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*Circulatory system diseases of select adult population
from the rural area*

The development of civilisation created by man, apart from positive effects has consequences of natural environment degradation. As a result of human industrial activities there is an increase in the pollution level of air, soil, water as well as food, which has a considerable impact on the state of health of human population. Natural and anthropogenic pollution leads to disturbances in the natural balance of the environment and to the occurrence of changes that are dangerous to the health and life of man. After the era of infectious diseases, with faster and faster technological progress and the development of civilisation, there emerges the era of civilisation diseases. The main part in the development of new civilisation diseases is played by modern changes in the lifestyle and changes in working conditions, and transformations of the natural environment. The most common civilisation diseases are circulatory system diseases, chronic, uncharacteristic diseases of the respiratory system, ulcerous and tumorous diseases. In recent years there has been a remarkable growth in epidemics of circulatory system diseases, including heart ischaemia disease and hypertension disease (3, 6, 9, 10).

The research aimed at the evaluation of the sick rate in circulatory system diseases of human population from a select rural area of the macroregion of Lublin.

MATERIAL AND METHODS

The state of health examination of a select rural population from the macroregion of Lublin was carried out in the years of 1999–2002. It included a group of 1,356 people of both sexes at the age of 31–61 and above. The examination included general medical examination, specialistic examination and biochemical examination, according to generally acknowledged rules in laboratory diagnostics. The examination was carried out among people who volunteered spontaneously.

RESULTS

The examination comprised a group of 1,356 people, 881 women and 475 men at the age of 31–61 and above, living in rural areas. During the time of study a group of people with circulatory system diseases numbered 924, including 626 females and 298 males. During the time of study the greatest spontaneous calling of people showed that the sick rate was greater among women than among men. The group prevailing among circulatory system diseases was hypertension disease and then coronary disease. Taking into account the age of the examined people, the greatest sick rate was in the group aged 41–61 and above. A higher sick rate in hypertension disease and coronary disease was found in women (Tab. 1, Fig. 1, 2).

Table 1. Hypertension disease and coronary disease in researched population with regard to age and sex

	Age group	1999			2000			2001			2002		
		total	women	men									
Hypertension disease	31-40	3	2	1	5	4	1	4	2	2	6	5	1
	41-50	10	7	3	24	12	12	21	13	8	16	9	7
	51-60	22	19	3	48	36	12	20	17	3	34	21	13
	Above 61	92	63	29	128	88	40	53	37	16	49	31	18
Coronary disease	31-40	1	1	0	2	2	0	1	1	0	2	2	0
	41-50	16	10	6	29	19	10	3	2	1	12	6	6
	51-60	16	12	4	42	29	13	20	14	6	23	17	6
	Above 61	46	28	18	137	92	45	32	25	7	42	28	14

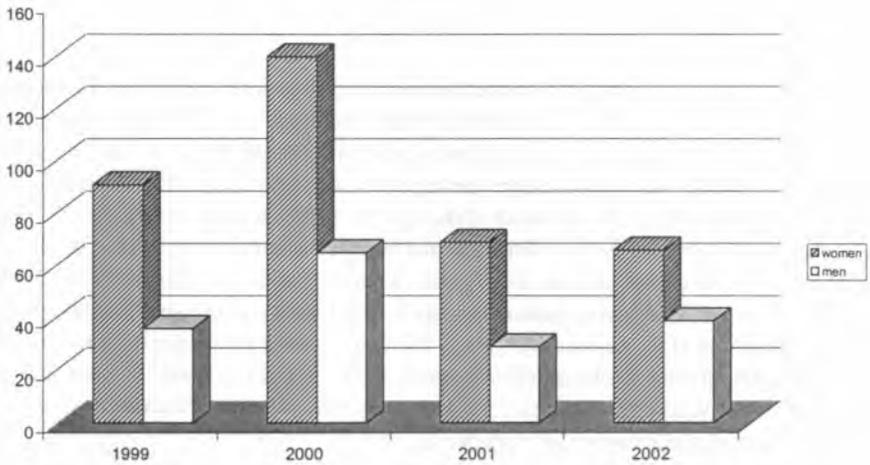


Fig. 1. Hypertension disease sick rate

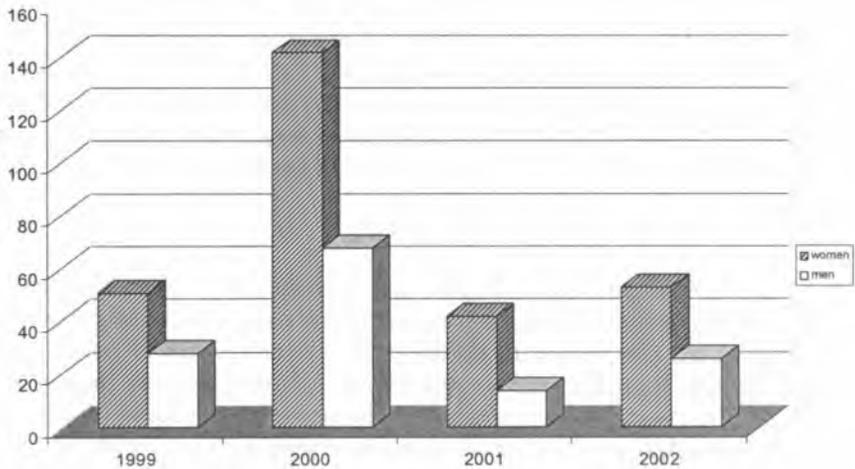


Fig. 2. Coronary disease sick rate

DISCUSSION

One of the biggest problems of the modern world are circulatory system diseases, including hypertension diseases and heart ischaemia disease. To the recognized risk factors belong: smoking, alcohol consumption, little physical activity, fat consumption, hypercholesterolemia. Epidemiological research points to risk factors of circulatory system diseases (1, 4, 8, 11). The death rate because of circulatory system diseases, including heart ischaemia disease and falling ill with infarct, despite observed for a few years downward tendency after many years of growth, is still big in Poland (9, 11). In recent decades till the end of 1980«s there was a growing death rate caused by circulatory system diseases, especially among men who are middle-aged, contributing to the shortening of an average life-span, disability and worsening of economic situation, whereas in the period 1991–1996 the death rate was 22% lower among men and 20% lower among middle-aged women, nevertheless, circulatory system diseases were in 1996 still the cause of 37% of total deaths of men and 33% of deaths of middle-age women at the age lower than 65 (9, 12). In Poland we can observe a constant tendency to an increase in the death rate and sick rate caused by heart ischaemia diseases. In 1976–1990 the death rate for this reason increased by 41% among middle-aged men and by 55% among women. In 2000 circulatory system diseases were responsible for 53% of deaths among men and 64% – among women. The death rate caused by heart ischaemia disease is statistically lower among rural population in comparison with urban population (2). Sk r ę t o w i c z et al. at the beginning of the 90's carried out an evaluation of the state of a select community of rural people, 6,511 in number aged 20–64, including 2,049 people connected with agricultural work. As regards the structure of diseases, circulatory system diseases were prevailing (men 25.6%, women 29.6%), and the sick rate was increasing with age (13). From the latest all-Polish research into the state of adult rural people it results that nearly 23% are disabled people, from among whom 75% are elderly people. From the research done by the Institute of the Country Medicine in Lublin it results that the population of the Lublin region consists of about 18% people at the age of above 60, and especially in the country there are many old people (5, 7). S u d ł et al. evaluated the state of health of the Lublin province population, who made 20.35% of total population. A prevailing group of diseases among the examined geriatric population were chronic joint diseases (about 45%), hypertension disease (about 42%), spine diseases (about 27%), heart ischaemia disease (about 27%) (14). In the examined rural area in the macroregion of Lublin during the period of study, a considerable sick rate in circulatory system diseases could be observed, especially in the group of women. A prevailing group of circulatory system diseases was hypertension disease followed by coronary disease. The greatest sick rate was observed in the age group of 61 and above.

The situation of people living in the country as regards health is difficult and peculiar in comparison with urban areas. Chronic diseases, especially in the old age, mainly circulation insufficiency with disability of bodily organs, result from work in the conditions of low temperature, dampness and overwork. Considering a huge growth of sick rate caused by circulatory system diseases, it is necessary to develop early detection together with primary prevention developed on a large scale. It is also important to develop secondary prevention through a suitable procedure in the first stage of treatment.

CONCLUSIONS

1. In the years of study 1999–2002 the greatest increase in sick rate caused by circulatory system diseases was observed in the age group above 61 in both sexes.
2. The prevailing group of circulatory system diseases was hypertension disease followed by coronary disease.

3. In the population of women the sick rate resulting from circulatory system diseases was higher than in the population of men.

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SUMMARY

The research into the state of health of the examined rural population in the macroregion of Lublin was done in the years 1999–2002. The research included both sexes at the age of 31 to 61 and above, with special regard to circulatory heart diseases. The highest sick rate caused by circulatory system diseases was observed in the age group of 61 and above. The prevailing group of circulatory system diseases was hypertension disease followed by coronary disease. The sick rate was higher in women.

Schorzenia układu krążenia wybranej populacji dorosłych ze środowiska wiejskiego

Badania stanu zdrowia populacji wiejskiej makroregionu lubelskiego przeprowadzono w latach 1999–2002. Badaniami objęto osoby obu płci w wieku od 31 roku życia do 61 i powyżej, ze szczególnym uwzględnieniem chorób układu krążenia. Wykazano największą zachorowalność na choroby układu krążenia w grupie wiekowej 61 lat i powyżej. Dominującą grupą schorzeń układu krążenia była choroba nadciśnieniowa i choroba wieńcowa. Stwierdzono większą zachorowalność u kobiet.