

Health transition in Estonia: emerging new trends from the perspective of native and immigrant populations

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Extended abstract

In the following analysis we proceed from the hypothesis of health transition put forward by several researchers lately (see Gaselli 1995; Vallin and Mesle 2005; Vallin 2005) in which concept of epidemiologic characteristics are supplemented by wider societal responses like social conditions, behavioural changes, health policies etc. bringing about the significant improvement, i.e. transition. According to Vallin populations pass through health transitions rather than epidemiologic ones and he underlines that “the main factor of (*health*) transition from one pathocenosis to the next are the actions of men and women concerning their own conditions of health and survival and this fully depends on the economic, social, cultural and political background of the country” (Vallin 2005, p.294). According to Vallin and Mesle (2005) most eastern Europe countries have not entered into the so-called ‘fourth age’ transition as described by Olshansky and Ault (1986) mostly because of the reliance on centralised modern health care prevented the initiative required for active responsibility of one own’s health and significant changes in individual behaviour in addition leaving these countries without the means necessary for a health system to deal with chronic diseases. This makes the process of great relevance to Estonia. However, as pointed out by Hertrich and Mesle (1999) the progress in the Baltic countries after the first shock years of early transition period could be reviewed as the starting point for something else than rather the return to previous level before the economic transition.

Estonia entered into the first health transition phase (or „epidemiologic transition” as defined by Omran (1971)) quite vigorously in the end of the 19th century and was characterised by 1959 with life expectancy 64,3 years for males and 71,3 for females. However, since then almost for 40 years the indicator remained fluctuating around that level (see Katus, Puur 1997). In only last years, namely starting from 2005 the life expectancy for males has for the first time over almost 50 years shown higher value than throughout the period. For females the phase of increase in life expectancy started in 1996, and accounts for more than 3 years in 10 years time period.

Last years have also witnessed the start of decreasing mortality rates by circulatory system diseases, signalling for possible new trends. Clearly, for females the phase of cardiovascular revolution has been under way with standardised mortality rates of circulatory diseases for 0-64 age group showing signs of decreasing in the early 1990s. After deterioration in mid-1990s, starting from 1998, female relevant mortality rates demonstrate continuous downward trend reaching 54,7 female deaths per 100 000 by 2005.

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Estonia is characterised by one of the biggest and oldest communities of immigrant population in Europe (Katus, Puur, Sakkeus 2003). Immigration has headed towards Estonia in several waves, the immigrant population having remained in Estonia is originating almost equally from each decade's wave (see Sakkeus, 2007), thus enabling to study also second generation immigrants. Although immigrant population originates from different countries, most of them formerly on the Soviet Union territory, by self-identification almost 95% identify themselves with Russian ethnicity. From the wider demographic perspective the immigrant population has been characterised by significantly different trends and patterns in most processes. In general, health behaviour can be best characterised by life expectancy. Hereby we present the life expectancy calculations in several points over 5 decades for native Estonian and immigrant (non-Estonian) population respectively, although we acknowledge that in the latter group 4% can be described as long-established national minority of Russians (see Katus, Puur, Sakkeus 2000) which behaviour patterns differ from Russians of immigrant origin.

As a definition for immigrant origin population we proceed from the concept combining differentiation from majority population in cultural terms by self-identification, place of birth (including both parents' place of birth different from the residence country) (see also Haug 2000).

Life expectancy for Estonian and Non-Estonian population over the 50 years has gone through several phases. The higher life expectancy of Estonian men compared to Non-Estonian relevant population for almost 3 years in the beginning of the Soviet era in the 1960s reduced to almost equal values in two subsequent decades, i.e. the convergence occurred in a worse direction, while relevant indicator for immigrant male population remained at the same level throughout these decades. Having come through the period of economic crisis in the 1990s, the gain for Estonian male population has again increased by 3 years. It has to be mentioned that over the 50 years period both male populations have altogether gained almost similarly 3 years, i.e. the speed towards transition has not been at a different pace. But as Vallin, Mesle (2005) point out, with higher levels of mortality, or with younger age structure, the same pace of mortality decrease produces a higher increase in life expectancy (p.101). It has to be noted, that Estonian population is characterised by older age structure.

Life expectancy of female population in both populations is characterised by a different pattern. While in the beginning of the observation period in the 1960s, the non-Estonian female life expectancy was practically similar to that of Estonian females and slightly exceeded it, during the next decade Estonian females gained 3 years in life-expectancy while the non-Estonian female population 1,5 up to 2 years. From then on for 3 decades in both female populations the life expectancy practically remained at the same level or slightly decreased. If economic crisis found non-Estonian male population to a great extent affected, having diminished their life expectancy by more than 3 years, the female population of both origins started to show thereafter speedy recovery in their health patterns, resulting by 2006 similarly to men in gain of 3 years life expectancy. However, the divergence between two female populations of around 3 years has remained.

Summing up the trends in life expectancy, it can be added that the underlying trend over the years has been that the male population in Estonia has become significantly divergent from their female counterparts during the health transition and the enlarged gap in their life expectancies, extended already to almost 11 years, predicts that female population might be entering into a next stage of health transition, while male population has not yet come through

from the initial stage. In Non-Estonian population the gender gap has been throughout the 50 years around 10 years, slightly diminishing in the 1970s-1980s, in order to rocket by today to an extensive gap of around 12 years.

Our aim is to understand why the two population groups, having for 50 years experienced similar centralised health care system, similar formal compulsory secondary education and in recent 20 years gone through similar reforms both in economics, health care, show divergent patterns in health transition. Proceeding from the thesis by Vallin, Mesle (2005) growing divergences indicate towards major changes in the group. In order to understand what are the main determinants of the major changes and who are the main carriers of it we base our following analysis on survey data and a variable that measures health status – limitations of daily activities because of health. This is used for the calculation of Healthy Life Years (HLY). As it has been shown for other countries, while entering into the phase of cardiovascular revolution this transition was characterised by overall increase in active life expectancy, however, the more years gained were years with disability for a decade (Crimmins et al 1989, 1994, 1997). By data of last years Estonia demonstrates one of the lowest values also for HLY in Europe. (Eurostat,15.09.08).

To understand the differentials of health status of native and immigrant population we rely on the limitation of everyday activities because of health that is one factor determines the value of HLY (see Methodological description... 2008). The main source for that is the Estonian Health Interview Survey 2006 (EstHIS2006, N=6434, covering 15-84 age groups, weighted by age groups, sex and five regions to be representative for total population). The survey encompasses several characteristics which allow to distinguish health status (both physical and psychological, onset of main chronic diseases), immigrant origin in terms of the 1st and 2nd generation and countries of origin, socio-economic status by attained education, main occupation during lifetime, behavioural patterns in smoking, alcohol consumption, diet habits and physical activity.

In order to compose comparable groups for native, the 1st and 2nd immigrant population aged 30-59 years have been included to the analysis. Our main focus is on the main determinants of better health status separately for native and immigrant population. There are some suggestions that in 2nd generation of immigrants the benefit of lower mortality in 1st generation tends to erode (Courbage, Compton 2002). It is known that socio-economic determinants such as gender, age, education attained, occupation and income are main factors to explain different health status of population groups. In the multivariate analysis we took into account additional factors like health behaviour and psychosocial determinants from the perspective of native and immigrant population. The analysis showed that there are different factors for different population groups having impact on the health status: male population and the more so, of the immigrant origin population lie such main determinants as heavy alcohol consumption and binge-drinking, high prevalence of smoking and less physical activity in later working ages. All these tend to contribute to the mortality of man-made diseases, preventing to reveal new phase of health transition. Younger ages of immigrant male population tend to demonstrate lower prevalence of disability which fades away in the later working ages. A factor having influence on health was the variable that describes psychosocial status: whether a person perceives oneself as someone who controls his life or he believes that his life is guided by external forces. This variable divides population into those who have external locus of control and others with inner locus of control. The results can be interpreted as people with external locus of control are more passive and feel themselves less responsible for their health and rather rely on outside institutions in the issues of preventing health problems or taking care of their health. On the other hand, people with

inner locus of control tend to take care more of their health and have health promoting life style and better health status. That is mentioned also by the authors who have analysed survey results in connection of social participation and health (Cockerham et al, 2002; Bobak et al 1998; Carlson, 1998; Siegrist, 2000). External locus of control was more common for the 1st generation of immigrants and internal for the 2nd generation of immigrants. Native population can be described as having mostly the mixed locus of control.

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