

Closing the Health Gaps

Andrzej Wojtyła¹

¹ Department of Health Promotion, Food and Nutrition, Institute of Rural Health, Lublin, Poland

For several decades, epidemics of chronic, non-contagious diseases have been observed in the developed countries worldwide. However, considerable health differences are noted between countries, even on the same continent, as well as between individual population groups in particular countries. These differences are very clearly observable in Europe. Professor Zatoński in his studies (HEM, PONS Study) tries to explain the causes of this phenomenon [1, 2, 3]. Differences occur between West European countries which form the core of the European Union, so-called countries of the Old Europe, and those which entered the European Union during the last decade [4]. The main cause of these differences are cardiovascular diseases, which are responsible for excessive mortality among middle-aged inhabitants, mainly males [5]. In the countries of the so-called New Europe, this phenomenon originated in the 1980s, in association with the economic crisis, as well as the lack of education of the societies concerning the prevention of the causes of cardiovascular diseases [6]. High morbidity due to cardiovascular diseases is mainly due to: diet consisting in the intake of excessive amounts of high energy foods, consumption of large amounts of animal fat, low consumption of fruits and vegetables, and tobacco smoking [7, 8, 9]. The causes of these diseases are therefore preventable. However, it is estimated that they are responsible for more than a half (54%) of the differences in mortality among males due to cardiovascular diseases between the countries of Old and New Europe [6]. Although the studies show that within the last 20 years the mortality due to these diseases has clearly decreased in the countries of Central and Eastern Europe, the differences still remain very high [1]. This resulted from the rapid modernization of these countries after the period of Communism, and change in life style, consisting in the reduction of physical activity and sedentary lifestyle; and consequently, an increase in overweight and obesity in all age groups [10, 11]. The result has been an increase in morbidity due to chronic diseases, such as: type 2 diabetes [12] or metabolic syndrome [13] – the leading health problem in all countries. The second cause of health differences between the European countries are morbidity and mortality due to cancer. Tobacco smoking is the primary problem for public health in Central and Eastern Europe [14]. Within the last 20 years, positive changes have taken place with respect to a decrease in the percentage of males and females who smoke in all age groups; however, these percentages still remain high [15]. This is the causative agent of morbidity due to both cancer and cardiovascular diseases which, in consequence, affect mortality. The health differences between the urban and rural populations are a problem which has been generally avoided. Lack of knowledge of these differences results mainly from insufficient research concerning this problem. Such opinions, however, are contradicted by scientific research [16,

17]. At present, the increase noted in risky health behaviours among the rural population is very high, and concerns also the youngest age groups [11, 18]. This problem has been previously dealt with in this journal, and is continued in the present issue.

In his studies, Professor Zatoński emphasizes that contagious diseases are relatively well controlled in the countries of Central and Eastern Europe, and currently, the frequency of their occurrence is on the same level as other EU countries [6]. However, these diseases should not be omitted while planning actions in the area of public health. From time to time, the world struggles with such epidemics, which can even take the form of a pandemic. Panic associated with the threat of bird flu [19], or a pandemic of AH1N1 flu, are specific examples [20, 21]. Threats of this type are described in this issue of the journal which concern *Coli* bacteria. The differences between individual continents and countries concerning the control of contagious diseases result, among other things, from the material standard of the local population, living conditions, level of education, sanitary-hygienic solutions, as well as the organization and efficacy of sanitary services. Undoubtedly, the risk of these diseases results from the type of occupation performed and place of residence. In this context, the specificity of life in the rural areas should be considered, and distinct actions in the area of health promotion and prophylaxis of diseases threatening the local population. Habitation in a rural area, far from medical centres and hospitals, especially specialist, results in the distinct and specific treatment of rural patients. For example, zoonoses create an important epidemiological risk associated with work and habitation in rural areas. These problems have been undertaken in many reports published in AAEM [22, 23, 24, 25, 26, 27]. Respiratory diseases also create a higher risk for the rural than urban population [28, 29, 30, 31, 32]. These differences have long been known. The above-mentioned aspects also precondition health differences between the inhabitants of even the same country. Solidarity in interpersonal relationships, primarily from the aspect of health as the highest value for each individual, requires efforts worldwide, most of all from the politicians who shape reality, to close this health gap.

Andrzej Wojtyła – Editor-in Chief

REFERENCES

1. Zatoński W, Manczuk M, Sulkowska U, and the HEM Project Team: Closing the health gap in the European Union. Warsaw, Poland, 2008 (available from www.hem.waw.pl).
2. Zatoński WA, and the HEM project team: Epidemiological analysis of health situation development in Europe and its causes until 1990. *Ann Agric Environ Med.* 2011; 18(2): 194-202.
3. Zatoński WA, Mańczuk M, Kielce PONS team Polish-Norwegian Study (PONS): research on chronic non-communicable diseases in European high risk countries – study design: *Ann Agric Environ Med.* 2011; 18(2): 203-206.

4. Boyle P. Improving Health in Central and Eastern Europe. *Ann Agric Environ Med.* 2011; 18(2): 281-282.
5. Islami F, Mańczuk M, Vedanthan R, Vatten L, Polewczuk A, Fuster V, Boffetta P, Zatoński WA. A cross-sectional study of cardiovascular disease and associated factors: *Ann Agric Environ Med.* 2011; 18(2): 255-259.
6. Zatoński WA, Bhala N. Changing trends of diseases in Eastern Europe: Closing the gap, *Public Health.* Available online 9 February 2012. (<http://www.sciencedirect.com/science/article/pii/S0033350611003696>)
7. Pająk A, Szafraniec K, Janion M, Szpak A, Wizner B, Wolfshaut-Wolak R et al. Polkard study group. The impact of the Polish national Programme of Cardiovascular Disease Prevention on the quality of primary cardiovascular disease prevention in clinical practice. *Kardiol Pol.* 2010; 68: 1332-1340.
8. Szuba A, Martynowicz H, Zatońska K, Iłow R, Regulska-Iłow B, Różańska D, Wołyniec M, Einhorn J, Vatten L, Asvold OB, Mańczuk M, Zatoński WA. Prevalence of hypertension in a sample of Polish population – baseline assessment from the prospective cohort 'PONS' study. *Ann Agric Environ Med.* 2011; 18(2): 260-264.
9. Iłow R, Regulska-Iłow B, Różańska D, Zatońska K, Dehghan M, Zhang X, Szuba A, Vatten L, Janik-Konieczny K, Mańczuk M, Zatoński WA. Evaluation of mineral and vitamin intake in the diet of a sample of Polish population – baseline assessment from the prospective cohort 'PONS' study. *Ann Agric Environ Med.* 2011; 18(2): 235-240.
10. Zatońska K, Regulska-Iłow B, Janik-Konieczny K, Iłow R, Różańska D, Szuba A, Einhorn J, Vatten L, Xiao-Mei M, Janszky I, Paprzycki P, Sulkowska U, Goździewska M, Mańczuk M, Zatoński WA. Prevalence of obesity – baseline assessment in the prospective cohort 'PONS' study. *Ann Agric Environ Med.* 2011; 18(2): 246-250.
11. Hoffmann K, Bryl W, Marcinkowski JT, Strażyńska A, Pupek-Musialik D. Estimation of physical activity and prevalence of excessive body mass in rural and urban Polish adolescents. *Ann Agric Environ Med.* 2011; 18(2): 398-403.
12. Zatońska K, Iłow R, Regulska-Iłow B, Różańska D, Szuba A, Wołyniec M, Einhorn J, Vatten L, Asvold BO, Mańczuk M, Zatoński WA. Prevalence of diabetes mellitus and IFG in the prospective cohort 'PONS' study – baseline assessment. *Ann Agric Environ Med.* 2011; 18(2): 265-269.
13. Janszky I, Vatten L, Romundstad P, Laugsand LE, Bjørnsgård JH, Mańczuk M, Zatoński WA. Metabolic syndrome in Poland – the PONS Study. *Ann Agric Environ Med.* 2011; 18(2): 270-272.
14. Przewoźniak K, Łobaszewski J, Cedzyńska M, Wojtyła A, Paprzycki P, Mańczuk M, Zatoński WA. Cigarette smoking among a sample of PONS study subjects: preliminary assessment. *Ann Agric Environ Med.* 2011; 18(2): 215-220.
15. Stankiewicz-Choroszuca BL, Wawrzyniak ZM, Lipiec A, Piekarska B, Kapalczyński WJ, Samoliński BK. Consequences of smoke inhalation in the 'Epidemiology of Allergic Diseases in Poland' project (ECAP). *Ann Agric Environ Med.* 2011; 18(2): 420-428.
16. Krzyżak M, Maślach D, Bielska-Lasota M, Juczewska M, Rabczenko D, Marcinkowski JT, Szpak A. Breast cancer survival gap between urban and rural female population in Podlaskie Voivodship, Poland, in 2001–2002. Population study. *Ann Agric Environ Med.* 2010; 17: 277-282.
17. Zagodzón P, Kolarzyk E, Marcinkowski JT. Quality of life and rural place of residence in Polish women – population based study. *Ann Agric Environ Med.* 2011; 18(2): 429-432.
18. Kołłątaj W, Sygit K, Sygit M, Karwat ID, Kołłątaj B. Eating habits of children and adolescents from rural regions depending on gender, education, and economic status of parents. *Ann Agric Environ Med.* 2011; 18(2): 393-397.
19. Romanowska M, Nowak I, Brydak LB, Wojtyła A. Testing of human specimens for the presence of highly pathogenic zoonotic avian influenza virus A(H5N1) in Poland in 2006–2008 – justified or unnecessary steps? *Ann Agric Environ Med.* 2009; 16: 239–247.
20. WHO. Pandemic (H1N1) 2009-update 103. WHO. int. Retrieved 2010-10-16.
21. WHO, Situation updates- Pandemic (H1N1)2009” WHO. Inf. Retrieved 2010-10-16.
22. Monno R, Fumarola L, Trerotoli P, Cavone D, Giannelli G, Rizzo C, Ciceroni L, Musti M. Seroprevalence of Q fever, brucellosis and leptospirosis in farmers and agricultural workers in Bari, Southern Italy. *Ann Agric Environ Med.* 2009; 16: 205-209.
23. Cisak E, Wójcik-Fatla A, Zając V, Sroka J, Buczek A, Dutkiewicz J. Prevalence of tick-borne encephalitis virus (tbev) in samples of raw milk taken randomly from cows, goats and sheep in eastern Poland. *Ann Agric Environ Med.* 2010; 17: 283-286.
24. Welc-Falęciak R, Hildebrandt A, Siński E. Co-infection with *Borrelia* species and other tick-borne pathogens in humans: two cases from Poland. *Ann Agric Environ Med.* 2010; 17: 309-313.
25. Dorko E, Pilipčinec E, Rimárová K, Kostovčíková J. Serological study of Q fever in sheep in the territory of Eastern Slovakia. *Ann Agric Environ Med.* 2010; 17: 323-325.
26. Dorko E, Rimárová K, Kecerová A, Pilipčinec E, Dudriková E, Lovayová V, Petrovičová J, Boroš E. Potential association between *Coxiella burnetii* seroprevalence and selected risk factors among veterinary students in Slovakia. *Ann Agric Environ Med.* 2011; 18: 47-53.
27. Bartosik K, Lachowska-Kotowska P, Szymańska J, Pabis A, Buczek A. Lyme borreliosis in south-eastern Poland: relationships with environmental factors and medical attention standards. *Ann Agric Environ Med.* 2011; 18: 131-137.
28. Garcia-Mozo H. The use of aerobiological data on agronomical studies. *Ann Agric Environ Med.* 2011; 18: 1-6.
29. Tsapko VG, Chudnovets AJ, Sterenbogen MJ, Papach VV, Dutkiewicz J, Skórka C, Krysińska-Traczyk E, Golec M. Exposure to bioaerosols in the selected agricultural facilities of the Ukraine and Poland – a review. *Ann Agric Environ Med.* 2011; 18: 19-27.
30. Broding HCh, Frank P, Hoffmeyer F, Bünger J. Course of occupational asthma depending on the duration of workplace exposure to allergens – a retrospective cohort study in bakers and farmers. *Ann Agric Environ Med.* 2011; 18: 35-40.
31. Hapunik J, Vichová B, Karbowski G, Wita I, Bogdaszewski M, Peřko B. Wild and farm breeding cervids infections with *Anaplasma phagocytophilum*. *Ann Agric Environ Med.* 2011; 18: 73-77.
32. Szczyrek M, Krawczyk P, Milanowski J, Jastrzębska I, Wolak A, Daniluk J. Chronic obstructive pulmonary disease in farmers and agricultural workers – an overview. *Ann Agric Environ Med.* 2011; 18(2): 310-313.