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Artykuł poglądowy/Review

# Global Financial Crisis, Health and Healthcare Professionals Role Implications: a Review of Literature

# Globalny kryzys finansowy, konsekwencje zdrowotne i wskazania dla pracowników ochrony zdrowia: przegląd literatury

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#### **Abstract**

**Aim.** Identifying the effects of the global financial crisis on health, public health system(s) and healthcare workers is the main purpose of this paper.

Material and methods. A review of the literature was undertaken. The following keywords were adopted: economic crisis, financial crisis, health implications, public health, unemployment, labour substitution, mental health, healthcare (nursing), and education as a Mesh word or text words in the title and in the abstract, via MedLine/Cinahl and Scopus database. A ten-year timeframe (2001-2011) was set in order to include the most recent studies. Articles reporting the relationship between financial crisis, health problems, mortality, use of public health care service(s), and implications on healthcare workers roles were included and analysed. A content analysis methodology of the articles retrieved was then performed.

**Results.** The economic downturn that has unfolded in recent years is expected to produce adverse social and health effects. Extended research data reveal that people's health status is definitely affected by the economic crisis and consequently the healthcare sector will have to be reformed to meet the new challenges more efficiently. Economics depressions have a direct impact on overall health, on public spending directed to the healthcare system, on the quality of the services provided and on restructuring of the roles and functions of healthcare personnel.

**Conclusions.** Preliminary lessons learnt from the current global financial crisis suggest undertaking several strategies at the: a) social and public health level, b) healthcare system level; c) healthcare workers education level and, d) at the nursing professional level. (PNN 2012;1(4):164–169)

**Key words:** economic crisis, financial crisis, health implications, mental health, public health, unemployment, healthcare (nursing)

#### Streszczenie

**Cel.** Ukazanie wpływu światowego kryzysu finansowego na zdrowie, systemy zdrowotne oraz pracowników ochrony zdrowia.

Materiał i metody. Dokonano przeglądu literatury w bazach MedLine/Cinahl i Scopus, na podstawie następujących słów kluczowych i terminów Me SH pojawiających się w tytule lub streszczeniu: kryzys ekonomiczny, kryzys finansowy, konsekwencje zdrowotne, zdrowie publiczne, bezrobocie, zdrowie psychiczne, pielęgniarstwo, ochrona zdrowia i wykształcenie. W celu uzyskania najbardziej aktualnych informacji zawężono okres, z którego pochodzi literatura, do 10 lat (2001–2011). Analizie poddano artykuły dotyczące związków między kryzysem finansowym a problemami zdrowotnymi, śmiertelnością, dostępem do usług medycznych i konsekwencjami dla ról pełnionych przez pracowników ochrony zdrowia.

Wyniki. Bez wątpienia kryzys ekonomiczny, który pogłębia się od kilku lat, ma negatywny wpływ na zdrowie publiczne, co wynika z licznych badań. W konsekwencji, sektor zdrowia publicznego będzie wymagał reform, aby sprostać nowym wyzwaniom. Problemy ekonomiczne mają bezpośredni wpływ na ogólne zdrowie, na wydatki publiczne przeznaczone na ochronę zdrowia, na jakość opieki oraz na konieczność ponownego zdefiniowania ról pracowników ochrony zdrowia.

Wnioski. Wczesne wnioski płynące z obserwacji wpływu kryzysu na zdrowie wskazują na konieczność zastosowania pewnych strategii na następujących poziomach: a) społecznym i zdrowia publicznego; b) systemu ochrony zdrowia; c) edukacji pracowników ochrony zdrowia oraz d) na poziomie pielęgniarstwa. (PNN 2012;1(4):164-169) Słowa kluczowe: kryzys ekonomiczny, kryzys finansowy, konsekwencje zdrowotne, zdrowie psychiczne, zdrowie publiczne, bezrobocie, opieka zdrowotna (pielęgniarstwo)

#### Introduction

Over the past few years several countries in the world are suffering from a global economic recession which is characterised by a rise in unemployment or reduction in wages leading to lower incomes [1]. According to a WHO report [2], in periods with serious economic downturns the most affected people are those who belong to low socio-economic groups; the risk of psychiatric disorders and suicides tends to increase and public expenditure for health and welfare services tends to diminish in order to allocate investments to other priorities. These cuts may lead to a restructuring of the roles and functions of the healthcare personnel, resulting in a deterioration of the quality of services provided. Thus, the crisis is expected to increase the burden of illness and worsen the social inequalities which in turn will lead to poverty and social deprivation [3,4]. While developing countries are not yet in recession - defined as two consecutive quarters of negative economic growth - economists are concerned about the global downturn. Some fear it could be as bad as or even worse than the Great Depression of the 1930s [5].

Identifying the global financial crisis impact on health, healthcare system(s) and worker roles is the main purpose of this contribution.

#### Material and methods

MedLine/Cinahl and Scopus databases were considered eligible. The following Mesh-terms or text words included in the title and/or in the abstract were adopted: *Economic crisis, financial crisis, labour substitution, health implications, public health, unemployment, mental health, healthcare (nursing)*. In accordance with the aim of the study, only those studies evaluating the effects of the financial crisis on health, public healthcare system(s) and healthcare worker roles, published from 2001-2011 in all languages, were included. The data search was performed twice, in 2011 and in March 2012 in order to detect if new articles have emerged. A hand search of documents/reports not indexed in the database aiming to retrieve unpublished materials was also carried out by a researcher (VN).

Among the 75 articles emerged, 22 studies and 15 documents (e.g. produced by WHO, OECD, or

commentaries) were retrieved. Two researchers independently discussed each of these retrieved for its eligibility. After having obtained the full texts, study design, subjects involved, and main findings were extracted for each included study, excluding those not reporting study findings such as international documents (e.g., produced by WHO) or those reporting reprinted documents published on 1981 [e.g., 6].

A content analysis methodology (LoBiondo & Haber 1994) requiring that researchers first identify the categories of interest and then include articles emerged in each category, was adopted. Therefore, in accordance with the aim of the study, researchers identified the following categories of interest: a) unemployment effects on health; b) economic effects of vulnerable groups, economic crisis effects on mortality rates; c) economic crisis effects on healthcare service utilisation, and d) implications on healthcare worker roles. Then the emerging contents reported in the articles included were included appropriately in each category.

In order to understand and describe some mechanisms explaining the relationship between the financial crisis and its effects when not fully reported in the article(s) retrieved (e.g., unemployment and cardiovascular morbidity) an independent-specific literature review was undertaken (n = 14 [5,7,8,9,10,11,12,13, 14,15,16,17].

#### Results

Unemployment and adverse health effects

Downturns in economic activity increase the rates of unemployment [18] which consequently affect mental and physical health: a strong correlation between unemployment or low income level and increased mortality rates, suicidal tendencies, mental disorders, changing eating habits and over-consumption of tobacco and alcohol is documented [19,20,21,22]. People who have lost their job suffered from symptoms of somatisation [4], depression, anxiety and were more likely to visit their physicians and take more medication. Job insecurity is also associated with drug addiction, increased rates of suicide and heart disease, mental disorders with the most vulnerable groups being those who belong to the low socio-economic classes

[6 reprinted document published on 1981, 21,22]. Currently it is judged that long-term job insecurity acts as a chronic stressor which increases sickness, work absenteeism and healthcare service utilization [23,24].

Historically, the loss of work and income is associated with economic crisis and has a deleterious effect on people's daily lives; but if individuals are encouraged to participate in social events/networks, these can facilitate coping with unemployment [25,26]. According to the OECD forum [27], support programmes for education and training can help displaced workers find new job opportunities and thus prevent many adverse health effects.

## Economic crisis and vulnerable groups

Poor social groups are those who are mainly affected by the repercussions of the crisis, since socioeconomic factors play a major role in the psychological health level of the population. Income inequalities, occupational status and productivity capacity are important indicators for the sense of well-being and the overall health of individuals [28,29]. It is worth mentioning that high-income countries, compared to those with low-incomes, have low fertility and mortality rates and increased life expectancies while the disease map to some extent is totally different from the low-incomes countries which are faced with high mortality rates from infectious diseases and maternal and childhood mal-conditions [30].

### Economic crisis and mortality rates

A study conducted in 26 European Union countries concluded the economic downturn has many attributes that can occur simultaneously, including unemployment, premature death from intentional violence, suicide, homicide and alcohol abuse [21]. In a review study conducted in Greece, authors stated that economic declines in middle or low-incomes countries is associated with an increase in all causes of mortality, expected mortality due to transport accidents decreasing, probably due to the reduced travel [20].

The Asian economic recession, which caused a sudden increase in unemployment, has also led to an increase in suicide mortality rates, reflecting a significant harmful mental health effect associated with the recession [19,22]. As described by Economou and colleagues [31] in a workshop that was held in 13 European Union Countries, there is a strong relationship between unemployment and an increase in cardiovascular mortality. Also Stuckler and colleagues [21] have reported the same effects. One possible explanation is that acute stress and depression have been associated with elevated levels of cytokines and leukocytes which lead to elevated blood pressure via catecholamine [10].

Although there is increasing literature that documents the relationship between economic fluctuations and mortality, controversies do exist about the mechanisms that induce the above-mentioned relationships. Health deteriorates when the economy temporarily improves since it is associated with increased smoking and obesity, reduced physical activity and worsened diet [32]. Gerdtham & Ruhm [33] have aggregated data for 23 Organization for Economic Cooperation and Development (OECD) countries over the 1960-1997 period to examine the relationship between macroeconomic conditions and deaths. From the results emerged, countries with weak social insurance protection can foster fluctuations in mortality rates compared to those with more extensive programs. Neumayer [34] has analysed the effect of state unemployment and economic growth rates on mortality in the states of Germany over the period 1980-2000. From the results, the total mortality rates are lowered in recessions; also in the commentary written by Perry and Humphreys [5], in the United States of America and Western Europe, there is evidence that mortality falls during recessions, through the decreased use of alcohol and tobacco, less pollution due to lower industrial output, and fewer road collisions as a result of less traffic.

## Economic crisis and use of public healthcare services

The aforementioned effects on overall health increase the demand for public healthcare services. There is a widespread agreement that, in stressful economic and social circumstances, the demand on public health services is increased for the reason that patients turn from the private to public sector services since the cost of care is lower [35]. However, the high utilisation of the healthcare system does not always interpret the presence of organic pathology as, in some cases, psychological disorders can be masked by physical complaints [36]. During financial crises, patients perceive themselves as frail, sick and physically disabled [37].

It also seems that healthcare consumption depends on household income as it is interpreted in the results from a study conducted in Seoul displaying that the high income groups have not changed their frequency of visits in medical services whereas the lower income groups have minimized mainly medicine expenditures and secondly the expenditures on medical services. Income reductions limit "unnecessary" expenses [38]. The above-mentioned results come in accordance with the study of Gottret and colleagues [39] concluding that households who experience reductions in income and employment, also reduce healthcare service utilization. Therefore, healthcare utilisation is difficult to predict in that short and long term, since income features play a major role.

## Economic crisis and implications for health professionals

Governmental concerns in periods of economic downturn are aimed at taking measures to reduce public sector expenses, including public healthcare services, which must reduce their operating and labour costs so as to control their expenditures. Health spending cuts have a direct impact on healthcare professionals, who are invited to provide high levels of care with minimal resources (workforce and supplies) [40]. Meanwhile, several studies have documented an association between lower nurse staffing levels and higher rates of some adverse patient outcomes addressing the safety and the quality of healthcare provision (e.g. [15]). Similarly, healthcare personnel shortages will make tasks more strenuous [41]. Burnout and job dissatisfaction are more likely to be revealed in hospitals with high patient-to-nurse ratios [7] and that comes in accordance with the results of Rafferty et al. [16] describing that the lower patient-to-nurse ratios the better outcomes, while the nurses in the high patient-to-nurse ratios hospitals were approximately twice as likely to be dissatisfied with their jobs, to show high burnout levels, and to report low or deteriorating quality of care on their wards and hospitals. According to a WHO Report [42], income is the most important motivation for health workers' migration followed by job dissatisfaction, career opportunities and political instability. Complementing those studies are a number of other studies addressing the negative impacts of the economic crisis on nursing education and research (e.g., [43]) which requires teaching staff, facilities, equipment and supplies to meet high quality standards.

On the other hand, during financial crises, healthcare worker roles might be expanded, reduced in their focus or eliminated, as indicated below:

- a) Clinical and/or managerial positions are cut as documented by Pringle [44] in the previous major recession in Canada in 1990 where there occurred the elimination of nurse management positions and the expansion of the range of responsibilities of those who remained.
- b) Nurses are replaced by nurse aides, prepared with courses lasting less and costing less. This implies that the staffs have a poor skill mix due the higher proportion of nurse aides. Despite 20 years of research on skill mix management in practice, there continues to be tension between the use of qualified and unqualified staff, particularly, regarding the costs and the quality dimensions [8].
- c) Nurses are employed in activities that are normally performed by doctors (e.g., [12,13]). The supply of physicians is constrained and there is increasing pressure to contain costs. Shifting care from physicians to nurses is one possible response to these challenges.

The expectation is that nurse-doctor substitution will reduce costs and physician workloads while maintaining the quality of care [13].

Substitution of skills has been introduced to increase health service efficiency, but little evidence is available about its cost-effectiveness [9]. There are numerous studies documenting the effects on patients and in general, it appears that nurses can provide cost-effective care, compared to other health professionals such as General Practitioners. It should be noted that enhanced nurse staffing is associated with both better outcomes and more expensive care, and therefore cost-effectiveness is not easy to assess as documented by several authors [11,12,13,17].

Healthcare personnel need to be alert and respond to the changes in the healthcare landscape so as to contribute and influence most cost effective reform processes [45,46]. Special attention should be paid to strengthening roles such as primary healthcare, public health and health promotion, developing healthcare worker competencies aiming to minimize the demand for hospital services [41]. As described by Lionis et al. [14], the strengthening of the primary care sector can result in a better quality of care provided, rationalise healthcare expenditure, reduce unplanned hospital admissions and increase user satisfaction.

## Conclusions and policy implications

This study has several limitations: there is a lack of generalization of the policy implications since the impact of economic downturns differs from country to country, depending on their economic, societal and cultural features. Also, it is probably too early to have definite estimates on the implications of the latest global economic recession but certainly this might be regarded as a great chance to reconfigure and optimise social and healthcare structures. Although it is still too early to estimate the effects of the current financial crisis properly, extended research data reveals that people's health status is definitely affected and consequently the healthcare sector will be reformed to meet the increasing needs efficiently. At the same time, demographic changes (e.g., lower fertility, ageing) and shifts in diseases and injuries, will have profound effects on the quantity and type of healthcare services needed. The financial crisis may also have an impact on social inequalities in health, inequitable access and low quality of healthcare through a deterioration of social determinants of health (loss of job-income, lack of health insurance, lack of information, direct financial costs of care, etc). Resource restrictions on healthcare personnel, education and research may affect the safety and quality of healthcare provision.

Further research is needed to determine the relationship between economic downturns and psychosocial parameters with the ultimate goal being the improved organisation of public healthcare provision in the community and hospital-based health policies. At this time, the preliminary lessons learnt from current global financial crisis suggest undertaking several different strategies:

- a) At the social and public health level: the major cause of inequality and relative poverty is unemployment. Income equality seems to improve social cohesion and reduce social divisions. Social and public health policies that can cover the most important health determinants by reducing unemployment, minimizing income and wealth inequality, are needed. Supportive programmes for education and training can help displaced workers find new job opportunities and thus prevent some adverse health effects.
- b) At the healthcare system level: the emerging challenges can be considered as an opportunity and a motivation to improve efficiency (by spending reviews, introducing strategies for lean organisation) and healthcare policies to improve the performance of healthcare systems. There is widespread agreement that health reforms should emphasize the field of prevention and early intervention. Flexible systems, different patterns of allocation, ways of working and tailoring healthcare services to community needs, might be some of the steps needed to cope with the epidemiological transitions such as ageing, non-communicable diseases, accidents and injuries, low fertility, etc. Probably it is too early to have definite estimates but certainly a well-planned reorganisation of healthcare institutions can be proved extremely effective to improve population health status in the future and tackle health problems in the early stages. There is also the need to establish policies to better connect hospitals, primary and community care to meet patient needs, improve the continuity of care and reduce demand for in-hospital admissions.
- c) At the healthcare worker education level: healthcare students need to be educated on emerging needs, e.g., to consider in their assessment process also new factors such as job insecurity, unemployment, or recent work loss in order to evaluate specifically patient and family actual and at risk problems. Specific programmes on vulnerable groups, and on the relevance of financial constraints on health, should be introduced among the healthcare student curriculum.
- d) At the nursing professional level: nurses are internationally recognized as the main pillar of the healthcare system given that they spend 24 hours a day and seven days a week taking care of patients and their families. Even those who are not involved in clinical practice but have managerial roles, pursue the priority mission to preserve patient care and safety. In this context, the point of view of nurses working at different levels in the healthcare system should be taken into consideration by those developing social and public health policies, healthcare system reforms and by those

reframing healthcare curriculum. Nurses can play a key role in times of global financial crisis: they can identify in advance patient and families needs, they can take care of and monitor patients and community needs; they can evaluate the appropriateness of nursing care at the bedside and at the community level, and they can evaluate immediate and long-term consequences of health reforms adopted at the national, regional and local levels.

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(A – Concept and design of research, B – Data Collection/ Analysis, E – Drafting of manuscript)

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