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Demographic changes in Poland in relation to changes in other countries of the European Union. Challenges for health policy

Zmiany demograficzne w Polsce w porównaniu do krajów Unii Europejskiej. Wyzwanie dla polityki zdrowotnej

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S u m m a r y

The image of contemporary Poland is significantly shaped by the demographic changes caused by the progressive aging of the population, lengthening of the average duration of life, falling birth rate and changing family model. This phenomenon is not only visible in Poland, prognosis assume that the percentage of people aged over 65 till year 2050 will increase from 11 to 25% worldwide, while in Europe (much older than the rest of the world) from 27 to 51%. In Poland and some other countries, the phenomenon of population aging is to be further combined with the reduction of the population. The variety of factors affecting the demographic transformation of Polish population causes changes taking place on many levels, of which the most important are the level of society, basic social groups (families, couples) and individuals. The progressive aging of the Polish population and the whole of Europe creates numerous challenges for health policy, whose main objective is to meet the growing health needs of the elderly. To meet this requirement, an adequate number of staff prepared for dealing with these challenges, is necessary. In light of these data, the key issue seems to be adequate preparation for old age, which should be carried out by different social and professional subjects and the interested parties, namely the aging population.

S t r e s z c z e n i e

Obraz współczesnej Polski w znaczący sposób kształtowany jest przez zmiany demograficzne spowodowane postępującym starzeniem się społeczeństwa, wydłużeniem przeciętnego czasu trwania życia, spadkiem przyrostu naturalnego oraz zmianą modelu rodziny. Zjawisko to nie dotyczy tylko Polski, ponieważ prognozy zakładają, iż odsetek osób w wieku emerytalnym do 2050 roku w skali światowej wzrośnie z 11 do 25%, natomiast w Europie (znacznie starszej niż reszta świata) z 27 do 51%. W Polsce i niektórych innych krajach zjawisko starzenia się populacji ma być połączone dodatkowo ze zmniejszaniem liczby całej populacji. Różnorodność czynników wpływających na przekształcanie demograficznego oblicza Polski powoduje, iż obserwowane przemiany zachodzą na wielu płaszczyznach, z których najistotniejszymi są poziomy: społeczeństwa, podstawowych grup społecznych (rodzina, para) oraz jednostek. Postępujący proces starzenia się populacji Polski, jak i całej Europy stwarza liczne wyzwania dla polityki zdrowotnej, której głównym celem jest zaspokojenie narastających potrzeb zdrowotnych osób starszych. Aby sprostać tym wymaganiom, niezbędna jest między innymi odpowiednia liczba personelu przygotowanego do rozwiązywania tego rodzaju wyzwań. W świetle powyższych danych, kluczowym zagadnieniem wydaje się odpowiednie przygotowanie do starości, które powinno być realizowane przez różne podmioty społeczne i zawodowe oraz samych zainteresowanych, czyli starzejące się społeczeństwa.

INTRODUCTION

The image of contemporary Poland is largely shaped by demographic changes caused by the ongoing aging of

the society, a shifting family model, and longer average life expectancy combined with the drop in the rate of natural increase. The forecasts assume that the percentage of peo-

ple of retirement age will grow from 11 to 25% globally, with Europe (already older than the rest of the world) set to experience a 27 to 51% increase (1). In Poland, and in certain other countries, the aging of population is to be coupled with its shrinkage. GUS (Central Statistical Office of Poland) predicts that the population of Poland, which stood at 38,461,752 in 2014, will fall to 33,950,569 in 2050 (2).

DEMOGRAPHIC BALANCE

The Eurostat data from 2014 show that 16 EU countries had a positive natural increase, while 12 EU members, including Poland, ended the year having a negative natural increase. What it means is that the death rate of these countries was higher than their birth rate (tab. 1).

FERTILITY AND DEMOGRAPHIC TRANSFORMATION

The transformation in human reproduction from its initial period (characterized by high death rate, short av-

erage life expectancy, high fertility and birth rate) to the current period (characterized by low and stable mortality rate, low and relatively stable fertility rate, and low birth rate) constitutes the foundation of demographic transition theory. According to this theory, demographic transformation occurs in stages and the final stage should yield balance between births and deaths, and consequently, stabilize the population numbers. The predictions regarding demographic changes in European countries having a well-developed market economy were off the mark. At the turn of the 1960s, the principles of starting and disbanding a family, and the family model itself underwent changes, which, for some European countries, resulted in a decline in population, caused chiefly by the drop in fertility rate that no longer guaranteed generation replacement. This phenomenon is presented in table 2, which shows the changes in total fertility rate from 1960 to 2013 in EU countries.

Tab. 1. Demographic balance, 2014 (thousands)

	Population, 1 January 2014	Live births	Deaths	Difference	Net migration and statistical adjustment	Population, 1 January 2015
EU-28	506 857.5	5108.4	4947.0	161.4	951.9	508 191.1
Austria	8506.9	81.7	78.3	3.4	74.6	8584.9
Belgium	11 204.0	125.0	104.8	20.2	34.2	11 258.4
Bulgaria	7245.7	67.6	109.0	-41.4	-2.1	7202.2
Croatia	4246.8	39.6	50.8	-11.2	-10.2	4225.3
Cyprus	858.0	9.3	5.3	4	-15.0	847.0
Czech Republic	10 512.4	109.9	105.7	4.2	21.7	10 538.3
Denmark	5617.3	56.9	51.3	5.6	36.8	5659.7
Estonia	1315.8	13.6	15.5	-1.9	-0.6	1313.3
Finland	5451.3	57.2	52.2	5	15.4	5471.8
France	65 835.6	820.8	556.1	264.7	31.9	66 352.5
Germany	80 767.5	700.0	875.0	-175	581.5	81 174.0
Greece	10 903.7	92.1	113.9	-21.8	-69.4	10 812.5
Hungary	9877.4	93.3	126.3	-33	4.6	9849.0
Ireland	4605.5	66.5	29.3	37.2	-16.8	4625.9
Italy	60 782.7	502.6	598.4	-95.8	108.7	60 795.6
Latvia	2001.5	21.7	28.5	-6.8	-8.7	1986.1
Lithuania	2943.5	30.4	40.3	-9.9	-12.3	2921.3
Luxembourg	549.7	6.1	3.8	2.3	11.0	563.0
Malta	425.4	4.2	3.3	0.9	3.0	429.3
Netherlands	16 829.3	175.2	139.2	36	35.5	16 900.7
Poland	38 017.9	375.2	376.5	-1.3	-10.9	38 005.6
Portugal	10 427.3	82.4	104.8	-22.4	-30.1	10 374.8
Romania	19 947.3	183.8	253.3	-69.5	-16.4	19 861.4
Slovakia	5415.9	55.0	51.3	3.7	1.7	5421.3
Slovenia	2061.1	21.2	18.9	2.3	-0.5	2062.9
Spain	46 512.2	426.0	396.1	29.9	-102.3	46 439.9
Sweden	9644.9	114.9	89.0	25.9	76.6	9747.4
United Kingdom	64 351.2	776.4	570.3	206.1	210.0	64 767.1

Based on Eurostat data (online data code: demo_gind), date of access: 11th November 2015

Tab. 2. Total fertility rate, 1960-2013 (live births per woman)

	1960	1970	1980	1990	2000	2010	2011	2012	2013
EU-28	n/a	n/a	n/a	n/a	n/a	1.62	1.58	1.58	1.55
Austria	2.69	2.29	1.65	1.46	1.36	1.44	1.43	1.44	1.44
Belgium	2.54	2.25	1.68	1.62	1.67	1.86	1.81	1.79	1.75
Bulgaria	2.31	2.17	2.05	1.82	1.26	1.57	1.51	1.50	1.48
Croatia	n/a	n/a	n/a	n/a	n/a	1.55	1.48	1.51	1.46
Cyprus	n/a	n/a	n/a	2.41	1.64	1.44	1.35	1.39	1.30
Czech Republic	2.09	1.92	2.08	1.90	1.15	1.51	1.43	1.45	1.46
Denmark	2.57	1.95	1.55	1.67	1.77	1.87	1.75	1.73	1.67
Estonia	1.98	2.17	2.02	2.05	1.36	1.72	1.61	1.56	1.52
Finland	2.72	1.83	1.63	1.78	1.73	1.87	1.83	1.80	1.75
France	n/a	n/a	n/a	n/a	1.89	2.03	2.01	2.01	1.99
Germany	n/a	n/a	n/a	n/a	1.38	1.39	1.36	1.38	1.39
Greece	2.23	2.40	2.23	1.40	1.27	1.47	1.40	1.35	1.30
Hungary	2.02	1.98	1.91	1.87	1.32	1.25	1.23	1.34	1.35
Ireland	3.78	3.85	3.21	2.11	1.89	2.05	2.03	2.01	1.96
Italy	2.37	2.38	1.64	1.33	1.26	1.46	1.44	1.43	1.39
Latvia	n/a	n/a	n/a	n/a	1.25	1.36	1.33	1.44	1.52
Lithuania	n/a	2.40	1.99	2.03	1.39	1.50	1.55	1.60	1.59
Luxembourg	2.29	1.97	1.50	1.60	1.76	1.63	1.52	1.57	1.55
Malta	n/a	n/a	1.99	2.04	1.70	1.36	1.45	1.43	1.38
Netherlands	3.12	2.57	1.60	1.62	1.72	1.79	1.76	1.72	1.68
Poland	n/a	n/a	n/a	2.06	1.37	1.41	1.33	1.33	1.29
Portugal	3.16	3.01	2.25	1.56	1.55	1.39	1.35	1.28	1.21
Romania	n/a	n/a	2.43	1.83	1.31	1.59	1.47	1.52	1.41
Slovakia	3.04	2.41	2.32	2.09	1.30	1.43	1.45	1.34	1.34
Slovenia	n/a	n/a	n/a	1.46	1.26	1.57	1.56	1.58	1.55
Spain	n/a	n/a	2.20	1.36	1.23	1.37	1.34	1.32	1.27
Sweden	n/a	1.92	1.68	2.13	1.54	1.98	1.90	1.91	1.89
United Kingdom	n/a	n/a	1.90	1.83	1.64	1.92	1.91	1.92	1.83

n/a (Data not available)

Based on Eurostat data (online data code: demo_frate), date of access: 11th November 2015

The changes at the turn of the sixties that occurred in the Western and Northern Europe have led to, generally speaking, the lack of continuity in human reproduction. In an attempt to explicate the origins of these changes, the theory of Europe’s second demographic transition characterized by the deficits in the long period of generation replacement (meaning the number of children is not high enough to replace the parents), and unorthodox family forms (cohabitation, LAT relationships, homosexual relationships, monoparental families, married couples who chose not to have children, etc.) has emerged. The demographic changes in Poland occurred in a similar fashion to those of the Western and Northern Europe, however, they did transpire in a relatively shorter period of time (3). Regardless of the rapidity of changes, a shift in the family model was observed in Poland that reduced the significance of marriage as a form of starting a family, and weakened the durability of marriages. This phenomenon is illustrated in the table 3, which depicts the

changes in the amount of marriages and divorces in EU countries.

The increased popularity of cohabitation (living together, informal relationships), LAT relationships (Living Apart Together), higher number of couples with only one or without any children are all signs of the abovementioned changes. The delay in both getting married and giving birth to a first child is also of significance. All these changes result in the sharp fall in the number of births. The causes arise from the processes of socio-economic transformations, which in turn are the reasons for the shift in economic relations between the country and the households or companies, as well as the radical changes on the labor market, which subsequently lead to the rise of importance of education and left many people feeling socially insecure. One may identify other causes that involve the rise of opportunity costs (alternatives excluded because of a particular choice) of marriage and/or motherhood, as well as heightened difficulty of combining the roles of

Tab. 3. Crude marriage and divorce rates, selected years, 1970-2013 (per 1000 inhabitants)

	Marriages				Divorces*		
	1970	2011	2012	2013	1970	2011	2012
EU-28	7.9	4.2	n/a	n/a	0.9	2.0	n/a
Austria	7.1	4.3	4.6	4.3	1.4	2.1	2.0
Belgium	7.6	3.7	3.8	n/a	0.7	2.5	2.3
Bulgaria	8.6	2.9	2.9	3.0	1.2	1.4	1.6
Croatia	8.5	4.7	4.8	4.5	1.2	1.3	1.3
Cyprus	8.6	7.3	6.7	6.4	0.2	2.3	2.4
Czech Republic	9.2	4.3	4.3	4.1	2.2	2.7	2.5
Denmark	7.4	4.9	5.1	4.9	1.9	2.6	2.8
Estonia	9.1	4.1	4.5	4.3	3.2	2.3	2.4
Finland	8.8	5.3	5.3	4.6	1.3	2.5	2.4
France	7.8	3.6	3.7	n/a	0.8	2.0	n/a
Germany	7.4	4.6	4.8	4.6	1.3	2.3	2.2
Greece	7.7	5.0	4.5	4.7	0.4	1.1	1.3
Hungary	9.3	3.6	3.6	3.7	2.2	2.3	2.2
Ireland	7.0	4.3	4.5	n/a	n/a	0.6	0.6
Italy	7.3	3.4	3.5	3.2	n/a	0.9	0.9
Latvia	10.2	5.2	5.5	5.7	4.6	4.0	3.6
Lithuania	9.5	6.3	6.9	6.9	2.2	3.4	3.5
Luxembourg	6.4	3.3	3.4	3.2	0.6	2.3	2.0
Malta	7.9	6.2	6.7	6.1	n/a	0.1	1.1
Netherlands	9.5	4.3	4.2	3.8	0.8	2.0	2.1
Poland	8.6	5.4	5.4	4.7	1.1	1.7	1.7
Portugal	9.4	3.4	3.3	3.1	0.1	2.5	2.4
Romania	7.2	5.2	5.4	5.4	0.4	1.8	1.6
Slovakia	7.9	4.7	4.8	4.7	0.8	2.1	2.0
Slovenia	8.3	3.2	3.4	3.0	1.1	1.1	1.2
Spain	7.3	3.4	3.5	3.3	n/a	2.2	2.2
Sweden	5.4	5.0	5.3	5.4	1.6	2.5	2.5
United Kingdom	8.5	4.5	n/a	n/a	1.0	2.1	2.0

n/a (Data not available)

Based on Eurostat data (online data codes: demo_nind and demo_ndivind), date of access: 11th November 2015

*Divorce was not allowed by law in Italy until 1970, in Spain until 1981, in Ireland until 1995, and in Malta until 2011

a partner and parent (4). Moreover, people face more varied, growing demands (like the need for being mobile and having flexible working hours) which are hard to meet, and tend the family at the same time.

The swings of hitherto established value system and rules, less cohesion in groups that set up norms, the growth of responsibility in regards to one's career, and greater social acceptance of childlessness all contribute to the situation. Furthermore, one has to mention the spread of knowledge regarding possibilities of effective pregnancy prevention methods, which foster the decision of having an active sex life without having a baby. One cannot omit the notion that multi-child families tend to be perceived as defective families, and associated with poverty and low social status of the parents.

The variety of factors that shape the demographic transformation in Poland is the reason behind the

changes transpiring and affecting multiple areas, the most important of which are the happiness of the society as a whole, its basic social groups (families, couples), and individuals. Certain decisions made by Poles stem not only from the living conditions, but also from the transformation of attitude and behavior model of contemporary Polish society (5). The changes in this model are responsible for the decreasing number of people getting married, the higher age at which people get married, increase in the number of divorces, drop in the number of people remarrying after a divorce or spouse's death, lower fertility rate caused by postponing first pregnancy and the overall higher age at which women give birth for the first time, devaluation of parenthood, and treating children as a commodity that stands in opposition to a career and material wealth. One can also notice the belief among people that children are a threat to parents' personal freedom.

AGING

Regardless of the reasons for the observed changes, the population of EU countries (including Poland) is aging. Table 4 shows the percentage of EU citizens that reached 65 years of age in 2014, as compared to 2004.

Tab. 4. Percentage of people aged 65 or above

Country	People aged 65 or above (% of total) in 2004	People aged 65 or above (% of total) in 2014
EU	25 countries 16.5	28 countries 18.5
Austria	15.5	18.3
Belgium	17.1	17.8
Bulgaria	17.1	19.5
Croatia	16.3*	18.5
Cyprus	11.9	13.9
Czech Republic	13.9	17.3
Denmark	14.9	18.3
Estonia	15.9	18.4
Finland	15.6	19.4
France	16.4	18.0
Germany	18.0	20.8
Greece	17.5	20.5
Hungary	15.5	17.6
Ireland	11.1	12.6
Italy	19.2	21.4
Latvia	16.2	19.1
Lithuania	15.0	18.5
Luxemburg	14.1	14.0
Malta	13.0	17.9
Netherlands	13.8	17.4
Poland	13.0	14.9
Portugal	16.8	19.8
Romania	14.4	16.6
Slovakia	11.5	13.5
Slovenia	15.0	17.5
Spain	16.8	18.1
Sweden	17.2	19.5
United Kingdom	16.0	17.5

Based on Eurostat data, date of access: 11th November 2015

*Croatia – data from 2003

Based on the gathered data, one can conclude that among the countries with the most people of old age were Italy – 21.4% aged 65 or more, Germany – 20.8%, Greece – 20.5%, and Portugal – 18.8%. Poland, with the mark of 14.9%, still belongs to the group of younger EU countries.

Although the process of aging varies for every individual, it has been observed that women tend to live longer than men (6). According to Eurostat data from 2013, women in EU countries could anticipate life expectancy that was 5.5 years longer than this of men (tab. 5), however, the disparity dwindled to just

0.1 year when healthy life years were taken into consideration (tab. 6). In Poland in 2013, these differences were 8.1 and 3.5 years respectively, whereas the difference between men and women in healthy life years after 65 years of age was estimated to be 0.6.

Tab. 5. Life expectancy at birth, 1990-2013 (years)

	Men			Women	
	1990	2011	2013	1990	2011
EU-28	n/a	77.3	77.8	n/a	83.1
Austria	72.3	78.3	78.6	79.0	83.8
Belgium	72.7	78.0	78.1	79.5	83.3
Bulgaria	68.0	70.7	71.3	74.7	77.8
Croatia	n/a	73.8	74.5	n/a	80.4
Cyprus	n/a	79.3	80.1	n/a	83.1
Czech Republic	67.6	74.8	75.2	75.5	81.1
Denmark	72.0	77.8	78.3	77.8	81.9
Estonia	64.7	71.4	72.8	74.9	81.3
Finland	71.0	77.3	78.0	79.0	83.8
France	n/a	78.7	79.0	n/a	85.7
Germany	72.0	78.4	78.6	78.5	83.2
Greece	74.7	78.0	78.7	79.5	83.6
Hungary	65.2	71.2	72.2	73.8	78.7
Ireland	72.1	78.6	79.0	77.7	83.0
Italy	73.8	79.7	80.3	80.3	84.8
Latvia	n/a	68.6	69.3	n/a	78.8
Lithuania	66.4	68.1	68.5	76.3	79.3
Luxembourg	72.4	78.5	79.8	78.7	83.6
Malta	n/a	78.6	79.6	n/a	83.0
Netherlands	73.8	79.4	79.5	80.2	83.1
Poland	66.3	72.5	73.0	75.3	81.1
Portugal	70.6	77.3	77.6	77.5	83.8
Romania	66.7	70.8	71.6	73.1	78.2
Slovakia	66.7	72.3	72.9	75.7	79.8
Slovenia	69.8	76.8	77.2	77.8	83.3
Spain	73.4	79.5	80.2	80.6	85.6
Sweden	74.8	79.9	80.2	80.5	83.8
United Kingdom	n/a	79.0	79.2	n/a	83.0

n/a (Data not available)

Based on Eurostat data (online data code: demo_mlexpec), date of access: 8th November 2015

The old age, aside from its other aspects, is without a doubt a traumatic period for people, even in today's world, in which the speed of civilizational changes and the challenges that follow gained a hitherto unknown pace (7). People usually tend to deal better with tough situations, provided that there is a prospect of better living conditions in the future. Such is not the case with the old age, since it is, as it always has been, the last stage of life. This is why in most cases the critical situations which negatively impact the safety and well-being of elderly people are perceived as significantly more

Tab. 6. Healthy life years, 2013 (years)

	Healthy life years at birth			Healthy life years at age 65	
	Women	Men	Difference	Women	Men
EU-28	61.5	61.4	0.1	8.6	8.5
Austria	60.2	59.7	0.5	8.8	8.9
Belgium	63.7	64.0	-0.3	10.9	10.8
Bulgaria	66.6	62.4	4.2	9.9	8.7
Croatia	60.4	57.6	2.8	5.9	5.5
Cyprus	65.0	64.3	0.7	8.7	9.5
Czech Republic	64.2	62.5	1.7	8.9	8.5
Denmark	59.1	60.4	-1.3	12.7	11.6
Estonia	57.1	53.9	3.2	5.7	5.1
Finland	56.2	57.3	-1.1	9.0	8.4
France	64.4	63.0	1.4	10.7	9.8
Germany	57.0	57.8	-0.8	7.0	7.0
Greece	65.1	64.7	0.4	6.8	8.0
Hungary	60.1	59.1	1.0	6.1	6.2
Ireland	68.0	65.8	2.2	12.1	10.9
Italy	60.9	61.8	-0.9	7.1	7.7
Latvia	54.2	51.7	2.5	4.2	4.0
Lithuania	61.6	56.8	4.8	6.3	5.9
Luxembourg	62.9	63.8	-0.9	10.6	10.9
Malta	72.7	71.6	1.1	12.7	12.8
Netherlands	57.5	61.4	-3.9	9.2	9.5
Poland	62.7	59.2	3.5	7.8	7.2
Portugal	62.2	63.9	-1.7	9.3	9.6
Romania	57.9	58.6	-0.7	5.2	5.8
Slovakia	54.3	54.5	-0.2	3.7	4.2
Slovenia	59.5	57.6	1.9	7.6	7.2
Spain	63.9	64.7	-0.8	9.0	9.7
Sweden	66.0	66.9	-0.9	13.8	12.9
United Kingdom	64.8	64.4	0.4	10.7	10.6

Based on Eurostat data (online data code: hlth_hlye), date of access: 8th November 2015

stressful than they otherwise would in the earlier stages of life (8). The most common critical situations disturbing the social functioning of the elderly include the deterioration of health and vitality, passing of relatives, financial losses following the transition from work to pension, as well as lessened prestige associated with one's professional career. Lifestyle changes forced by lower income lead to limitation of social interactions and withdrawal from social life, especially in its cultural aspect. Eventually this situation results in the progression of social and environmental isolation, followed by a string of negative consequences.

Old age as a stage of life is a continuation of the previous phases, from the early childhood to the so-called late adulthood. This makes the old age an outcome of a person's whole life. According to Erikson, the wis-

dom achieved by perceiving life in its entirety becomes available to people who can accept old age as another stage of their existence (9). The need for one's life to be meaningful is especially intense for the elderly, and satisfying this craving constitutes a substantial element of maintaining a mental balance (10). The acceptance of changes in one's organism as it ages does not indicate a passive and fatalistic view on old age as a period of life characterized by helplessness and inability to act. It is widely known that insufficient activity (especially physical), passiveness, and the lack of life goals highly influence the progression of decrepitude (11). Adapting to old age, towards which everyone is moving (whether consciously or not), is related to the ability of dealing with the issues of this period, along with maintaining the necessary control over the quality of life as the limits keep on growing.

ROLE OF MEDICAL PERSONEL IN GERIATRIC CARE

In the light of the presented data, the key issue seems to be the proper preparation for old age, which should be conducted by various social and professional entities as well as the demographic in question – the aging society itself. From the medical standpoint, this multisectoral task requires adequate staff, trained and equipped to meet the aforementioned requirements. Table 7 presents the number of physicians for every 100,000 inhabitants of certain EU countries – the numbers encompass the absolute value, as well as the particular specialities, such as general practitioners, paediatricians, gynaecologists and obstetricians, psychiatrists, and experts in surgical and non-surgical specializations. According to table 7, in 2012 Poland had the lowest number of medical practitioners for every 100,000 inhabitants among the countries of the European Union.

While examining the data regarding geriatricians, one can notice that in EU countries the number of this medical specialists per one million inhabitants is outstandingly distinct, which consequently leads to the diversity in their possible ways to act in favor of prevention and active aging in certain countries.

Based on the data presented in „Pacjent w wieku podeszłym w polskim systemie ochrony zdrowia” (“Elderly patients in Polish healthcare system”) formulated by the Gerontology Board in the Ministry of Health. The Board members: Barbara Bień, Piotr Błędowski, Katarzyna Broczek, Jarosław Derejczyk, Tomasz Grodzicki, Kornelia Kędziora-Kornatowska, Alicja Klich-Rączka, Janina Kokoszka-Paszkot, Tomasz Kostka, Zbigniew Machaj, Anna Pietruszka Monika Przygućka, Katarzyna Szczerbińska, Katarzyna Wieczorowska-Tobis, Michał Sobolewski (12).

Unfortunately in this case, the data is incomplete, as the Gerontology Board in the Ministry of Health took eight out of twenty-seven EU countries into consideration. Judging by the data from table 8, Sweden, Belgium and Spain boast the most geriatricians per one

Tab. 7. Physicians by speciality, 2012¹ per 100,000 inhabitants

	Total	Generalist medical practitioners	General pediatricians	Gynecologists and obstetricians	Psychiatrists	Medical group of specialists	Surgical group of specialists
Austria ²	490	159.7	15.2	19.6	14.7	103.5	88.7
Belgium ²	293	111.2	12.2	12.2	16.9	80.3	54.8
Bulgaria ²	391	67	19.4	18.9	8	127.9	76.7
Croatia ²	299	77	17.6	17.3	14.5	99.6	56.1
Cyprus	304	n/a	n/a	n/a	n/a	n/a	n/a
Czech Republic ²	367	70.2	12.6	25.2	14.2	149.2	87.1
Denmark ³	348	73.3	6.7	9.5	16.9	57.8	52.2
Estonia ²	328	84.9	12.3	20.2	13.8	87	72.5
Finland ²	329	116.5	9.8	11.1	20	62.5	37.9
France	308	155.6	11.6	12.3	22.3	81.8	45.1
Germany ²	389	160	11.8	19.7	20.8	89.7	78
Greece ⁴	614	30.3	29.6	25.3	16.9	185.7	101.6
Hungary ⁵	309	33.5	26.6	12.2	10.5	78.4	37.4
Ireland	271	240	11.5	8.4	25.4	83	55.5
Italy ²	385	98.1	13	22	18.9	173.5	104.4
Latvia ²	314	64.5	13.3	21.8	16	94	69
Lithuania ²	422	85.1	28.2	25.1	21.4	147	95.6
Luxemburg	280	83.1	15.6	15.3	20.5	81.9	61.8
Malta	329	192.2	15	11.7	6.4	63.9	60.1
Netherlands ⁶	313	125.5	8.9	7.8	20.5	77.8	26.6
Poland ²	221	41.2	12.5	13.4	8.3	94	49
Portugal ²	410	207.6	15.6	15.1	10.8	91.3	61.2
Romania ²	261	87.9	11.3	11.3	9.2	74.1	44
Slovakia	336	n/a	n/a	n/a	n/a	n/a	n/a
Slovenia ²	254	52.9	24.2	16.4	10.8	83.3	51
Spain ²	369	74.3	25.8	12.1	10.1	74.5	83.4
Sweden ⁵	392	62.9	10.4	14.2	21.9	87.6	62.5
United Kingdom	275	80.1	14.9	11.9	18.8	63.4	68.1

n/a (Data not available)

Based on Eurostat data, date of access: 11th November 2015

¹Practising physicians, except: Greece, the Netherlands, Slovakia, Finland, Serbia (professionally active); Portugal (licensed)

²Analysis by speciality: as of 2011

³As of 2009

⁴As of 2011

⁵As of 2010

⁶Total: as of 2011. Analysis by speciality: as of 2010

Tab. 8. Number of geriatricians per one million inhabitants in selected EU countries

Country	Sweden	Slovakia	Belgium	Czech Republic	Spain	Germany	Denmark	Poland
Number of geriatricians per one million inhabitants	75.6	30.7	30	26	25	21.7	12.7	7

million inhabitants out of eight presented countries. According to the same data, Poland, Germany and Denmark have the fewest geriatricians per one million inhabitants.

CONCLUSIONS

One has to realize that people of old age wrestle with a number of salient problems in their everyday

life. The worsening of physical fitness exacerbates the reduction of vitality and general activity, at the same time leading to a gradual deprivation of self-reliance, drop in overall functioning, and problems with immunity. Indirectly linked to the insufficient physical activity, the changes in the quality of life among the elderly cause the loss of both physical (featuring the change in posture and facial features) and mental

attractiveness, connected to embracing the somewhat secluded and passive lifestyle. The incidence of the closest relatives dying contributes to the growing problem of isolation and loneliness. The above-mentioned phenomena affecting the elderly constitute a factor that plays a role in both mental and physical deterioration of older people.

Therefore the preparations for old age should take place in the earlier stages of life, especially given the existing environment of dynamic and rapid changes. Old age is not only a challenge for an aging man, but also for both the health care and social institutions (13). The actions such institu-

tions undertake to ensure a proper quality of life for the elderly should acknowledge and consider one of the most precious values of our civilization – preservation of one's identity. The ongoing process of aging populace in Poland, and in the entire Europe, generates numerous challenges for health policy, whose main objective is to meet the increasing healthcare requirements. An appropriate number of well-trained personnel as well as a group of experts in the field of gerontology and geriatrics that have the opportunity to work in a properly structured and organized environment is necessary to overcome these challenges.

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