

The Significance of a Health Psychology Approach in Transforming Societies

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Up to the end of the 1970s mortality rates in Hungary had been actually lower than in Britain or Austria. Subsequently, mortality rates continued to decline in Western Europe, whereas in Hungary and in other Central East European (CEE) countries this tendency reversed, especially among middle-aged men (Black et al., 1992; Bobak & Marmot, 1996; Cornia & Panixcia, 2000; Marmot & Wilkinson, 1999). In the late 1980s, the mortality rates among 45-64 year old men in Hungary rose to higher levels than they were in the 1930s, while the mortality rates in the older age groups were comparable to the worst in Western-Europe. Cardiovascular mortality accounts for the majority of this excess mortality in these countries (Weidner, 2000).

What is the explanation for the vulnerability of middle aged men during this period of rapid economic change? This deterioration cannot be ascribed to deficiencies in health care, because during these years there was a significant decrease in infant and old age mortality and improvements in other dimensions of health care. Furthermore, between 1960 and 1989 there was a constant increase in the gross domestic product (GDP) in Hungary. Thus the worsening health status of the Hungarian male population cannot be explained by a worsening material situation.

A growing polarisation of the socioeconomic situation occurred in the CEE countries, especially in Hungary between 1960 and 1990. The vast majority of the population lived at a similarly low level in 1960, with practically no income inequality, and there were no mortality differences between socioeconomic strata. Since that time increasing disparities in socio-economic conditions have been accompanied by a widening socio-economic gradient in mortality, especially among men (Black et al., 1992; Mackenbach et al., 1999).

The theory of relative deprivation hypothesises that chronic stress can arise out of situations in which there is rapid improvement in living standards for some but not for others. Relative deprivation may be deleterious to both psychological and physical health, mediated through stress-related coping responses (e.g., more smoking, heavier drinking) as well as invidious social comparisons. Conversely, social cohesion and meaning in life may help to counterbalance the widening gap in material circumstances (Skrabski et al., 2003, 2004, 2005).

One of the most interesting features of the so-called "Central-Eastern-European health paradox" is the gender difference in worsening mortality, in spite of the fact that men and women share the same socio-economic and political circumstances. In Hungary the male/female differences in life expectancy in 2004 was 8.3 years, which is considerably higher than the average difference found in countries of Western Europe, for example 5,7 years in the neighboring Austria, 4.6 years in Denmark and Great Britain (Demographic Yearbook, 2004). The mortality ratio comparing the lowest to highest educational stratum is 1.8 for Hungarian males, while 1.2 for females (Mackenbach et al., 1999). There are also marked morbidity and mortality differences according to the Hungarian counties and sub-regions.

Based on the data of our national representative surveys conducted in the Hungarian population (Hungarostudy 1983,1988, 1995, 2002; Kopp et al., 1995, 1998, 2000, 2002, 2005; Kopp & Skrabski, 1996; Skrabski et al., 2003, 2004, 2005) we found that a worse socioeconomic situation is linked to higher morbidity and mortality rates in Hungary as well. According to multivariate analyses, however, a relatively poor socioeconomic situation in itself does not cause higher morbidity rates, only through the mediation of depressive symptoms. In 1988, according to our national representative study in the Hungarian population, depression mediated between low income and self-rated morbidity among men, while among women low income was not significantly connected neither with depression, nor with self reported morbidity. In 1995 this pic-

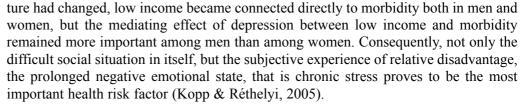
Overview Paper

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Health Psychology in Transforming Societies



Presumably a self-destructive circle develops from the enduring relatively disadvantageous socioeconomic situation and depressive symptoms. This circle resulting in chronic stress, plays a significant role in the increase of morbidity and mortality rates in the lower socioeconomic groups of the population. Until the 1970's with the uniformly low living standards, Hungarian health statistics showed more favourable data, than in several Western countries, such as in Great Britain or Austria. During rapid socioeconomic changes the disadvantaged continuously blame themselves or their environment, consider their future hopeless, experience permanent loss of control and helplessness, because they cannot afford a car, better living conditions, higher income, while others around them are able to achieve these. They constantly rate their own situation negatively, feel helplessness, and a loss of control. This experience becomes widespread when society becomes rapidly polarized and social cohesion, trust, reciprocity and social support decrease dramatically.



Though the relationship is true in general, the significance of the different factors varies according to periods and to environmental processes. In relatively stable societies, existing without great social shocks, the social factors and the psychological coping with these factors have less significance. In a region like Hungary and the other Central and Eastern European countries, dramatic changes have occurred in the last decades. During this time period depression and premature cardiovascular and overall mortality increased in parallel, primarily among men.

Men were found to be more susceptible to the effects of relative income inequality and GDP deprivation, but the pathway of this relationship is yet to be explained. Two possible explanations can be hypothesized. One is that the income inequality is much higher among men. In Hungary, in 1988 the main income of working women was 31% lower than that of working men, with a standard deviation 26% lower, while in 1995 the average personal income of women was 24% lower with 37% lower standard deviation, that is the income inequalities among men were and remained more substantial (Kopp & Réthelyi, 2005).

The other possible explanation might be that men are more susceptible to loss of status than women. Animal experiments have shown males to be more sensitive than females to loss of dominance position, that is loss of position in hierarchy (Réthelyi & Kopp, 2005). Most animal studies on social rank examine males, where social rank is the best predictor of quality of life and health. The relationship between social inequality and health applies to women as well as to men in several respects according to several studies, although the income and occupation of women are not as powerful predictors of mortality as they are for men (Marmot & Wilkinson, 1999). Especially in a suddenly changing society, such as Hungary, the social inequalities in mortality rates are much more pronounced among men. In such a situation, in a more traditional society, the relative income deprivation might be a more important risk factor for men than for women. There are significant gender differences in ways of coping during the sudden changes of the political-economic system, male morbidity seems to be more affected by the socio-economic changes (Kopp, 2000).

Middle aged men are more vulnerable to the socio-economic risks of their society, but this is closely connected with different male-female roles in the society. Men are affected not only by their own social situation but by the subjective evaluation of social status of women as well (Kopp et al, 2005). The subjective social status and education of women were strongly and inversely correlated with male mid-aged mortality, which means that in sub-regions where women hold more negative appraisal of the social standing and have lower education, there is greater male health deterioration.

In preventing the high male premature mortality in Central-Eastern Europe women might play an important role.

It can be hypothesised that the socio-political changes may have different consequences for men and women. The improvement of higher education of women seems to be beneficial both for male and female longevity. Educated women accept more the responsibility for the socio-economic situation of their family. The feeling of relative socioeconomic deprivation among women in the relatively deprived regions, on the contrary, might result in a vicious cycle of relative deprivation among men (Kopp et al., 2005).

During the modernisation process of society the female patterns of inequity, risk factors and health might approach male patterns as it has been experienced in several Western countries.

In the comparison of women to men socio-economic factors are nearly four times more important predictors of middle-aged mortality differences among regions. Social distrust and the rival attitude are important predictors of middle aged mortality differences among men (Skrabski et al., 2003, 2004). This indicates that in a suddenly changing socio-economic situation relative economic deprivation, rival attitude and social distrust are all more important risk factors for men while the strong collective efficacy could be a protective factor, even in the case of men. Rival attitude has a highly significant negative association with participation in civic organizations, consequently the protective effect of participation in civic associations might influence health through a lower rival, competitive attitude in members of civic networks among men.

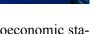
The existing and broad socio-economic differences among the Hungarian regions are less important regarding the middle aged female mortality differences. Neighbourhood cohesion, religious involvement, trust and reciprocity were not as much influenced by sudden socio-economic changes in the last decades, therefore the protective network of women remained relatively unchanged.

The above results show that health psychology approach might play a central role in preventing the middle aged morbidity and mortality crisis in transforming societies.

References:

- Black, D., Morris, J.N., Smith, C., Townsend, P., & Whitehead, M. (1992). Inequalities in health: The Black report. Health Divide. London: Penguin.
- Bobak, M., & Marmot, M., (1996). East-West mortality divide: Proposed research agenda. *British Medical Journal*, 312, 421–425.
- Cornia, G.A. & Panicia, R. (Eds.) (2000). The mortality crisis in transitional economies. Oxford.
- Kopp, M.S., Skrabski, Á. & Szedmák, S. (1995). Socioeconomic factors, severity of depressive symptomatology and sickness absence rate in the Hungarian population. J. Psychosom. Res., 39 (8), 1019–1029.
- Kopp, M.S. & Skrabski, Á. (1996). *Behavioural sciences applied to a changing society*. Budapest: Bibl Septem Artium Liberalium.
- Kopp, M.S., Falger, P., Appels, A. & Szedm?k, S. (1998). Depressive symptomatology and vital exhaustion are differentially related to behavioural risk factors for coronary artery disease. *Psychosomatic Medicine*, 60, 752–758.
- Kopp, M.S. (2000). Cultural transition. In: Fink, E.G., (Ed). *Encyclopedia of Stress*, volume 1, (pp. 611–615). San Diego: Academic Press,.
- Kopp, M.S., Skrabski, Á. & Szedmák, S. (2000). Psychosocial risk factors, inequality and self-rated morbidity in a changing society. *Social Sciences and Medicine*. 51, 1350–1361.
- Kopp, M.S., Skrabski, Á. & Székely, A. (2002). Risk factors and inequality in relation to morbidity and mortality in a changing society. In: Weidner, G., Kopp, M.S. & Kristenson, M., (Eds.) Heart disease: Environment, stress and gender. *NATO Science Series, Life and Behavioural Sciences*, vol. 327, (pp. 101–113) Amsterdam: IOS Press;.

Health Psychology in Transforming Societies



- Kopp, M.S., Skrabski. A., Kawachi, I. & Adler, N.E. (2005). Low socioeconomic status of the opposite gender is a risk factor for middle aged mortality, *Journal of Epidemiology and Community Health*, 59, 675–678.
- Kopp, M.S, & Réthelyi, J. (2004). Where psychology meets physiology: chronic stress and premature mortality the Central-EE health paradox. *Brain Res Bull.*, 62, 351–367.
- Kristenson, M. & Kucinskiene, Z. (2002). Possible causes of the differences in coronary heart disease mortality between Lithuania and Sweden: the LiuViCordia study. In: Weidner, G., Kopp, M.S., & Kristenson, M., (Eds). Heart disease: Environment, stress and gender. *NATO Science Series, Life and Behavioural Sciences*, vol. 327, (pp. 328–340). Amsterdam: IOS Press.
- Mackenbach, J.P., Kunst, A.E., Groenhof, F., Borgan, J.K., Costa, G., Faggiano, F., Józan, P., Leinsalu, M., Martikainen, P., Rychtarikova, J. & Valkonen, T. (1999). Socioeconomic inequalities in mortality among women and among men: An international study. *Am. J. Public Health.* 89(12), 1800–1806.
- Marmot, M. & Wilkinson, R. (1999). *Social determinants of health*. Oxford Univ. Press. Skrabski, Á., Kopp, M.S., & Kawachi, I. (2003). Social capital in a changing society: Cross sectional associations with middle aged female and male mortality rates. *J Epidemiol Commun Health*; 57, 114–119.
- Skrabski, Á., Kopp, M.S., & Kawachi I. (2004). Social capital and collective efficacy in Hungary: Cross sectional associations with middle aged female and male mortality rates. *J Epidemiol Commun Health*, 58, 340–345.
- Skrabski, A., Kopp, M.S., Rózsa, S. et al. (2005). Life meaning: and important correlate of health in the Hungarian population. *Int J Behav Med* 12 (2), 78–85.
- Weidner, G. (2002). The role of stress and gender related factors in the increase in heart disease in Eastern Europe: Overview. In: Weidner, G., Kopp, M.S. & Kristenson, M., (Eds). Heart disease: Environment, stress and gender. *NATO Science Series, Life and Behavioural Sciences*, vol. 327, (pp. 1–14). Amsterdam: IOS Press;



Intervention Checklist Developing a comprehensive checklist to guide the design of interventions

The initial idea for the Intervention Checklist (ICL) was devised during the CREATE 2005 workshop "Designing and evaluating theory based interventions", facilitated by Charles Abraham, Susan Ayers, and Susan Michie at EHPS Conference in Galway, Ireland. The participants within this innovative workshop identified a need for an integrated perspective framework, that would allow for both theory testing and provide concrete strategies on "How To" design, plan, implement and evaluate theory based interventions.

A focus group was formed comprising members of the original workshop, whose goal was to bring the initial idea to fruition. A key initial area of consideration was the dissemination of the final "product". It was decided very early on that a web-based forum would be needed to aid access for those people that would consider using the ICL. With this in mind the focus group split into two teams. The first of which would design the website and the second would develop the content of each section, both being overseen by an editor-in-chief. Within the content team, a brain storming exercise ensued. While still in Galway, we decided the outline of the points that we would need to incorporate in the website. Each person was then in charge of doing a comprehensive literature review on their specific sub-section. Over the proceeding months, this was compiled by the editor-in-chief into a coherent order. Slowly the Intervention Checklist began to emerge. However, being in separate countries proved to be a consistent stumbling block. We kindly received funding from the EHPS for four of us to meet in a central location to facilitate the final phase of the project. This proved to be integral to advancing the ICL nearer to its completion and we are very grateful to EHPS for this opportunity.