



## Research Article

### THE EUROPEAN HEALTH DIVIDE AND POLICIES THAT COULD REDUCE IT

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#### ABSTRACT

A continuously increasing health divide exists in European countries though many of those have similar culture, economy, and other facilities. Thus, this review paper aims to identify "What does the European Health Divide refer to?" as well as to describe this divide with some examples of policies that could reduce it. This paper identified the term European Health Divide as the existing and continuously increasing health gap between and within European countries, especially, between Eastern and Western dimension. The reasons of this health divide include, for example, higher consumption of alcohol, smoking and unhealthy diet; political instability, lack of individual trust, ineffective governmental policies, economic crisis, lower production, unemployment, unequal distribution of resources, money and power; lack of social cohesion and family relation. Policies to improve health and to reduce the health divide within and between countries in Europe as well as globally include improving educational attainment, exercising democracy to improve political stability, universal welfare policy to minimize economic problems, positive perception on governmental policy and trust on individual, taking steps on behavioral factors like, diet, reducing alcohol consumption, for example, applying the Gorbachev Anti-Alcohol Campaign to reduce mortality rate, and lowering smoking level; reforming health care, ensuring equal distribution of money, power and resources among all, improving social determinants such as housing conditions, social networks and family relations; creating social cohesion and mutual responsibility, and finally taking special care for immigrants, low paid workers and the aging population.

**Keywords:** European Health Divide, Eastern, Western, Policies

#### INTRODUCTION

The health divide had existed earlier a century, in 1910, when infant mortality were quite higher in countries belong to communist block than the Western European countries. Moreover, in the last four decades, two countries with short distance, Finland and Estonia, have similarities with languages, cultures, and populations; but differs in life expectancies by more than 7 years. Furthermore, male life expectancy in Russia than Sweden, the neighbor of the above two countries, was about 20 years lower (Vågerö, 2010). However, the health inequalities turned towards Eastern Europe recently. After Second World War, reduction of child mortality from infectious diseases were reduced and resulted in only around two years gap in life expectancy in Eastern and Western Europe in 1969. Moreover, the health divide in East-West dimension after 1968 was mainly due to adult chronic diseases. The improvement in controlling circulatory diseases further distinguished health between Poland and France; Russia and Britain. However, mortality due to the circulatory diseases has not started to control yet in Russia as well as in Moldova, in Ukraine and in Belarus. The stagnation of the Soviet system arose in 1968 to 1984 in consideration of life expectancy and health though had declining infant and child mortality. However, a small increase in male mortality was noticed in that period in communist-led countries and in Soviet Union including Russia, where, working aged men were affected most (Vågerö, 2010). Moreover, educational inequalities showed health difference measured by mortality as well as life expectancy in Russia, Estonia and Lithuania in 1990s. Furthermore, health of Eastern European population might be affected more than West due to financial crisis in 2008/2009 and the banks crisis in Hungary, Latvia, Ukraine and Moldova produced lower production and higher unemployment along with economic and political crisis (Vågerö, 2010). In addition, child poverty in Eastern Europe remained almost same level in 2009, though 10-15 years economic growth, due to lower expenditure on family cares than Western European countries.

However, countries belonged to European Union experienced 10% (Iceland) to 33% (Romania) child poverty in 2009 (WHO, 2013). Moreover, among the Central and Eastern European countries in 2010, Bosnia and Herzegovina showed highest unemployment rate and Russia and Ukraine showed lower unemployment rate than many other countries, for example, Latvia, Estonia, Romania, and Moldova. Moreover, in Europe, unemployment rate was the highest in Greece and lowest in Germany in 2011 (WHO, 2013). Countries belong to Eastern Europe, especially, the countries which earlier belonged to Soviet Union and were led earlier by Communist regimes, showed worse health compared to countries located in Western Europe (Vågerö, 2010; Marmot *et al.*, 2012; and Carlson, 2016). This health gap in European countries might receive importance to examine the reason and effective strategies to overcome this problem. Therefore, the aim of the present study is to explore the European health divide, to identify the root causes of this health divide, the most affected regions, and some effective policies that might reduce this health divide with some specific examples. In this regard, the study will mainly focus on Eastern and Western European countries with special concentration on Russia, to examine life expectancy, child and infant mortality, and adult mortality; to explore the existing health inequalities in European countries. In terms of the research aim, the existing and continuously increasing health gap between and within European countries, especially, between Eastern and Western dimension, is referred to the European Health Divide. In this regard, the European commission on social determinants of health identified the conditions of arising health inequalities as "where people born, grow, live, work and age and inequities in power, money and resources that give rise to these conditions of daily life" (WHO, 2013). Moreover, this health divide is shifting towards east and the most suffered countries named Russia, Belarus, Ukraine, Poland, Estonia and Moldova. Moreover, several risk factors are liable for this health divide and some include alcohol consumption, smoking, dietary habits, social classes, past governing systems, educational differences, trust, occupations, and so on. (Vågerö, 2010, Marmot *et al.*, 2012; and Carlson, 2016). The remainder of this short review

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considers the above aim to explore with some examples and to mention the policies to minimize the health divide.

**Trust and health in Eastern-Western Europe:** Better individual health belongs to better economy and higher trust. The Eastern European countries are categorized into three groups based on mortality trends from early 1990s onwards by Billingsley (Billingsley 2011, cited in Carlson, 2016, p. 69), such as Czech Republic and Poland showed marginal increase; Estonia, Latvia, and Lithuania revealed higher increase and over a wider duration, but mostly reduced at early level; and Russia and Ukraine exhibited faster increase with no mortality reduction. Russia experienced the worst life expectancy along with worst GDP/capita compared to Poland and Estonia. However, the within and between countries health differences are due to economic circumstances. Moreover, stress and anxiety, and food and housing availability are affected by poverty (Carlson, 2016). Positive perception on governmental policy and trust on individual might improve health. Self-rated health variations, in Central and Eastern Europe, are associated with interpersonal and political trust (Carlson, 2004). Better health from trust may be achieved through stress reduction (Abbott and Freeth, 2008). Other studies showed that poor trust in other people or lack of confidence on administrative institutions demonstrates poor health (Carlson, 2016). Moreover, Russia experienced more economical difficulties and inequalities than Estonia and Poland. It might be due to past political systems, especially communism, and instability in future political and social factors (Carlson, 2016). However, Study on 19 Western European countries regarding trust and health identified that poor individual health was associated with poor trust in political institutions. Moreover, individual knowledge and experience regarding governmental institutions are related to public trust (Mattila and Rapeli, 2017). Thus, minimizing economic problems through political stability (for example, democracy) and improving trust in others might improve health, thus health divide within and between countries will be reduced.

**Alcohol or artefact, and health:** A claim existed that the mortality fluctuation in Russia over the period 1984-1994 was due to artefact. Several reasons are presented in favour of this, for example, huge migration back after the collapse of former Soviet Union, thus there might have under estimation of total population, but not the number of deaths. Which might showed higher mortality rates. However, some studies showed that mortality from all neoplasms were not fluctuated much but from others, for example, alcohol and pneumonia. Moreover, in 1987, more than 80% male and 70% female deaths occurred due to accidental poisoning by alcohol, which was more pronounced at below age 45 years and this trend declined sharply at elderly. Furthermore, another claim against causes of death certification bias was cleared that alcohol related deaths were more pronounced among young and adults not for infant, child and elder. Thus, it might be concluded that the mortality fluctuation in Russia was not a fact of artefact rather else, for example, might be alcohol (Leon and Chenet, 1997). The frequent ups and downs in mortality was mainly associated with alcohol along with violence and accidents in Russia during 1984-1994. Other study found the correlation between alcohol and death with accidents and suicides. However, mortality from cancer was not the result of alcohol consumption in this period. In addition, fell in health care quality might had some impact on mortality and life expectancy in the 1990s (Leon and Chenet, 1997). Moreover, one effective policy implication in Russia was that in May of 1985, the Gorbachev Anti-Alcohol Campaign demonstrates less alcohol production, higher price, less availability, and less consumption; which resulted in an average of 24% lower crude death rate per year in Russia, thus, around 1.61 million fewer deaths at the end of 1980s. Furthermore, he introduced two more campaigns

named Perestroika (change) and Glasnost (open-ness) that made scope to challenge party activities in every sector and to explore the real situation of the country with honesty. These three campaigns together had broken the stagnation and resulted in great improvement in life expectancy in Russia (65 for men and 74 for women, the highest in Russian history) as well as across whole Eastern Europe. However, cancellation of the anti-alcohol campaign resulted in around 2.15 million more deaths and seven years lower life expectancy in 1987-1994. Furthermore, population health was affected in Central and Eastern Europe due to replacement of the old system as the new in 1989. Most affected country was Russia, and the least was Czech Republic, while other ex-communist countries excluding East Germany experienced negative effect on health as well. In addition, Russian male life expectancy became 60 at age 15 in 2004, which was lower than many developing countries like Bangladesh, India and Pakistan. Health crisis in Eastern Europe might be the result of food shortage, wars, starvation, civil wars, revolutions, massive repression, unhealthy behaviours, and higher risk of circulatory diseases and breast cancer mortality due to Leningrad blockade hypertension. Shock therapy crisis decreased life expectancy at worse position in 1994 especially in Russia as well as in Latvia, Estonia and Lithuania (Bhattacharya *et al.*, 2013; Vågerö, 2010).

Moreover, Russian mortality fluctuation during 1991-2001 was associated with economic and societal factors as well as individual alcohol consumption mainly. Several factors like, vascular disease, suicides, unintentional poisoning, homicides, and traffic accidents affected young and middle aged adults mortality and costs 2.5-3 million extra deaths during that period. Other study concluded that higher alcohol consumption from late 1992 to extremely high in 1993 resulted Russian increased mortality in 1991-94; however, decreased mortality in 1995 to up to 1998. Moreover, life expectancy/mortality fell down again in 1998-2001 due to economic crisis including increased poverty, fast drop in currency value and increased inflation (Leon and Chenet, 1997; Men *et al.*, 2003). In addition, circulatory diseases increased modestly for both sexes, and a constant increase in infectious diseases especially tuberculosis, cerebrovascular disease, ischaemic heart disease, pneumonia, alcohol induced liver disease, cirrhosis, haemorrhagic stroke, arrhythmias and cardiomyopathies.

However, mortality from cancer was decreased during that period. A regional mortality difference was observed in Russia where highest in Siberian and Far Eastern regions, and lower in Southern region. Moreover, mortality differences were existed between neighbor countries, for example, a wide gap between Russia and Finland, but a smaller gap between Finland and Czech Republic over the period 1991-2001. Furthermore, General economic and political uncertainty due to lifestyle and societal factors might be another explanation for the mortality fluctuation. For example, hyperinflation, devaluation of currency, alleviation in social stress, or breakdown in trauma care (Men *et al.*, 2003). In this context, further studies might improve the causes of the specific diseases and pre-cautiousness. Furthermore, other study showed that East-West health gap due to alcohol consumption was related to variation in frequency and level of alcohol consumption between this dimensions. Low frequency with high one-occasion intake in the Eastern countries (for example, Estonia, Latvia and Lithuania) than the Western (EU15) countries might causes more circulatory diseases and other risk behaviours, and results in higher mortality (Moskalewicz *et al.*, 2016). Therefore, reducing alcohol consumption, considering other factors like smoking, with better policy, improving political stability, universal welfare policy, and better data regarding the real situation might improve health and will reduce health gap between and within European countries including Russia, as well as globally.

**Smoking and health:** About 100 million deaths occurred due to smoking in the 20<sup>th</sup> century worldwide, moreover, 5.4 million per year currently. However, smoking related deaths in Russia was 5.8 million during 1980 – 2000, while, over 300,000 deaths at present annually. Higher investment in Russia, during 1992 -2000 by the tobacco companies, and flexible legislation and implication of governmental rules, low costs and unconsciousness of negative effect of smoking alleviated the smoking prevalence sharply at top position among 53 European countries particularly men (62.6% in 1992 -2003). Moreover, other study revealed that the households exhibited higher alcohol consumption, also showed higher smoking habit. However, more educated and wealthier men are exploring lower smoking in Moscow currently, but still, the younger smoke more. In addition, some advertisement by TTCs (transnational tobacco corporations) to influence particularly women and youth will increase the smoking rate in this region (Stickley and Carlson, 2009). However, the prevalence of smoking in the Western European countries were very low, for example, only 14 among professional and 38% among unskilled manual occupations in 1992 in the UK. Some policies like, advertising prohibition, increasing price of cigarette, restriction to smoke in workplace, institutions, encouraging to giving up smoking and providing knowledge of harmfulness of smoking might be effective to reduce smoking in lower socioeconomic groups (Giskes *et al.*, 2007). Therefore, some urgent policies are required to reduce smoking to promote better health in Russia and thus, reduction in health gap.

**Life expectancy in Ukraine:** Ukraine experienced history lowest life expectancy only 7 years for men and 11 years for women, due to extreme food crisis in the 1930s. However, life expectancy has improved and the current gap between Sweden and Ukraine is 14 years in men and 10 years in women. Several risk factors affected Ukrainian life expectancy worst in among 43 European countries, include extreme alcohol consumption, much smoking, lower entrance to better health care and low control over perceived stress, which resulted for unstable economic situation; political failure, and communism instead of democracy. Thus, not only geopolitics but attention on a smooth transition to full democratization, health and health care policy implementation, and health care reform might improve Ukrainian health situation and will reduce health gap to Western European countries (Mackenbach *et al.*, 2014).

**Policies to minimize health inequities :** The Europe has divided with poorer health outcomes and larger health differences in the East compared to the West. Lack of strong health policy was revealed in Europe (Vågerö, 2010). However, some policies might reduce this health gap, for example, equal rights in educational attainment, and access to medical care across whole Europe and special care on areas where health is in worst situation. Ensuring equal distribution of money, power and resources among all through the help of international institutions, like, United Nations system of regional and global institutions especially, WHO, might improve health in Europe (WHO, 2013). One target to reduce health inequalities at half by 2040 in all socioeconomic groups driven by the Commission on Social Determinants of Health through the announcement “closing of the gap in a generation”, would reduce health differences and improve health within and between European countries (Vågerö, 2010).

**Policies regarding social mobility, social cohesion, and inequities in living conditions:** Eastern European countries exhibit poorer health outcome than the West. Specific health policies are required for low, middle and high income countries. Existing health differences in even well-nourished countries are driven by falling social mobility, social cohesion, and inequities in living conditions. Social cohesion and education brings better health as well as more

health equity, since people can lead their lives, as they have reason to value, through these. Universal coverage of health care and taking steps on behavioural factors like, diet, smoking and alcohol will explore health inequities and might reduce it at some extent. Moreover, introducing new policies where required and keeping up the existing policies effectively might improve health (WHO, 2013). In addition, facilitating a good start of life through better health care before and after birth, flexible paid parental leave arrangements, access at better care and education; might provide better educational performance, thus, better job and income, resulted in better physical and mental health. Moreover, to reduce health gap within and between countries the policies should focus on average health improvement and health inequities reduction. In this regard, tasks are to improve health of marginalized groups up to health of well-off groups within countries, and least healthy countries up to best healthy countries; as well as ensuring the equal distribution of social determinants to all, reducing social injustice, along with identifying the causes of health inequities within and between countries. Policy implication is necessary at each stage of life but priority should be given to working and older ages (WHO, 2013).

**Policies to minimize inequities particularly at older ages:** Health differences in older age are the effects of early life social determinants and their health behaviours, physical and social environment, continuously increasing health demand and social care at older age. Moreover, Eastern European region has scarce of data to explore this issue. Thus, reducing health inequities require better data from this region. Furthermore, special attention should be given to older women with lower SES, and to prevent and to provide treatment for chronic diseases to get minimum health difference. In addition, policy implication should focus on social determinants especially, social protection, housing conditions, neighbourhood, and communities; improving social networks and family relations, and ensuring health care access equally considering SES, gender and educational level. In general women live longer than men but with higher morbidity, for example, in Portugal, six years higher survivorship for women than men but eight years higher morbidity than men, while this gap in Estonia was 11 years higher survivorship but six years longer morbidity for women than men. One policy like increasing expenditure on social protection might reduce educational inequities in health. For example, Social spending was high in Sweden, Denmark, Austria and Luxembourg in 2000, and experienced lower mortality than other countries (WHO, 2013).

**Conclusion:** In conclusion, the collapse of the Soviet system raised the inequalities in life expectancy or mortality between East European countries. A growing health inequality is existed in Russia, Ukraine, Moldova and Belarus. Moreover, alcohol consumption played an important role regarding European health divide, between and within countries, thus, health policy to control and prevent alcohol related diseases might need priority. However, Smoking and trust have strong effect as well. Thus, to improve health to reduce European Health divide, necessary to improve psychosocial work environments making national legislation and regulations, preserving employment rights especially for low-paid part-time employees, migrants, unemployed and with temporary job contracts, and exploring reasons of social isolation; creating social cohesion and mutual responsibility; ensuring intergenerational equity; reducing smoking, and alcohol consumption, caring aging population, ensuring stable democratic government with universal welfare policy.

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