek CR, Wharton M. Diphtheria in the former Soviet Union: reemergence of a pandemic disease. Emerging Infect Diseases 1998; 4(4) [Accessed 2009 June 20] Available from: http://www.cdc.gov/ncidod/eid/vol4no4/vitek.htm
- [18] Murphy GC, Atahanasou JA. The effect of unemployment on mental health. J Occu Organ Psychol 1999; 72:83-99.
- [19] Catalano R, Dooley D, Wilson G, Hough R. Job loss and alcohol abuse: a test using data from the Epidemiologic Catchment Area study. J Health Social Behav 1993; 34(3): 215-25.
- [20] Dooley D, Catalano R, Wilson G. Depression and unemployment: panel findings from the Epidemiologic Catchment Area study. Am J Commun Psychol 1994; 22(6): 745-65.
- [21] Ferrie JE, Shipley M, Stansfeld S, Marmot MG. Effects of chronic job insecurity and change in job security on self reported health, minor psychiatric morbidity, physiological measures and health related behaviours in British civil servants: the Whitehall II study. J Epidemiol Commun Health 2002; 56:450-4.
- [22] Catalano R. Health, medical care and economic crisis. N Eng J Med 2009; 360(8): 749-51.
- [23] Seifert RW, Rukavina M. Bankruptcy is the tip of a medical-debt iceberg. Health Affairs 2006; 25(2): w82-92.
- [24] Fry-Johnson YW, Daniels EC, Levine R, Rust G. Being uninsured: impact on children's healthcare and health. Curr Opin Pediatr 2005; 17(6): 751-2.
- [25] Levy BS, Sidel VW. Eds. Social injustice and public health. New York: Oxford University Press 2006.
- [26] Yang BM, Prescott N, Bae EY. The impact of economic crisis on health-care consumption in Korea. Health Policy Plan 2001; 16(4): 372-85.
- [27] Waters H, Saadah F, Pradhan M. The impact of the 1997-98 East Asian economic crisis on health and health care in Indonesia. Health Policy Plan 2003; 18(2): 172-81.
- [28] BBC News. Commons clash over NHS shakeup. July 14, 2010. [Accessed 2010 August 20] Available from: http://www.bbc.co.uk/ news/health-10634206

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- [29] World Health Organization. WHO framework convention on tobacco control. Geneva: WHO 2003.
- [30] Doran CM, Hall WD, Shakeshaft AP, Vos T, Cobiac LJ. Alcohol policy reform in Australia: what can we learn from the evidence? Med J Aust 2010; 192(8): 468-70.
- [31] Lee JM, Chen MG, Hwang TC, Yeh CY. Effect of cigarette taxes on the consumption of cigarettes, alcohol, tea and coffee in Taiwan. Public Health 2010; 124(8): 429-436.
- [32] McCue, ML. 2<sup>nd</sup> ed. Domestic violence. Santa Barbara, California: ABC-CLIO 2007.
- [33] Kessler RC, Borges G, Walters EE. Prevalence of and risk factors for lifetime suicide attempts in the National Comorbidity Survey. Archv Gen Psychiatry 1999; 56(7): 617-26.
- [34] MacVean M. Victory gardens sprout up again. Los Angeles Times. January 10, 2009. [Accessed 2009 June 20] Available from: http://www.latimes.com/features/home/la-hm-victory/10-2009jan10,0,7167635.story
- [35] Hertrampf E, Cortes F. National food-fortification program with folic aid in Chile. Food Nutr Bull 2008; 29(2 Suppl): S231-7.
- [36] Planning Commission. Government of India. Kerala development report. New Delhi: Academic Foundation 2008.
- [37] Ramesh M. Economic crisis and its social impact: lessons from the 1997 Asian economic crisis. Draft working paper prepared for the Unicef Conference East Asia and the Pacific Islands on the Impact of Economic Crisis on Children, 6 – 7 January, 2009, Singapore. Bangkok: UNICEF East Asia and the Pacific Regional Office 2008.
- [38] Duffy G. Family friendly: Brazil's scheme to tackle poverty. BBC News, May 25, 2010. [Accessed 2010 August 20] Available from: http://www.bbc.co.uk/news/10122754
- [39] Beyond Shelter. Website. [Accessed 2010 August 20] Available from: http://www.beyondshelter.org/aaa\_initiatives/ending\_ homelessness.shtml
- [40] Online NewsHour. House passes bill forcing Medicare to negotiate drug prices. January 12, 2007. [Accessed 2009 June 20] Available at: http://www.pbs.org/newhour/bb/government\_programs/janjune07/medicare\_01-12.html
- [41] Lagarde M, Palmer N. The impact of user fees on health service utilization in low- and middle-income countries: how strong is the evidence? Bull World Health Organ 2008; 86(11): 839-48.

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