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Sytuacja zdrowotna mieszkańców województwa łódzkiego na tle Polski

Streszczenie

Wstęp. Systematyczna ocena sytuacji zdrowotnej populacji należy do głównych zadań zdrowia publicznego i powinna być podstawą podejmowania kluczowych decyzji z zakresu polityki zdrowotnej państwa. Porównanie głównych negatywnych mierników stanu zdrowia populacji Polski w podziale na województwa pokazuje znaczne ich zróżnicowanie.

Cel. Celem pracy jest przedstawienie obecnej sytuacji zdrowotnej województwa łódzkiego.

Materiał i metody. W pracy wykorzystano dane dotyczące stanu zdrowia i wybranych elementów sytuacji zdrowotnej Polski w ujęciu terytorialnym zawarte w publikacjach Głównego Urzędu Statystycznego, Państwowego Zakładu Higieny, Wojewódzkiego Centrum Zdrowia Publicznego w Łodzi oraz Rządowej Rady Ludnościowej z lat 2007-2010.

Wyniki. W 2009 r. w strukturze demograficznej woj. łódzkiego zwraca uwagę najwyższy spośród 16 województw odsetek ludności w wieku poprodukcyjnym (18,5%; Polska 16,5) i współczynnik feminizacji 110,2 (Polska 107,1) oraz najniższy przyrost naturalny -2,24‰ (Polska +0,9). Standaryzowany współczynnik umieralności ogólnej (2010 r.) kształtował się na poziomie 1017,0/100 tys. ludności (Polska 784,2). Zgony z powodu chorób układu krążenia stanowiły około 46% zgonów, ale standaryzowany współczynnik umieralności z tej przyczyny w woj. łódzkim był najwyższy w Polsce i wynosił 509,8/100 tys. ludności (Polska 449,6). Przeciętne trwanie życia mieszkańców województwa łódzkiego również kształtowało się na najniższym poziomie w kraju (zarówno wśród mężczyzn, jak i kobiet) i wynosiło odpowiednio w 2010 r. 70,1 i 79,4 lat. Do najwyższych należą współczynniki zapadalności na WZW, gruźlicę oraz wskaźniki charakteryzujące bezpieczeństwo na drogach.

Wnioski. Na złą sytuację zdrowotną województwa łódzkiego w znacznym stopniu ma wpływ struktura społeczno-demograficzna ludności, w tym głównie znaczna feminizacja i nasilony proces starzenia się społeczeństwa. W 2010 r. w woj. łódzkim odnotowano najwyższe w Polsce standaryzowane współczynniki umieralności ogólnej oraz umieralności z powodu chorób układu krążenia.

Słowa kluczowe: epidemiologia, umieralność, zachorowalność, choroby niezakaźne, choroby zakaźne, wskaźniki stanu zdrowia, Polska.

Health condition of Łódzkie province inhabitants compared to Polish citizens

Abstract

Introduction. Systematic study of the population's health condition is a primary goal of national healthcare and should be a base for taking significant resolutions as far as the state health policy is concerned. The comparison of the main negative indicators of the Poles' health condition broken down by the province shows a vast diversity.

Aim. The aim of the study is to present the current health situation of the Łódzkie province.

Material and methods. The study uses the information about health condition and chosen factors of Poland's health situation by the province included in the publications of the Central Statistical Office, National Institute of Hygiene, Regional Centre of Public Health in Łódź, the Government Population Council in the years 2007-2010.

Results. It is worth noticing that Łódzkie province has the highest percentage of retirement age population in Poland (18.5%, Poland 16.5%), a very high feminization ratio – 110.2 (Poland 107.1) as well as the lowest population growth factor -2.24‰ (Poland +0.9). The overall standardized mortality rate was (2010) at 1017.0/100 thousand of people (Poland 784.2). Deaths due to cardiovascular system failure comprised 46% of all deaths, however, the standardized mortality rate in Łódzkie province was the highest in Poland and amounted to 509.8/100 thousand people (Poland 449.6). The life expectancy of Łódzkie province inhabitants was the lowest in Poland for both males and females, and amounted to 70.1 and 79.4 years in 2010. The incidence of viral hepatitis and tuberculosis, as well as road safety coefficients, are also very low in the Łódzkie province.

Conclusions. The poor health condition is influenced to a great extent by socio-demographic population structure, feminization and progressive population aging. In recent years, in the Łódzkie province, the general standardized mortality rate, as well as the number of deaths due to cardiovascular diseases, external causes and diseases of the digestive system, have been the highest in Poland.

Keywords: epidemiology, mortality, non-infectious diseases, infectious diseases, morbidity, health status indicators, Poland.

INTRODUCTION

The preparation of a systematic evaluation of the population health is the primary duty of Public Health and should act as the basis for making key decisions concerning national health policies. The province provinces in Poland show significant differences in terms of primary indicators. They are conditionally multifactorial, depending on, among other things, the social demographic structure, living conditions and lifestyle of the residents from different parts of the country, as well as their access to healthcare and funds. For many years, the health status of the residents of the Łódzkie province has not been favourable when compared with that of other province provinces.

AIM

The aim of the study is to present the current health status of the residents of the Łódzkie province compared to Poland as a whole.

MATERIAL AND METHODS

The primary sources of data used in evaluating the health of the residents of the Łódzkie province were:

- two publications of the Regional Public Health Publication Centre in Łódź: "Informator statystyczny ochrony zdrowia województwa łódzkiego 2009" (The 2009 guide to health protection statistics in the Łódzkie province) and "Wokół zdrowia. Województwo łódzkie na tle Polski" (About health. The Łódź province compared to the rest of Poland) issued in 2010;
- Demographic Yearbook of Poland 2010, Central Statistical Office;
- annual reports by the National Institute of Public Health – The National Institute of Hygiene in Warsaw regarding infectious diseases and poisoning in Poland, 2009;
- annual reports of the Central Police Commission "Wypadki drogowe w Polsce" (Road accidents in Poland) from the years 2007-2010;
- the latest edition (2010) of a regular report by U. Wojciechowska, J. Didkowska, W. Zatoński "Cancers in Poland in 2008". Institute of Oncology in Warsaw, as well as other journals.

Considering the wide area covered by the topic, this study is limited to presenting only the most important and up to date information regarding the health status of the residents of the Łódzkie province. In the study, the following indicators will be used: mortality rate, detailed mortality rate and infant mortality rate and morbidity rate; profile rate, sex ratio, economic burden and natural growth, as well as the average annual rate of population growth/loss.

RESULTS

On 31.12.2010, the population of the Łódzkie province was 2,534 400 which represents 6.6% of the population of Poland, making it the 6th largest in the country. The greatest number of residents were found in Łódź, the capital of the province: 737.1 thousand, representing 29.1% of the

total population of the province. The province is characterized by a population density of 139 people/km²: the value for the whole of Poland being only 22 people/km². The majority of the residents (64.0 %) are registered in urban areas, again placing Łódź in 6th place nationwide; however, urban residents of the region represent only 7% of the total Polish urban population.

In 2010, the province had the highest proportion of female residents, constituting 52.5% of the population, as well as overall and urban sex ratio scores of 110.2 and 115.0, respectively (the respective averages for Poland being 107.1 and 111.0). It is worth noting that the female residents of Łódź represent nearly 55% of the total population, and its sex ratio, approaching a value of 120, was the highest of all large cities [1].

The age profile of the province is as follows: 17.4% of the population is below productive age, 63.8% are at productive age and 18.8% are at retirement age. The proportion of people at pre-working age is one of the lowest in the country, with lower ones being seen only in the Opolskie and Śląskie provinces, while the proportion of the population at retirement age is the greatest in the country. The demographic dependency ratio in the province was 56, compared with 55 for the whole of Poland [1].

In 2010, the crude death rate (general mortality) was 12.28‰ and the live birth rate 10.04‰; hence, as in previous years, while a negative growth rate of -2.24 per 1000 people can be observed in the Łódź region (-4.92‰ in Łódź itself), positive growth of +0.9‰ was seen across the whole of Poland [1,2]. In 2009, the Łódzkie province reported the greatest average annual rate of population loss in the country: -0.17% compared to +0.1% for Poland [3].

The average lifespan of the population in 2010 was 70.1 years for men and 79.4 years for women throughout the Łódzkie province, and 70.0 and 79.1, respectively, in Łódź itself. Men were found to live around 3.6 years less than the highest national values, seen in the Podkarpackie province, and women around 2.5 years less than their highest, seen in the Podlaskie province [4].

In 2010, the standardised general mortality rate in the Łódzkie province was 1017 per 100 thousand people, and was the highest in the country. The corresponding value for Poland as a whole was 784.2 per 100 thousand people [1,4].

The profile of the deaths in the province in 2008 was as follows: the greatest share of total deaths belonged to cardiovascular diseases (46.1%), followed by cancer (22.3%), external causes (6.6%), illnesses of the respiratory system and of the digestive system [5].

The greatest threat to the urban residents of the region was constituted by cardiovascular diseases: the standardized mortality rate in 2007 being 509.8 per 100 thousand people, compared with 449.6 for the whole of Poland, and was the highest of all provinces. In 2009, the highest death rates in Poland due to cardiovascular diseases were noted in the Świętokrzyskie and Łódzkie provinces, followed by Lubuskie, Dolnośląskie and Lubelskie, where the standardized mortality rate ranged from 539 to 495 per 100 thousand people: the value for Poland being 363.3 per 100 thousand [1,4]. As was seen with the whole country, women were more likely than men to die from cardiovascular disease

(as highlighted by the actual death rates), after elimination of differences due to sex, these illnesses were found to represent a greater threat to men than women.

The second of the most common causes of death in the Łódzkie province, like in Poland as a whole, was cancer. In the Łódzkie province in 2009, the standardized death rate due to malignant cancers for every 100 thousand people, based on sex, was 193.8 for men and 103.3 for women: the corresponding rates for the whole of Poland being 185.6 for men and 101.8 for women (Table 1). The threat of death by malignant tumors in the Łódź region was twice as high for men than women, while for both sexes, the most common fatal condition was lung cancer (C34 according to ICD-X) [6]. In 2008, the Łódzkie province was ranked 8th highest in the country for deaths due to cancer for male residents, and 9th for female residents. However, the standardized death rates due to the most common malignant cancers (lung, large intestine, stomach, breast, prostate and cervical cancers) were not among the highest in the country (Table 2).

TABLE 1. The standardized mortality rates due to cancers in Poland and the Łódzkie province in the years 2008 and 2009 according to gender [6,13]

Standardized mortality rate/100 thousand people	Poland		Łódzkie province	
	2008	2009	2008	2009
Men	188.6	185.6	191.0	193.8
Women	103.0	101.8	103.1	103.3

TABLE 2. Standardized mortality rates due to malignant tumors in 2008 in the Łódzkie province compared to Poland according to gender, with the province ranking [6, own calculations]

Tumour		Men	Women
Over all	Łódzkie	81910	91031
	Polska	1886	1030
Large intestine	Łódzkie	9197	9101
	Polska	199	106
Breast	Łódzkie		9144
	Polska		147
Cervix	Łódzkie		1643
	Polska		53
Lung	Łódzkie	7621	9150
	Polska	615	155
Prostate	Łódzkie	10128	
	Polska	129	
Stomach	Łódzkie	13121	1539
	Polska	127	46

In 2009, the province recorded the highest standardized death rates in Poland by external causes, 73 out of 100 thousand, as well as digestive disorders, 55 out of 100 thousand: the corresponding rates for Poland being 57.9 and 42.9 [1].

Regarding external causes, the deaths of residents in 2008, the Łódzkie province was ranked highest out of 16 in terms of deaths due to suicide: the death rate being 1.8 per 10 thousand people, compared to an average value of 1.5 for the whole of Poland [7]. Similarly, reports about road safety indicate that in recent years, conditions were among the worst in the country. In 2010 the Łódzkie province saw the highest number of road accidents and number of people injured, and was in third place in terms of number of killed per 100 thousand residents (Table 3) [8]. The death rate due to suicide in 2008 was higher in the Łódzkie province than

in both the other provinces and Poland as a whole: the rate for Poland was 1.5/10 thousand and Łódzkie 1.8/10 thousand, which was on a par with the Dolnośląskie, Podlaskie and Zachodniopomorskie provinces. Men were more likely to commit suicide compared to women: 3.1 per 10 thousand men versus 0.6 per 10 thousand women, the corresponding rates for Poland being 2.6 and 0.4 per 10 thousand [7].

TABLE 3. Indicators of road safety and serious accidents in Poland and the Łódzkie province in 2007 and 2010 [8,14].

Indicator/100 thousand residents	Poland		Łódzkie province	
	2007	2010	2007	2010
road accidents	128.7	107.1	187.1	163.8
fatalities	14.3	10.2	17.2	12.6
injured	162.9	128.2	233.3	205.9
Indicator/100 thousand accidents				
fatalities	11.3	10.1	9.2	7.7
injured	127.6	126.1	124.7	125.7

The infant mortality rate in the province per 1000 live births remained low. In 2009, its value was lower than that of Poland (5.4‰ vs. 5.6‰) and by 2010, it had fallen to 3.96‰, although recent years have seen a rising trend. It is worth noting that this infant mortality rate amounted to 7.98‰ in 2009, and then fell by half in the following year to 3.21‰. However, great variation was seen across the region: from 10.23‰ in Piotrków Trybunalski to 0 (no deaths) in the Rawski district [1,2].

The 2009 incidence rates of socially significant infectious diseases per 100 thousand inhabitants were as follows: tuberculosis (all forms) 29.4 (Poland 21.6), tuberculosis, people aged 15-19 years 6.9 (Poland 5.1), hepatitis B 8.2 (Poland 3.9), hepatitis C 10.2 (Poland 5.1), syphilis 2.3 (Poland 2.6), gonorrhoea 1.1 (Poland 0.9), 27.4 pertussis (Poland 6.3) [2,9-11].

DISCUSSION

Since 1991, Poland has seen lengthening of lifespan, both in men and women. In men, this indicator rose by about 6.2 years from 1991 to 71.2 years in 2010, and in the same period for women by 5.5 years to 80.6. This significant rise is explained by the lower mortality rates of men and women, in which there is a strong falling trend in child mortality, which hasn't affected all provinces. An average increase in male lifespan of not less than 6 years has been seen in 6 provinces. The Łódzkie province, alongside the Lubelskie province, demonstrate the lowest growth in this respect: 4.8 years. The situation is not much more favorable in the female population; the Łódzkie province, with an average increase of life expectancy of about 5.1 years, cannot include itself among the best in the country in this regard: the increase in other areas being no lower than 5.5 years [4].

In Poland, large variations in average life expectancy can be seen across the provinces. In 2010, the shortest lives in Poland belonged to the male and female residents of the Łódzkie province. In comparison to the national average, the women were found to live about 1.2 years less and men about 2 years, wherein the greatest differences were seen

in the urban male population, who lived around 2.5 years less. In the 90s, the characteristic feature of the province was a reduced difference between male and female lifespan, but from 2002, the gap began to grow. In 2010, the difference between male and female lifespan in Poland was 8.5 years, and was as high as 9.4 years in the Łódzkie province; for rural inhabitants, the difference reached 10 years.

The situation regarding the average life expectancy of a resident of Łódź, the third largest city in Poland, is particularly noteworthy. The difference between men and women is smaller than that seen in other large Polish cities such as Warsaw, Kraków, Wrocław, Poznań and Szczecin, however, although the residents of these large cities live the longest in Poland, the residents of Łódź do not [12].

The primary cause of death of inhabitants of the Łódzkie province, as in Poland in general, is cardiovascular disease. In this respect, the province is ranked highest among the others. A good thing is the steady reduction in the value of the standardized mortality rate for this factor: in the year 2006, it was 509.8 per 100 thousand residents (in Poland, 449.6), while the current value is 495 per 100 thousand [12].

The slowly falling trend in the standardized mortality rate due to cancers observed in Poland over recent years isn't reflected in data (in the years 2008-9) concerning the Łódzkie province (Table 1). Although these indicators in the region are not currently among the highest in the country, the crude rates occupied the first place in 2008-9. The influence for that situation was the age and sex – profile, characteristic of the ageing population.

For many years, there has been a falling trend in deaths due to external causes, which currently represents one third of all the deaths in Poland and the main cause of death for young men: this is also the case in the Łódzkie province. However, in the years 1999-2006, the province was the only one in Poland in which the male population demonstrated a significant increase in the standard mortality rate for this condition, and in 2006, the rate was 127.0 per 100 thousand residents, compared to 101.1 per 100 thousand for the whole country [12]. Currently, this factor is lower (75 people per 100 thousand), but the province remains in the first place.

The most common external causes of death are traffic accidents and suicide (intentional self-harm). Despite safety improvements on Polish roads resulting in an absolute fall in number of accidents, deaths and injuries, the indicators of road safety are still worrying. This situation, one of the highest in the country (the second after the Śląskie province) is largely explained by the proportion of intoxicated road users involved in accidents: including fatal accidents and those resulting in injury. One comfort is the fact that the road accident severity indicators for the number of killed and injured per 100 thousand accidents are not as high as in other provinces: being 14th and 10th, respectively, out of 16 provinces (Table 3) [14].

With regard to the number of deaths due to digestive system disorders, the highest were noted in the Łódzkie province in Poland both in 2009 and the period 1999-2006 [12]. A considerable influence on the number of deaths was exerted by liver diseases which were closely connected with the level of alcohol consumption in the province: mainly cirrhosis and alcoholic hepatic morbus.

The incidence of the most important infectious diseases, mainly tuberculosis, from the social point of view has changed very little for a number of years and remains at a high level. During the period 2006-2009, the Łódzkie province occupied third place in terms of the incidence of tuberculosis, and 2009, in the population aged 15-19, it was ranked second in the country [9,10]. Despite a steady reduction in Poland since the 90s, the incidence of hepatitis type B in the Łódzkie province has been among the highest in the country, both from short-term and long-term perspectives, and in 2009, was ranked in first place. The similarity in the spread of viral hepatitis types C and B, could be due to similarities in their territorial variation. In 2009, higher incidence of type C than in the Łódzkie province was only noted in the Świętokrzyskie province. It is worth noting that in the Łódzkie province, the incidence of both hepatitis B and C is twice as high as in the whole of Poland [11].

CONCLUSIONS

1. The current health situation of the residents of the Łódzkie province, in comparison to other provinces, is unfavorable.
2. The socio-demographic profile of the Łódzkie province population has a significant influence on the poor health situation, key elements of which are the sex ratio of the area and the continual aging of society.
3. In recent years, in the Łódzkie province, the general standardized mortality rate, as well as the number of deaths due to cardiovascular diseases external causes and diseases of the digestive system, have been the highest in Poland.

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