The Impact of Economic Crises on the Risk of Depression and Suicide:

A Literature Review

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The aim of this review is to present current knowledge on impact of economic crisis on risk of depression and suicide, and actions that could be implemented to reduce the impact.

This review is based on a literature search performed in November 2009. The following databases were searched: Cinahl, Medline, SocINDEX, and CSA Social Services Abstracts. Identified reports were included in this review based on relevance for European mental health policy and scientific quality.

1. Introduction

The current economic crisis could have a significant influence on Europeans' health and wellbeing. Economic hardship, unemployment, job insecurity, and the lack of a regular living wage all have important effects on health and demand for health care¹. The economic downturn has a potential for both negative (loss of income, insecurity) and positive (reduced work load, less traffic) effects on health², but the pooled effects in Europe are likely to be negative³.

The data on the impact of unemployment on mortality rates is conflicting. There is evidence from the EU for a link between unemployment and mortality rates: i.e. the higher unemployment, the higher is all-cause mortality⁴. A 1% increase in a national unemployment rate increases the standardised mortality rate substantially, i.e. by 1,5 per 100 000 people.⁴ On the other hand, the evidence across the EU that all-cause mortality increases when unemployment rises is not consistent. ⁵ Populations vary substantially in how sensitive mortality is to economic crises, depending partly on level of social protection.⁵

The increased risk of death due to suicide after redundancy and financial problems is greater among men than among women^{6,7}, perhaps because men are taught to believe more often than women that there is no appropriate source of support and help for them when things go wrong.

Times of economic instability cause psychological stress, which is linked to both the onset and course of mental illnesses. Unwelcome changes in life circumstances, such as unemployment, are strongly linked to depression, anxiety disorders, and suicide. The effects are modified by experiences like shame at losing one's job and financial hardship¹¹.

To some extent, the economic growth has been on the expense of the mental well being of the population¹². Thus, the economic crisis may also bring along welcome changes, such as increase in spare time leading to increases in time spent with family members and NGO activities. How people deal with difficulties like unemployment in times of economic crisis depends on the individual's coping mechanism. The crisis may offer possibilities to strengthen social capital and to shift our value base from money to non-monetary components of life, provided that social protection is sufficient. The economic crisis offers a chance for re-orientation.

2. Potential impact of economic crisis on determinants of depression and suicide

Increased unemployment

Unemployment causes poor mental health as a result of financial strain and absence of the nonfinancial benefits provided by one's job, such as social status, self esteem, physical and mental activity, and use of one's skills¹³.

The main short term health effects to be expected from the rising unemployment in Europe are psychological distress, alcohol abuse, and suicides. Prospective studies uniformly show that unemployment has causal influence on depression and suicidal thinking¹⁴ ¹⁵¹⁶. Unemployed people are at 2-3 times more risk of suicide^{17,18}. This is partly because people with mental disorders are at greater risk of losing their jobs¹⁹, but even among people with no record of serious mental illness, unemployment is still associated with approximately a 70% greater suicide risk²⁰.

In the EU, there is an association between national unemployment rates and suicide rates^{4,5}. In EU, every 1% increase in national unemployment rate has been associated with a 0,8% rise in suicides of people under 65 years. A more than 3% increase in unemployment was linked to a 4,5% increase in suicides. Younger populations were more sensitive to the negative health effects of rising unemployment than were those over 60 years. Middle-aged and unmarried men are an

especially vulnerable population in regard to unemployment-related suicide^{5,21}. The individual impact of being made unemployed may be lessened in a context of high unemployment^{22,23,24}.

Young people are at risk of mental problems after job loss. The relative risk of becoming psychologically disturbed for young people (aged 15-24) after becoming unemployed is 51 % higher compared to young people who did not experience job loss²⁵. Unemployment rates in young people appear to be associated with suicide rates²⁶.

Increased job insecurity

Job loss is not the only stress during economic crises. Recessions can be equally stressful for those still in the workplace. Their options and choices become narrower; People fear losing their jobs and experience financial difficulties; Job insecurity is associated with a 33 % increase in risk of common mental disorders^{27,28}. In addition, the workload of those left in work after personnel cuts may increase.

Increase in households in high debt

In 2005, 10 % of European households reported housing, utility or credit arrears.²⁹ The number of households in high debt is increasing in Europe as a result of the current economic crisis. Debts and over-indebtedness are socially patterned and disproportionately affects those on low incomes.³⁰ By definition, large economic recessions will affect people with little previous experience of coping with hardship. These people may be at greater risk of mental health problems than others more used to financial insecurity.³¹

High debts have been identified as an important risk factor for mental disorder. Longitudinal data provides evidence that financial difficulties lead to an increased occurrence of major depression³². Longitudinal data also indicate that housing payment problems³³ and consumer debt³⁴ lead to poorer mental health. The more debts people have, the more likely they are to have mental disorders overall.³⁵ Nearly one in two adults with debt has a mental disorder³⁶. In Finland, data shows that people with high mortgages have poorer psychological well-being and more mental disorders^{37,38} People with debt are two to three times more likely to suffer from depression than the general public³⁶. Single mothers in debt or borrowing money have an increased risk of depression.³⁹

People with mental health problems in Britain are nearly three times more likely to report debt compared with individuals without similar conditions³⁵. People in debt and suffering from mental health problems often do not seek help for their financial difficulties⁴⁰.

Debt repayment difficulties are associated with suicidal thoughts,³⁸ and several studies from Hong Kong have found unmanageable debt to be a predictor of suicide^{41,42,43}.

Increased poverty, social exclusion and inequality

The economic crisis will increase poverty in Europe. It is the poor – and those made poor through loss of income or housing – that will be hardest hit by the economic crisis⁴⁷. Poverty is a major socio-economic risk factor for mental health problems, disorders such as depression and even suicide⁴⁴. The deficits in cognitive, emotional, and physical development for children growing up in extreme poverty and the consequent effects on health and wellbeing across the life course are potentially enormous¹. Suicide levels have consistently been found to be higher in deprived areas^{45,46}.

In Europe, it is likely that the current economic crisis will increase the social exclusion of vulnerable groups, the poor and people living near the poverty line⁴⁷. The least well educated are those at greatest risk of ill health after job loss⁴⁸.

Data from Japan show that during a recession social inequalities widen⁴⁹. Health gradients exist in Europe, and as people move down the socio-economic ladder due to loss of jobs and income, their health will be affected.

Adverse life style changes

Job loss leads to life style changes. Increases in spare time can have both beneficial and negative effects. Trend data suggests links between economic cycles and alcohol use with recessions linked to increased binge drinking. Even among those who remain employed, binge drinking increased substantially during economic downturns⁵⁰. If the current recession leads to an increase in alcohol use, a higher death toll linked to alcohol is to be expected, because per capita alcohol consumption is one of the strongest single mortality determinants in Europe⁴. In European countries, mass job loss, i.e. more than 3 % rise in unemployment rate in a year, is strongly associated with an increase in alcohol-related deaths⁵.

An increase in mean alcohol consumption has been associated with a post-war rise in suicide mortality in many European countries (Denmark, France, Hungary, Norway, Sweden), but not in the south of Europe^{51,52}. The link seems to be more pronounced in countries where strong spirits dominate the consumption⁵³ ⁵⁴ ⁵⁵, and is only seen in some population groups, such as lower educational group⁵⁶.

Families under pressure

The impact of unemployment on both the worker and the family is pervasive, because work is a primary source of material, social, and psychological security within the family unit. The family unit is also derives its daily and weekly routine, place in a social network, status, and economic well-being from the labour force participation of its parental member(s).⁵⁷

During economic recession, family economic hardship creates a risk for maternal and child mental health. Longitudinal data indicates that financial disadvantage after giving birth may lead to maternal depression⁵⁸. Economic pressure, through its influence on parental mental health, marital interaction, and parenting, affects mental health of children and adolescents^{59,60,61}. Furthermore, reduced public spending has impacts on health services and education, and ultimately on the well-being of families and the development of the community as a whole.⁴⁷

Children often do not understand the complexity of family financial loss. This creates a feeling of helplessness alongside their desire to alleviate the turmoil created by unemployment. Feelings of confusion, anger, and insecurity may affect the attitudes of children and young people towards parents, the school, and the world of work.⁵⁹

Research into transmission of negative emotions and mental distress within the family between parent and child is limited. However, it suggests that a parent's heightened level of mental distress may have a direct impact on the child's well-being. ^{62 63 64 65}

Cuts in health systems and social protection

Economies under stress may lead to recession cuts in health and social services.⁶⁶ Social protection plays an integral role in mitigating against the impact of poverty in an economic crisis and is, therefore, an important counter-cyclical social policy. However, the social protection response to the global financial crisis has been minimal, and increases in coverage have been marginal⁶⁷.

Impact on mental health services

Mental health services in Europe are underfunded⁶⁸. Evidence from past economic crises gives us a reasonably precise idea about what is likely to happen in the current socio-economic crisis. In spite of increased pressure on mental health services⁶⁹, government expenditures on health will be

squeezed and seem likely fall, contributing to worse health outcomes. Household income to pay for health will drop. Insurance protection will decline. Patients will switch from the private to the public sector⁴⁷. In countries without comprehensive healthcare provision, people most in need of mental health services may be less inclined to access them because of the costs involved.⁷⁰

3. The potential impact of the economic crisis on prevalence of depression and suicide

Depression

Data described in the previous section convincingly showed that known risk factors for depression, such as unemployment, high debts, and alcohol consumption will increase due to the economic crisis. Among people loosing their jobs, the psychological impact will appear in the short term, but economic pressure will also affect families and constitute a risk factor for the longer-term mental health of children. If preventive actions are not in place, there is a risk that the toll of the crisis will be paid by the next generation: i.e. by those who now are children.

Suicides

Economic crises constitute a risk for increase in suicide rates. Whether this risk will evolve into real increased rates depends on policy measures.

The Asian economic crisis in the late 1990s was accompanied by a rise suicide mortality in several countries^{71,72}. However, comparative international studies indicate that the negative impact of economic recession can be modified or even eliminated by social protection actions⁷³.

Two EU countries have been able to decouple economic crisis from the rise in suicide deaths. In Sweden, unemployment rose from 2.1% to 5,7% between 1991 and 1992, but suicide rates dropped. In Finland, unemployment rose from 3,2% to 16,6% between 1990 and 1993, but suicide rates dropped each year. Possible explanations for the successes in these to countries include the Nordic social welfare model with a high level of social protection and active labour market programmes⁷⁴, as well as national suicide prevention activities⁷⁵.

Evidence for protective factors also comes from the contrasting trends in suicide among male youth in New Zealand and Finland during the recession of the 1980s and '90s. Unemployment rose to a greater extent in Finland than in New Zealand, but no increase in male suicide was recorded in Finland^{76,77}, where, in contrast to New Zealand, social spending rose⁷⁸.

4. Potential actions to alleviate the impact of the economic crisis

Strengthening the support provided by social safety nets — whether related to health care, social protection, employment security, housing, food or informal social support — will help to buffer the effects of shifts in the economy and promote mental health.

Tailored response of health systems

The health systems in Europe can alleviate the impact of the economic crisis on mental wellbeing by better acknowledging the role of unemployment and financial strain on mental wellbeing. Improved responsiveness of health services to changes in the social, employment and income status of patients and early recognition of depression and suicidal ideas will reduce the human toll paid for recession.

Responsive health services modify their services to accommodate the population needs originating from the economic crisis. By providing psychological support in health services the effects of

unemployment can be modified. Group-based cognitive behavioural therapy for unemployed people improves mental health and facilitates return to work⁷⁹. In times of hardship, good psychological coping skills are beneficial. Problem-solving skills may be protective against depression and suicidal behaviour⁸⁰.

Social protection and active labour market programmes

Social protection provides several societal benefits, one of them being protection against rise in suicides in times of economic hardship. Social protection policies encompassing not only adequate welfare benefits in case of unemployment, but also reinforcing activation for those most affected by the economic slowdown in line with the flexicurity approach, will be crucial in modifying the impact of the crisis.⁸¹ EU Member States with a higher investment in active labour market programmes had a reduced association between unemployment and suicides.⁵

Debt relief programmes

Debt relief programmes help people suffering from the stress of being over-indebted. In Sweden, people in high debt who had been granted debt relief had a better mental health than those who had not been granted debt relief⁸². National debt relief legislation and debt relief programmes will help to reduce the mental health impact of the economical crisis. Community support agencies should be adequately resourced to help people with problems arising from job loss, debt, and mortgage arrears.⁷⁰

It is necessary to try to prevent people from becoming over-indebted as well as making it easier for them to pay their fair share and to be able to return to a dignified and economically active life. This results in reduced suffering and socioeconomic benefits.⁸²

In view of the extremely high co-occurrence of over-indebtedness and mental disorders, there is a need for national programmes to strengthen cooperation and improve communication between health services and debt management agencies. Debt management advisers should be trained to refer clients to mental health care when needed. On the other hand, health services need to acknowledge the burden of over-indebtedness in clients and to provide well-functioning referral links to debt advice bureaus.³¹

Strengthening social capital

In times of economic crisis, social capital is a protective factor. Social capital and social networks as represented e.g. by number of trade unions, religious congregations of sports clubs, seem to constitute a safety net against the adverse effects of rapid macroeconomic changes.²¹ Strengthening the civic society will create social capital and cohesion, and promote mental health.

Alcohol policy

There is a close relationship between alcohol problems and mental health. Recessions have been linked to increased binge drinking⁵⁰, and the impact of recession on mental health and suicide rates is partly mediated by alcohol. People with mental health problems are at increased risk of alcohol problems and vice versa.⁸³ Reducing access to alcohol, by e.g. increasing alcohol taxation⁸⁴, reduces alcohol consumption and is one of the key actions to counteract the impact of the economic crisis on mental health and suicide rates.

Labour policies

Employers' awareness of the potential impact of job loss on mental health and suicide risk need to be heightened to ensure that workers are directed to appropriate sources of advice when facing joblessness. Likewise, health and social services as well as debt advice agencies need to have clear guidelines in work on how to identify and support people with unemployment-related distress, depression and suicidality.

Active labour market programmes that keep and reintegrate workers in jobs reduce the mental health effects of the recessions.^{5,74}

Targeting youth unemployment

Special attention should be paid to the mental health needs of young people, whose labour market security is likely to be most affected by the economic downturn. If the crucial step into labour market is delayed it leads to difficulties in achieving the psychological identity of an earning adult and valued member of the society, which in turn leads to alienation, marginalisation and anomie.

Special programmes for youth in transition from school to work and re-employment training for young people left unemployed can be of benefit.⁸⁵ Training in regular educational settings of apprenticeship-type training offer most mental health benefits.⁸⁶ Youth opportunity schemes, which do not offer ordinary education or properly paid jobs, have turned out to be almost as detrimental to psychological good health as is unemployment itself.⁸⁷

Increasing university intake to increase the proportion of young people going to university is a feasible action to relieve the impact of the economic crisis on young people in Europe. Overall, more education and training opportunities are needed also because existing students stay on and displaced workers seek to re-skill.⁸¹

Support children and parenting in families victimised by the crisis

At times of crisis expenditure that supports families ⁵, especially single parent households, are necessary. Families, friends, and communities of those affected by unemployment should be reminded of its impact on an individual's emotional wellbeing and encouraged to give support. ⁷⁰ A focus on developing family and community connectedness is needed. ⁸⁰

Responsible media coverage of the crisis

There is often high profile reporting in media of suicides and suicide clusters related to job loss, such as recent coverage of events in France Telecom. Such reporting may provoke copycat suicides.⁸⁸

Strengthening mental health systems

To meet the mental health challenges of the economic crisis, not only protection of spending on mental health services is needed, but also restructuring of services to meet the needs of the population. The primary care approach will increase access to mental health care, and shift the focus to prevention and early detection of mental health problems. The current financial crisis may create urgency and strengthen courage to both eliminate the fundamental problems in health care delivery and reduce health inequalities.⁸⁹

5. Conclusions

The main mental health risks of the economic crisis for the next years are increased psychological distress, increased alcohol abuse and increase in suicides. However, these risks can to a large extent be avoided by policy measures. What leads to health in industrialised countries is not absolute wealth or growth but how the nation's resources are shared across the population⁹⁰. Thus, the impact of decreased wealth on health can be modified by policy measures which strengthen social inclusion and social protection.

We can minimise the mental health impacts of the economic crisis by:

- · raising awareness of mental health needs of workers and families due to the crisis
- adapting service provision in health services to the psychological needs of people hit by the crisis
- avoiding spending cuts in services for individuals and families hit by the crisis
- providing sufficient social protection and active labour market programmes for unemployed people
- providing debt relief counselling and legislation for debt relief
- increasing university intake and providing rewarded apprenticeships for young people
- strengthening the civic society and voluntary sector in order to create increased social capital
- restricting access to alcohol
- monitoring the poverty impact of the crisis

6. References

Marmot MG (2009). How will the financial crisis affect health? BMJ 338:b1314.

² Janlert U (2009). Economic crisis, unemployment and public health. *Scand J Public Health* 37:783-4.

- ³ Falagas ME, Vouloumanou EK, Mavros MN, et al. (2009). Economic crises and mortality: a review of the literature. Int J Clin Pract 63(8):1125-35.
- Economou A, Nikolaou A (2008). Are recessions harmful to health after all? Evidence from the European Union. J Econ Studies 35(5):368-84.
- Stuckler D, Basu S, Suhrcke M, et al. (2009). The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis. Lancet 374:315-23.
- ⁶ Mathers CD, Schofield DJ (1998). The health consequences of unemployment: the evidence. Med J Aust 168:178-83.
- Berk M. Dodd S. Henry M (2006). The effect of macroeconomic variables on suicide. Psychol Med 36(2):181-9.

⁸ Herbert J (1997). Stress, the brain and mental illness. *BMJ* 315(7107):530-535.

⁹ Artazcoz L, Benach J, Borrell C, et al. (2004). Unemployment and mental health: Understanding the interactions among gender, family roles, and social class. Am J Publ Health 94(1):82-8.

Yang B, Lester D (1995). Suicide, homicide and unemployment. Appl Econ Lett 2:278-9.

- 11 Rantakeisu U, Starrin B, Hagquist C (1999). Financial hardship and shame: A tentative model to understand the social and health effects of unemployment. Br J Social Work 29(6):877-901
- Weehuizen R (2008). Mental Capital. The economic significance of mental health. Maastricht, the Netherlands: Universitaire Pers Maastricht.
- Bartley M (1994). Unemployment and ill health: understanding the relationship. J Epidemiol Community Health 48:333-
- 7.

 14 Dooley D, Catalano R, Wilson G. (1994). Depression and unemployment: panel findings from the epidemiological catchment area study. Am J Community Psychol 22:745-65.
- Lewis G. Sloggett A (1998). Suicide, deprivation, and unemployment: record linkage study. BMJ 317(7168):1283-6.
- ¹⁶ Gunnell D, Harbord R, Singleton N, et al. (2004). Factors influencing the development and amelioration of suicidal thoughts in the general population. Br J Psychiatry 185:385-93.
- Platt S. Hawton K (2000). Suicidal behaviour and the labour market. In: Hawton K, van Heeringen K, eds. The international handbook of suicide and attempted suicide. New York: Wiley, pp 310-84.
- ¹⁸ Beautrais AL, Joyce PR, Mulder RT (1998). Unemployment and serious suicide attempts. *Psychol Med* 28(1):209-18.
- Blakely TA, Collings SC, Atkinson J (2003). Unemployment and suicide. Evidence for a causal association? JEpidemiol Comm Health 57(8):594-600.
- ²⁰ Agerbo A. (2005). Effect of psychiatric illness and labour market status on suicide: a healthy worker effect? *J Epidemiol* Community Health 59:598-602.
- Stuckler D, King L, McKee M. (2009). Mass privatisation and the post-communist mortality crisis: a cross-national analysis. *Lancet* 373(9661):399-407.

 ²² Platt S.(1986). Parasuicide and unemployment. *Br.J.Psychiatry* 149:401-5.

- ²³ Crawford MJ, Prince M (1999). Variation in the rate of suicide in young men in the 366 county districts of England, 1979-1992 - the importance of social context. Social Sci Med 49:1419-1423.
- Crawford MJ, Kuforiji B, Ghosh P (2009). The impact of social context on socio-demographic risk factors for suicide: a synthesis of data from case-control studies. Jech. online first published Oct, 14, 2009.
- Morrell S, Taylor R, Quine S, et al. (1994). A cohort study of unemployment as a cause of psychological disturbance in Australian youth. Soc Sci Med 38(11):1553-64.
- ²⁶ Gunnell D, Lopatatzidis A, Dorling D, et al. (1999). Suicide and unemployment in young people. Analysis of trends in England and Wales, 1921-1995. Br J Psychiatry 175:263-70.
- Ferrie JE, Shipley MJ, Stansfeld SA, et al. (2002). 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 Community Health 56(6):450-4.
- Stansfeld S, Candy B (2006). Psychosocial work environment and mental health: a meta-analytic review. Scand J Work Environ Health 32:443-62.
- ²⁹ European Commission (2008). Towards a common operational European definition of over-indebtedness. Brussels: European Commission.
- ³⁰ Fitch C, Simpson A, Collard S, et al. (2007). Mental health and debt: challenges for knowledge, practice and identity. J Psych Mental Health Nursing 14:128-33.
- ³¹ Fitch C, Hamilton S, Basset P, Davey R (2009) Debt and mental health: What do we know? What should we do? London, UK: Royal College of **Psychiatrists** and Rethink. Available http://www.rcpsych.ac.uk/pdf/Debt%20and%20mental%20health%20(lit%20review).pdf
- Skapinakis P, Weich S, Lewis G, et al. (2006). Socio-economic position and common mental disorders: Longitudinal study in the general population in the UK. Br J Psychiatry 189:109-17.
- Taylor MP, Pevalin DJ, Todd J (2007). The psychological costs of unsustainable housing commitments. Psychol Med 37:1027-36.
- ³⁴ Brown S, Taylor K, Wheatley Price S (2005). Debt and distress: Evaluating the psychological cost of credit. J Econ Psychol 26:642-663.
- Jenkins R, Bhugra D, Bebbington P, et al. (2008). Debt, income and mental disorders in the general population. Psychol Med 38:1485-93.
- Jenkins R, Bhugra D, Bebbington P, et al. (2009). Mental disorder in people with debt in the general population. J Public Health (Oxf) (in press)

- ³⁷ Viinamäki H. Kontula O, Niskanen L, et al. (1995). The association between economic and social factors and mental health in Finland. Acta Psychiatr Scand 92:208-13.
- Hintikka J, Kontula O, Saarinen P, et al. (1998). Debt and suicidal behaviour in the Finnish general population. Acta Psychiatr Scand 98:493-6.
- Cooper C, Bebbington PE, Meltzer H, et al. (2008). Depression and common mental disorders in lone parents: results of the 2000 National Psychiatric Morbidity Survey. Psychol Med 38:335-42.
- ⁴⁰ European Commission (2009). Reducing the psychosocial impact of the financial and economic crisis Selected Facts and Figures. Working document for the meeting: Mental Health Round table: Reducing the Psychosocial

- Available at: http://ec.europa.eu/health/ph_determinants/life_style/mental/docs/ev_20090427_rd01_en.pdf 41 Wong PWC, Chan WSC, Chen EYH, et al. (2008). Suicide among adults aged 30-49: a psychological autopsy study in Hong Kong. BMC Public Health 8:147.

 42 Chen EYH, Chan WSC, Wong PWC, et al. (2006). Suicide in Hong Kong: a case-control psychological autopsy study.
- Psychol Med 36:815-25.
- Yip PS, Yang KC, Ip BY, et al. (2007). Financial debt and suicide in Hong Kong. J Appl Soc Psychol 37:2788-99.
- ⁴⁴ Fryers T, Melzer D, Jenkins R, et al. (2005). The distribution of the common mental disorders: social inequalities in Europe. Clin Pract Epidemol Ment Health 1:14.
- Middleton N, Sterne JAC, Gunnell D (2006). The geography of despair among 15-44-year-old men in England and Wales: putting suicide on the map. JECH 60:1040-7.
- ⁴⁶ Rehkopf DH, Buka SL (2005).The association between suicide and the socio-economic characteristics of geographical areas: a systematic review. Psychol Med 36(2):145-57.
- ⁴⁷ WHO (2009). Financial crisis and global health: report of a high-level consultation. Geneva: World Health Organization. Available: http://www.who.int/mediacentre/events/meetings/2009 financial crisis report en .pdf

Edwards R (2008). Who is hurt by procyclical mortality? Soc Sci Med 67:2051-58.

Impact of the Financial and Economic Crisis"Brussels, 27 April 2009.

- ⁴⁹ Kondo N, Subramanian S, Kawachi I, et al. (2008). Economic recession and health inequalities in Japan: an analysis with a national sample, 1986–2001. J Epidemiol Community Health 62:869–75.
- ⁵⁰ Dee TS (2001). Alcohol abuse and economic conditions: evidence from repeated cross-sections of individual-level data. Health Econ 10(3):257-70.
- Norström T (1995). Alcohol and suicide: a comparative analysis of France and Sweden. Addiction 90(11):1463-9.
- Norström T, Ramstedt M (2005). Mortality and population drinking: a review of the literature. *Drug Alcohol Rev* 24(6):537-47.

 Nemtsov A (2002). Correlations between alcohol consumption and suicides. *Demoscope Weekly* 73-4.
- ⁵⁴ Värnik A, Wasserman D (2005). Suicide among Russians in Estonia: database study before and after independence. BMJ 330:176-177.
- ⁵⁵ Wasserman D, Värnik A (1994). Increase in suicide among men in the Baltic countries. *Lancet* 343:1504–5.
- ⁵⁶ Herttua K, Mäkelä P, Martikainen P (2007). Differential trends in alcohol-related mortality: a register-based follow-up study in Finland in 1987-2003. Alcohol and Alcoholism 42:456-64.
- Reynolds S, Gilbert P.(1991). Psychological impact of unemployment: Interactive effects of vulnerability and protective factors of depression. J Counseling Psychol 38(1):76-84.
- Reading R, Reynolds S (2001). Debt, social disadvantage and maternal depression. Soc Sci Med 53:441-53.
- ⁵⁹ Solantaus T, Leinonen J, Punamäki R-L. (2004). Children's mental health in times of economic recession: replication and extension of the family economic stress model in Finland. *Develop Psychol* 40 (3): 412-29.
- Leinonen JA, Solantaus TS, Punamäki RL (2003). Social support and the quality of parenting under economic pressure and workload in Finland: the role of family structure and parental gender. J Fam Psychol 17(3):409-18.
- Conger RD, Elder GH Jr, Lorenz FO, et al. (1994) Economic stress, coercive family process, and developmental problems of adolescents. Child Dev 65:541-61
- Almeida DM., Wethington E, Chandler, AL. (1999). Daily transmission of tensions between marital dyads and parentchild dyads. J Marriage Family 61, 49-61.
- Christensen A, Margolin G. (1988). Conflict and alliance in distressed and nondistressed families. In Hinde RA& Stevenson-Hinde J(Eds.). Relationships within families: Mutual influences (pp. 263-282). Oxford, England: Clarendon Press.
- Downey G, Purdie V, Schaffer-Neitz, R. (1999). Anger transmission from mother to child: A comparison of mothers in chronic pain and well mothers. J Marriage Family 61:62-73.
- Powdthavee N, Vignoles A (2008). Mental health of parents and life satisfaction of children: A within-family analysis of intergenerational transmission of well-being. Soc Indic Res 88:397-422.
- Appleby J (2009). The credit crisis and health care. BMJ 337:1022-4.
- McCord A, Vandermoortele M (2009). The global economic crisis: Poverty and social protection. Overseas Development Institute. Briefing Paper, August 2009. Available at: http://www.odi.org.uk/resources/download/3282.pdf
- ⁶⁸ Knapp M, McDaid D, Mossialos E, et al. (Eds) (2005). Mental health policy and practice across Europe. Open University Press/McGraw Hill.
- ⁶⁹ Weaver JD (1983) Economic recession and increases in mental health emergencies. J Ment Health Adm 10(2):28-31.
- ⁷⁰ Gunnell D, Platt S, Hawton K (2009). The economic crisis and suicide. Consequences may be serious and warrant early attention. *BMJ* 338:1456-7.
- Khang Y, Lynch J, Kaplan GA (2005). Impact of economic crisis on cause-specific mortality in South Korea. Int J Epidemiol 34:1291-301.
- Chang SS, Gunnell D, Sterne JAC, et al. (2009). 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 68:1322-31.

⁷⁴ Vuori J, Silvonen J (2005). The benefits of a preventive job search program on re-employment and mental health at two years follow-up. J Occup Organ Psychol 78:43-52.

⁷⁵ Upanne M, Hakanen J, Rautava M (1999). Can suicide be prevented? The suicide project in Finland 1992-1996: Goals, Implementations and Evaluation. Stakes. Available at: http://www.stakes.fi/verkkojulkaisut/muut/mu161.pdf

⁷⁶ Hintikka J, Saarinen PI, Viinamäki H (1999). Suicide mortality in Finland during an economic cycle, 1985-1995. Scand J Publ Health 27(2):85-8.

⁷⁷ Ostamo A, Lönnqvist J (2001). Attempted suicide rates and trends during a period of severe economic recession in Helsinki, 1989-1997. Soc Psychiatry Psychiatr Epidemiol 36(7):354-60.

Howden-Chapman P, Hales S, Chapman R, et al. (2005). The impact of economic recession on youth suicide: A comparison of New Zealand and Finland. Report 4: Social explanations for suicide in New Zealand. Wellington, New Zealand: Ministry of Health.

⁷⁹ Proudfoot J, Guest D, Carson J, Dunn G, Gray J (1997). Effect of cognitive-behavioural training on job-finding among long-term unemployed people. Lancet 350:96-100.

⁸⁰ Scottish Government (2008).Risk and Protective Factors for Suicide and Suicidal Behaviour: A Literature Review. Available at: http://www.scotland.gov.uk/Publications/2008/11/28141444/0

⁸¹ EU Commisson (2009).Paper supporting the Round Table.Working document for the meeting: Mental Health Round table: Reducing the Psychosocial Impact of the Financial and Economic Crisis" Brussels, 27 April 2009.Available at: http://ec.europa.eu/health/ph_determinants/life_style/mental/docs/ev_20090427_rd02_en.pdf

Enforcement Authority (2008). Everyone wants to pay their fair share: Causes and consequences of overindebtedness. Report 2008:1B. Stockholm: Enforcement Authority.

Institute of Alcohol Studies (IAS) Alcohol and Mental health- IAS Factsheet. Available: http://www.ias.org.uk/resources/factsheets/mentalhealth.pdf

84 Gillan E, Macnaughton P (2007). Alcohol - Price, Policy and Public Health. Report on the findings of expert workshop by SHAAP- Scottish Health Action on Alcohol Problems. Available: http://www.shaap.org.uk/UserFiles/File/Price%20Report%20-%20Full%20report.pdf

Morrell SL, Taylor RJ, Kerr CB (1998). Unemployment and young people's health. Med J Aust 168;236-40.

⁸⁶ Dorling D, Gunnell D (2003). Suicide: the spatial and social components of despair in Britain 1980-2000. Trans Inst Br Geographers 28:442-60

Branthwaite A, Garcia S (1985). Depression in the young unemployed and those on youth opportunities schemes. Br J Med Psychol 58:67-74

 88 Hawton K, Williams K (2002) Influences of the media on suicide. BMJ 325:1374-5.

89 Lewis SJ, Leeder SR. (2009). Why health reform? Med J Aust. 191(5):270-2.

90 Bezruchka, S (2009). The effect of economic recession on population health. CMAJ 2009.

⁷³ Zimmerman SL (2002). States' spending for public welfare and their suicide rates, 1960 to 1995: what is the problem? J Nerv Ment Dis 190:349-60.