M.6. Impacting health

Are differences in implementation of HIA related to differences in public health systems?

Gabriel Gulis

G Gulis1, Jana Kollarova2, Eun Jin Choi3, Yoshihisa Fujino4
1University of Southern Denmark, Esbjerg, Denmark
2Regional Public Health Authority Kosice, Kosice, Slovakia
3KIHASA, Seoul, South Korea
4Environmental and Occupational Health University Fukuoka, Japan
Contact: ggulis@health.sdu.dk

Issue/problem
Implementation of any public health action or intervention is a complicated issue; implementing health impact assessment (HIA) is no difference. HIA is a rather broad methodology applied to assess future impacts of recent policies, projects and plans (actions) on health of population. Mostly it is applied to actions outside the health sector what makes implementation even more complicated. HIA is therefore often considered as a key mechanism to implement Health in All Policies approaches. In addition HIA itself consists of several steps and often it is debatable whether a single step of HIA (screening) is implemented or the whole methodology.

Description of the problem
We analyzed the relation between, public health system orientation (regulatory-health promotion oriented) and priorities in Denmark, Slovakia, Japan and Korea to identify links to implementation of HIA.

Lessons
In Denmark, the largely decentralized system on local level oriented toward health promotion, lead to support of bottom-up way of implementation of HIA. It is mostly the Danish municipalities who are using HIA at least on screening and consultation level while developing plans and policies on municipal level. In Slovakia, where the public health system is based on public health authority work and regulations HIA has been implemented via a paragraph in public health law. A licensing system has been established to grant license to private businesses who develop HIA. In Japan, there is a strong tradition of occupational health and epidemiology and this is visible also on implementation of HIA. Cases completed until now dealt mostly with occupational health issues with strong involvement of broader issues such as employment questions.
In Korea, where tradition of EIA is strong, HIA is implemented mostly as part of HIA; strong interest for environmental health issues is other reason for this approach.

**Main messages**

There is a variety of options how to implement HIA. Socio-political environment expressed via governance systems plays a key role in selection of the proper method.

**Key message**

- Implementation OF HIA is closely related to orientation and priorities of existing public health system in country.

**Motherhood, family structure and health in Sweden**

Sara Fritzell

S Fritzell\(^1\), M Gähler\(^2\)
1Department of Public Health Sciences, Karolinska Institutet, Stockholm, Sweden
2Swedish Institute for Social Research, Stockholm University, Stockholm, Sweden

**Contact:** sara.fritzell@ki.se

**Background**

This study focuses on health among mothers in different family structures. Swedish family policy aims to reduce financial differences between family forms. Research has shown that some of the poorer health among lone mothers may be explained by financial difficulties. However, being able to share the responsibility (socially and economically) of bringing up children may also impact on health in several ways. Alternate living is increasingly common in Sweden among children in post separation families. This is influenced by possibilities of parental cooperation, which may also impact on health in itself. Although research is beginning to analyze how alternate living and parental cooperation affects the health of children, there is still lack of research on how it may affect health of mothers.

**Methods**

Using data from the 2010 Swedish Level of Living Survey, we analyze the impact of alternate living and parental cooperation (indicated by discussions related to the child regularly) on self-rated health (SRH) of mothers in five different family structures (couple; stepfamily; lone with alternate living (children live equally much with father); lone with mainly sole custody (children live with father no more than 4 days per month); and lone with sole custody). Data on 758 mothers with children 0-18 in the household were analyzed by multivariate logistic regression. Adjustments were made for social and economic background factors.

**Results**

Preliminary results showed differences in health among mothers by family structure. Lone mothers with sole and mainly sole custody reported worse SRH than all other family structures, OR 1.8, CI 1.1-3.1 (adjusted for age, level of education, financial strain and number of children, reference group: couple mothers). In the same model, OR for excess risk of poor SRH was not significant for lone mothers with children living alternately and mothers in stepfamilies. Differences in parental cooperation were entailed with excess risk of poor SRH (OR 2.9, CI 1.2-7.2). Adjusting for this lowered the OR for poor SRH among lone mothers (sole and mainly sole) from 1.8 to 1.4 (reference group: alternate living).

**Conclusion**

Alternate living as well as parental cooperation is important to consider analyzing health among lone mothers.

**Key messages**

- Sharing responsibility for children with the father in terms of alternate living is associated with better health among lone mothers.
- Difficulties in parental cooperation are associated with poorer health among lone mothers.

**Longitudinal analyses of mobility disability, weight gain and interaction by unemployment in the Stockholm Public Health Cohort 2002-2010**

Jeroen De Munter

J de Munter, F Rasmussen

Department of Public Health Sciences, Karolinska Institute, Stockholm, Sweden

**Contact:** jeroen.de.munter@ki.se

**Background**

People with a mobility disability are a vulnerable group in society and have more difficulty remaining weight-stable compared to the general population. Unemployment has been related to changes in body weight in the general population. However, the impact of unemployment on body weight in people with a mobility disability is currently unclear, but expected to be worse. Therefore, this study aims to explore changes in body weight after a period of unemployment in people with a mobility disability compared to the general population.

**Methods**

We used population based data from the Stockholm Public Health Cohort (baseline 2002, age range 18 to 60 years) and follow-up in 2007 and 2010 (n=19 128). Mobility disability was defined according to a self-reported item on mobility ("I have some problems walking around"). Self-reported weight and height were used to calculate BMI (kg/m2). Self-reported unemployment was measured in 2007 covering any period between 2002 and 2007. Age, education, baseline BMI and chronic illness adjusted linear regression stratified by sex was used to model the association between mobility disability status and change in BMI and interaction by unemployment.

**Results**

Fully adjusted and compared to people without mobility disability, people with mobility disability increased in BMI over time (men: 0.83 kg/m2, 95% CI: 0.46–1.21; women: 0.38, 0.67–0.70). In the total population we observed an association between unemployment and increase in BMI in men (0.23, 0.06–0.40), but not in women (0.02, -0.14–0.18). People with mobility disability and a period of unemployment gained more BMI than the main effects of mobility disability and unemployment (test for interaction in men: p<0.001; in women: p=0.02). Men with a mobility disability and unemployment increased 2.96 kg/m2 (2.02–3.90) compared to employed men without mobility disability.

**Conclusion**

The results show the harmful influence of unemployment in people that have a mobility disability on their change in body weight, particularly in men. These findings underline the importance of employment on health and well-being, especially in these marginal groups. Further research should focus on identifying underlying mechanisms of this increase in weight and development of preventive efforts.

**Key messages**

- People with a mobility disability seem more affected by a period of unemployment in terms of an increase in BMI than those without mobility disability, which will impact their health in later life.
- The stronger increase in BMI after unemployment in mobility disabled people compared to those without mobility disability needs attention from an equality focus through preventive and policy action.

**Self-rated health before and after labor force exit and re-employment - evidence in European countries**

Merel Schuring

M Schuring, A Burdorf

Department of Public Health, Erasmus University Medical Center, Rotterdam, The Netherlands

**Contact:** m.schuring@erasmusmc.nl

**Objective**

To investigate self-rated health before and after labour force exit due to unemployment, early retirement or economic inactivity, and re-employment. A secondary aim was to investigate educational differences in health trajectories before and after employment transitions.
Methods
Trajectories of self-rated health for up to 7 years before and 7 years after employment transitions among 136,556 persons were examined from the European Community Household Panel Survey (ECHP) with yearly measurements from 1994-2001. Data were analysed by use of repeated-measures logistic regression with generalised estimating equations.

Results
Among workers who became unemployed, the likelihood of poor health gradually increased after labor force exit (OR = 1.06, 95%CI 1.03-1.09). Among workers who became economically inactive, the likelihood of poor health gradually increased before labor force exit (OR = 1.03, 95% CI 1.00-1.06). Among low and intermediate educated workers, the likelihood of poor health increased before early retirement (OR = 1.09-1.14), whereas among high educated workers, the likelihood of poor health increased after early retirement (OR = 1.10, 95%CI 1.02-1.19). Among non-employed persons who entered paid employment, the likelihood of poor health decreased in the year of entering paid employment (OR = 0.93, 95%CI 0.91-0.95).

Conclusions
Health trajectories associated with labor force exit depend on the pathway out of the labor force. There are educational differences in health trajectories before and after early retirement. Efforts should be made to keep workers with health problems in the labor force and to avoid further deterioration of health.

Key messages
- Health trajectories associated with labor force exit depend on the pathway out of the labor force.
- There are educational differences in health trajectories before and after early retirement.

Unemployment, precarious work and decreased mental well-being among young individuals in southern Sweden. The Scania Public Health Cohort 2000-2010
Per-Olof Östergren, C Canivet
P-O Östergren, C Canivet
Social Medicine and Global Health, Lund University, Lund, Sweden
Contact: per-olof.ostergren@med.lu.se
Several studies from European contexts have shown that unemployment, a precarious work situation and job insecurity is detrimental for mental health. However, it has been claimed that developed welfare systems, like the one in Sweden, buffer for such negative effect. The aim of the study was to investigate whether mental health among individuals who stated they were at good mental health at baseline year 2000, developed worse mental health during a 10 year follow-up because of exposure to unemployment, precarious work or job insecurity.

Methods
A questionnaire was sent out to 25,000 randomly selected individuals 18-80 years old in the population of Scania, the southernmost region of Sweden, in 2000. The response rate was 59%. The questionnaire contained detailed information about the current employment situation, history of unemployment, and perceived job security, as well as self assessed general and mental health (GHQ 12). All individuals who responded at baseline, received an identical questionnaire in 2005 and 2010. Information at all three assessment was obtained from 2100 individuals who were 18-30 years of age at baseline. Logistic regression was used to calculate risk for decreased mental health.

Results
At baseline 42% of the cohort had stable employment, 28% were judged to have a precarious work situation, 12% were unemployed and 18% were students or outside the labour market for other reasons. The risk for impaired mental health at follow-up in 2010 was more than doubled for the unemployed, and about 80% higher in the precarious group, compared with those with stable employment.

Conclusion: A large group of young individuals in the current labour market in Sweden are exposed to work precariousness or unemployment. The risk for a negative impact on health is substantial among those, which in combination constituted a major negative effect on mental health from a population perspective.

Key message
- Precarious work and unemployment is common among young individuals and a risk for impaired mental health.

The impacts of job loss and job recovery on self-reported health: testing the mediating role of financial strain
David Stuckler
D Stuckler, T Huijts
Department of Sociology, University of Oxford, Oxford, UK
Contact: david.stuckler@sociology.ox.ac.uk

Background
Is re-gaining a job sufficient to reverse the harmful impacts on health of job loss? Using longitudinal data from the EU Statistics on Income and Living Conditions (EU SILC) during the Great Recession, we tested whether unemployed persons who found work within one year of job loss experienced a full recovery of their health. Additionally, we tested the mediating role of financial strain.

Methods
Linear regression models were used to assess the effects of job loss and recovery on self-reported health using the longitudinal EU-SILC, covering individuals from 27 European countries. We constructed a baseline of employed persons (n = 70 611) in year 2007. We evaluated financial strain as a potential mediating factor.

Results
Job loss was associated with significantly worse self-reported health in both men (B = 0.13, p < 0.001) and women (B = 0.12, p = 0.01). Financial strain explains about one third of the association between job loss and health. Women who regained employment within one year after job loss were found to be similarly healthy to those who did not lose jobs. In contrast, men whose employment recovered had an enduring health disadvantage compared with those who had not lost jobs (B = 0.11, p < 0.001). These gender differences appear to be accounted for by residual financial strain in men’s but not women’s job recoveries.

Conclusions
Both men and women’s health appears to suffer equally from job loss, but differ in recovery. Whereas women’s job recovery tends to alleviate financial strain, in men financial strain and associated health consequences appear to persist even when employment recovery is rapid. Further research is needed to understand how to promote transitions to better quality jobs.

Key messages
- Helping men into new employment quickly after job loss is not enough to prevent the harmful effect of recessions on health, partly because they continue to experience increased financial strain.
- Women are more resilient to the impact of recessions, since their health fully recovers after finding new employment.

Curbing access constrains to health promotion programs with a web portal
Luis A Saboga Nunes
LA Saboga Nunes
National School of Public Health, New University of Lisbon, Lisbon, Portugal
Contact: saboga@ensp.unl.pt

Background
While the strategy of supporting people to quit smoking has been emphasized at National Health Service level, the uptake of cessation assistance has exceeded the capacity of the service.
A problem of health provision emerged with waiting lists for smoking cessation programs. This induced the demand for new theoretical and practical venues to offer alternative options to stop smoking. eHealth and the use of information and knowledge management technologies (IKMT) in smoking cessation are researched as operational salutogenic strategies. The present study explores the possibility of IKMT to increase health literacy and the motivation to consider smoking cessation in the Portuguese population.

**Methods**
Smokers and non-smokers were asked about the use of the Internet for smoking cessation and carbon monoxide (CO) levels were measured. A convenient sample of 10,824 (58.3% were males) was collected across the country in the context of the European HELP campaign.

**Results**
Results showed that 37.0% of the participants were smokers. These participants had a mean of 18.4 ppm of CO (SD 12.9 ppm). Awareness about CO levels was associated with motivation to make behaviour changes (IBC) ($x^2 = 0.120; p < 0.01$). A significant number of smokers (59.4%) would like to stop and 60% wanted to have help. More women than men accepted assistance for smoking cessation ($x^2 = 4.48; p = 0.03$). Even if 24.4% did not have Internet access, 57% said a web platform could help a lot ($x^2 = 18.66; p = 0.01$). That having Internet access were more favorable to the contribution of the web to help quit ($x^2 = 377.07; p < 0.001$). Among the participants, 43.5% were motivated for not using tobacco in the next six months ($x^2 = 0.790; p < 0.01$) and men were more motivated than women to go through with a quitting help program in the web ($x^2 = 10.60; p = 0.01$).

**Conclusions**
Access to the web portal www.parar.net by the means of IKMT would assist health professionals in their task and support people to reinforce their decision to stop smoking.

**Key message**
- Internet support with emphasis on health literacy about the benefits and strategies to stop smoking is recommended as a help strategy, particularly when waiting lists make it difficult for smokers to get appropriate support in due time.