

# The PONS study and its place in the strategy of health gain in Poland

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After 30 years (1960-1990) of adult health decline, since the beginning of the political and economic transformation in the early 1990s, a dramatic reversal of health trends is being observed in Poland. In contrast, in the countries of Western Europe, a significant, steady health gain has been observed already since the end of World War II. At the beginning of the 21<sup>st</sup> century one in three men in Poland still do not reach the age of 65, which dramatically contrasts with the one-digit premature mortality in Western Europe (EU15). In Poland very high proportion of this mortality (men ~30%, women ~15%) occur in working age population hampering social and economic development. Non-communicable diseases and risk factors (smoking, drinking, obesity) are major cause of health inequality and contribute to poverty. This health gap, leading to an over-proportional loss of human capital in Eastern Europe, is one of the most crucial challenges for the European Union during the period of economic crisis.

The main aim of the health improvement strategy in Poland should be reaching a one-digit mortality figure before the age of 65 during the third decade of the 21<sup>st</sup> century [1-3]. Such an ambitious health goal requires establishing strategic intervention programmes at the national level (Health in all Policies), an important element of which must be the analysis and monitoring of health development among the Polish population.

The first step taken towards such evidence- and science-based programmes has been made by the preparation of the 'Closing the Health Gap in the European Union' report prepared for the European Commission ([www.hem.waw.pl](http://www.hem.waw.pl)) [1]. This report analyzes the development of the health situation in EU countries, with a special focus on the health history and recent developments in the East European member-states (see the next article in this issue).

The strategic problem discussed during the Polish Presidency of the European Union (July-December 2011) was closing the health gap between EU member-states through Solidarity in Health. Conclusions reached at the EU Health Ministers' meeting on 2 December 2011 called upon the European Commission and the EU member-states to undertake an intervention to control health damage caused by tobacco smoking, hazardous alcohol consumption and inappropriate diet. Also been recommended is the establishment of pilot interventions and health development monitoring programmes, especially in the East European member-states of the EU.

In 2005-2011, an attempt was launched to establish models for monitoring population health in selected areas of Poland. The first pilot cohort study was conducted by a team from the Cancer Centre and Institute of Oncology, the Health Promotion Foundation (W.A. Zatoński), and the Medical University of Wrocław (A. Szuba, K. Zatońska, R. Iłow) [4,5].

Cooperation with a world leading research unit, the Population Health Research Institute at McMaster University in Hamilton, Canada, under the leadership of Professor Salim Yusuf, was launched in Poland within the framework of the global Prospective Urban-Rural Epidemiologic (PURE) study. The Polish PURE study covers a rural (around 1,000 participants from Żórawina county), as well as an urban population (around 1,000 participants from the city of Wrocław) [4,5].

The next step in establishing a network of prospective cohort studies was conducting the PONS cohort study of a rural (Kielce county), and an urban area (city of Kielce) in southern Poland in collaboration with Norwegian researchers (HUNT study [6]), funded by the Polish-Norwegian Research Fund (W.A. Zatoński, M. Mańczuk, L. Vatten). The PONS study embraces a sample of over 10,000 inhabitants of the urban and rural regions.

The current issue of the AEEM Journal presents the ongoing PONS study, describes its aims and methodology, and presents the results of preliminary analysis based on the sample of the first 3,862 participants.

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## REFERENCES

1. Zatoński W, (Eds.) with: Mańczuk M, Sulkowska U, and the HEM Project team. Closing the health gap in European Union. Cancer Center and Institute of Oncology, Warsaw, 2008 ([www.hem.waw.pl](http://www.hem.waw.pl)).
2. Zatoński W. The East-West Health Gap in Europe – what are the causes? *Europ J Public Health*; 2007;17:2:121.
3. Zatoński W, Bhala N. The changing trends of diseases in eastern Europe: closing the gap. *Public Health* 2011, accepted for publication (Keynote lecture at IEA World Congress of Epidemiology, Edinburgh, 2011, available at: [http://www.savav.co.uk/webcasts/ieaepidemiology/videoconsole/iea.html?playlist=iea\\_4\\_witoldzatoski.xml](http://www.savav.co.uk/webcasts/ieaepidemiology/videoconsole/iea.html?playlist=iea_4_witoldzatoski.xml)).
4. Teo K, Chow CK, Vaz M, Rangarajan S, Yusuf S. The Prospective Urban Rural Epidemiology (PURE) study: examining the impact of societal influences on chronic noncommunicable diseases in low-, middle-, and high-income countries. *Am Heart J* 2009 Jul;158(1):1-7.
5. Yusuf S, Islam S, Chow CK, Rangarajan S, Dagenais G, Diaz R, Gupta R, Kelishadi R, Iqbal R, Avezum A, Kruger A, Kuttly R, Lanus F, Lisheng L, Wei L, Lopez-Jaramillo P, Oguz A, Rahman O, Swidan H, Yusuf K, Zatoński W, Rosengren A, Teo KK. Use of secondary prevention drugs for cardiovascular disease in the community in high-income, middle-income, and low-income countries (the PURE Study): a prospective epidemiological survey. *Lancet* 2011;378(9798):1231-43.
6. Holmen J, Midthjell K, Kruger O, Langhammer A, Holmen TL, Bratberg GH, Vatten L, Lund-Larsen PG. The Nord-Trøndelag Health Study 1995-97 (HUNT2): objectives, contents, method and participation. *Norsk Epidemiologi* 2003;13(1):19-32.