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ИЗБРАНИ АСПЕКТИ ОТНОСНО УСЛОВИЯТА НА ЖИВОТ И ЗДРАВΟΣЛОВНОТО СЪСТОЯНИЕ НА  
СЕЛСКОТО НАСЕЛЕНИЕ В ПОЛША  
**SELECTED ASPECTS OF THE LIVING AND HEALTH CONDITIONS OF THE RURAL POPULATION IN POLAND**

Агниешка Вжохалска  
**Agnieszka Wrzochalska**

Институт по икономика на земеделието и хранителната промишленост  
Национален изследователски институт – Варшава, Полша  
Institute of Agricultural and Food Economics, National Research Institute - Warsaw, Poland

**E-mail: wrzochalska@ierigz.waw.pl**

**Резюме**

Оценката на данните, отнасящи се до здравето на селското население, е доста сложна, тъй като засяга не само хигиената, лечението, профилактиката и храненето, а е свързана и с културата, и с условията на живот и труд в селската среда. Не могат да бъдат изключени също и другите фактори, влияещи на здравното състояние на селското население като индивидуалната устойчивост и генетичната предразположеност на отделните хора. Удължаването на живота и грижите за подобряване на здравето на селското население трябва да бъде подпомогнато от правилно изградена система за здравеопазване, която да осигурява лечение и предотвратяване на болестите. На този етап най-важен се оказва въпросът за здравната просвета на селското население. Това произтича от факта, че все повече здравното състояние и устойчивостта на населението към заболявания са обусловени от особености на поведението по отношение на здравната профилактика.

**Abstract**

The assessment of the data related to the health conditions of the rural population is quite complex, as it is related not only to the hygiene, medical treatment, prevention and nutrition, but also to issues to do with culture and the living and working conditions in rural areas. Such factors as individual resistance and genetic predispositions of individuals must not be left out, either. It seems that at present the most important issue is the pro-health education of the rural communities. This results from the fact that more and more health conditions and health predispositions of society are conditioned upon the general social and economic development, which translates into its educational achievements. Good health directly translates into employability and work efficiency of the population, educational achievements, and all of the above translates into social welfare achievements.

Ключови думи: система на здравеопазване, условия на живот, селско население.

**Key words:** health care, living standards, rural population.

**INTRODUCTION**

The World Health Organisation (WHO) Constitution of 1948 stipulates that "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Recently the definition was completed with a phrase concerning the ability "to live a socially and economically productive life".

Since the second half of the last century several deliberations concerning social issues remain subject to the new economy. The aspect is closely related to the impact of human factor on the economic growth. Therefore, there

exist a development regularity concerning all countries of the world, the significance of investment in human grows as countries achieve successive stages of economic development. Academic writers treat expenditure allocated to education or health care, as investment in the quality of human capital. The possibilities of human capital increase through investing in human. The quality of human capital increases not only as a result of education, training, migration and academic research, but also due to health care (which influences human life span, vitality, strength and verve).

## MATERIAL AND METHODS

The analysis was mostly based on the survey conducted by the IAFE-NRI (Institute of Agricultural and Food Economics – National Research Institute) in 2005, CSO (Central Statistical Office in Poland) statistics and data from the Social Diagnosis 2005 and 2007 – Objective and Subjective Quality of Life in Poland. The aim of the paper is to describe and analyse the factors influencing life and health conditions of the rural population in Poland.

## RESULTS

The factors influencing health condition of the society can be grouped into those that result from the *characteristics of the surrounding environment, hence, factors relating to the condition of the environment, work conditions, as well as to healthcare infrastructure*. But at the same time, health condition is directly influenced by the behaviour and lifestyle of the society.

When defining the determinants of the health condition of the rural population, work characteristics of population engaged in agriculture should also be taken into consideration. Their work is characterised by different activities performed throughout a day, changing work conditions, irregular working hours, which on many occasions reach 10-12 hours and which in turn influences different meal times. Adverse weather conditions also have negative impact on health. Among these one can enumerate: constant changes of temperature, insulation, differentiated air humidity, and winds.

The expenses incurred for health care in Poland mostly come from the resources of the National Health Fund, state budget, local self-government budgets, official payments made by patients, but also the grey zone patient payments should be taken into consideration. As regards GDP (Gross domestic product), the health care expenditure in Poland accounts to about 6%, which in comparison to other European countries places our country at a distant position, in particular, because individual countries increased their expenditure for the purpose in the last years (Table 1).

While considering rural populations one must also keep in mind that the above mentioned conditions are interrelated with delays as regards healthcare infrastructure when comparing it to urban population. It is true that the majority of citizens use healthcare institutions financed by the National Health Fund, however, gradually in the years 2005-2007, increased the percentage of population paying for medical services from their own resources (Table 2).

There is significantly less healthcare institutions within rural areas, and in consequence, the number of population per one such facility is twice as big in comparison to a town or city (Table 3, 4 and 5). The indicator illustrating the number of medical advice per one citizen in rural areas is also significantly lower. However, it should be emphasised

that though, in slow pace, the percentage of medical advice given by medical experts increases from 3.4% in 2001 to 6.1% in 2006.

Although recently the overall number of newly established pharmacies in Poland is not as high as it was in the last decade of 20th century, the number of dispensaries at rural areas increases, which significantly decreased the number of people per one facility of this type. Despite the above, the number in rural areas is almost double in comparison to urban areas. In the opinion of the rural population not only the number of healthcare institutions is of major importance, but first of all, their distance, that is how close to the place of residence the concerned institution is, and how fast, if need be, one can reach it. The IAFE-NRI survey showed that in 2005 only 16% of villages had a pharmacy, and 13% had consultation rooms or medical care institutions. While inhabitants of over half of surveyed villages had to travel 5 or more kilometres to this type of institution (Table 6).

The material status of rural population has a great impact on their health condition. The major part in the structure of expenditure allocated to health care and personal hygiene by households is taken up by medicines. However, on many occasions the resources are not sufficient to buy the medicines (Table 7).

The performed surveys showed that in majority of households, generally within rural areas and in farming families (respectively in 40% and 33%) in 2007 a situation had place in which: the physician was asked to prescribe cheaper medicines; in over 45% of cases patients bought cheaper equivalents of the medicines on the advice of the pharmacist, and in over 60% of rural families the medicines were not bought. Only in 30% of cases the families tried to obtain additional funds to buy the required pharmaceuticals. The surveys of household budgets carried out by CSO showed that expenditure allocated to health care and personal hygiene per month (in 2006) in farming households account to approximately 5 euro per person and are slightly higher than expenditure allocated to alcohol and cigarettes.

Another factors having impact on the health condition of the rural population are water supply system and sewage system, as well as actions involved in environment protection and health education of the society. The survey showed that in 2005 one-fifth of households was connected to water supply system and sewage system and had a bathroom, and almost one-third had a bathroom with hot water and a toilet (Table 8).

The situation significantly improved in comparison to 2000. All the systems gave the citizens possibility to easily maintain personal hygiene. Despite the positive changes at household level, there were also reported general negative signals. Such as: occasional lack of portable water that made it necessary to bring it from elsewhere, disposing of refuse in forests and on roadsides or storing it on illegal



Таблица 1. Разходи за здравеопазване в избрани европейски държави (% от brutния вътрешен продукт)

**Table 1.** Health care expenditure in selected European countries (as GDP %)

11,0-10,1% БВП 11,0-10,1% GDP	9-8% БВП 9-8% GDP	7-6% БВП 7-6% GDP
<b>1999</b>		
Germany (10,7)	France (9,4) Norway (8,8) Sweden (8,7) Greece (8,7) Belgium (8,7) Denmark (8,5) Portugal (8,4) Netherlands (8,2) Austria (8,1)	Italy (7,8) Spain (7,7) Czech Republic (7,2) United Kingdom (7,1) Finland (6,9) Ireland (6,8) Hungary (6,8) Poland (6,2) Slovakia (5,8)
<b>2005</b>		
France (11,1) Germany (10,7) Belgium (10,3) Portugal (10,2) Austria (10,2) Greece (10,1)	Netherlands (9,2) Denmark (9,1) Norway (9,1) Sweden (9,1) Italy (8,9) United Kingdom (8,3) Luxembourg (8,3) Spain (8,2) Hungary (8,1)	Finland, (7,5) Ireland (7,5) Czech Republic (7,2) Slovakia (7,1) Poland (6,2)

Source: Prepared on the basis of OECD (Organisation for Economic Co-operation and Development) data

Таблица 2. Относителен дял на лицата, използващи здравни заведения през периода 2005-2007 г. по местоживеене\*

**Table 2.** The percentage of citizens using healthcare institutions in the years 2005-2007, according to their place of residence\*

Местоживеене Specification	Здравни заведения, платени от Healthcare institutions financed by					
	Държавен здравен фонд National Health Fund		Собствени средства Own resources (i.e. paid by patients themselves)		Работодатели Employer (purchased subscription)	
	2005	2007	2005	2007	2005	2007
Полша общо Poland in general	72,4	76,2	25,5	29,9	3,2	3,4
Градове над 500 хил. жители City with population of over 500 thousand inhabitants	77,7	76,9	37,0	42,6	7,4	9,8
Градове под 20 хил. жители City with population of less than 20 thousand inhabitants	70,0	74,0	23,4	26,6	2,5	3,4
Селски райони Village	68,7	74,4	20,8	23,6	1,4	1,8
Заети в земеделието Farmers	63,9	71,6	18,9	24,3	0,5	0,3

\* Сумите по редове не дават 100%, понеже анкетираните лица са посетили повече от един вид платени здравни заведения

\*Numbers in the rows do not add up to 100 as they come from different resources

Source: Prepared on the basis of Diagnoza Społeczna 2007, Warunki i jakość życia Polaków

Таблица 3. Здравни заведения в Полша през периода 2001-2006 г. по местоживеене  
**Table 3.** Healthcare institutions in Poland in the years 2001-2006, according to the place of residence

Местоживеене Specification	2001	2004	2006
Здравни заведения (хил.) Healthcare institutions (in thousands)			
Град City/town	5,5	9,0	10,0
Село Village	2,5	3,0	3,5
В това число държавни (%) Including public (%)			
Град City/town	39,8	22,5	21,3
Село Village	62,0	43,7	33,1
Жители на 1 заведение (хил.) Inhabitants per 1 institution (thousands)			
Град City/town	4,3	2,6	2,4
Село Village	5,7	4,8	4,2

Source: Prepared on the basis of: Statistical Yearbook of Agriculture and Rural Areas CSO (Central Statistical Office in Poland) 2001, 2004, 2006

Таблица 4. Лекарски прегледи в Полша през периода 2001-2006 г. по местоживеене  
**Table 4.** Medical advice provided by physicians in Poland in the years 2001-2006 according to the place of residence

Местоживеене Specification	2001	2004	2006
Лекарски прегледи (хил.) Medical advice provided by physicians (in thousands)			
Градове City/town	178,5	198,1	209,0
Селски райони Village	34,4	35,2	38,6
Процент на лекарските прегледи, направени в селата Percentage of medical advice provided within rural areas	14,7	13,7	14,3
В това число специализирани прегледи (%) Including expert advice within rural areas (%)	2,3	5,4	7,0
Лекарски прегледи на 1 жител Medical advice per 1 citizen			
Градове City/town	7,6	8,4	8,9
Селски райони Village	2,4	2,4	2,6
Лекарски прегледи, направени в държавни заведения (%) Medical advice provided in public institutions (%)			
Градове City/town	58,5	42,8	37,0
Селски райони Village	73,4	44,6	38,8

Source: Prepared on the basis of: Statistical Yearbook of Agriculture and Rural Areas CSO 2001, 2004, 2006



Таблица 5. Стоматологични прегледи в Полша през периода 2001-2006 г. по местоживеене  
**Table 5.** Medical advice provided by dental technicians in Poland in the years 2001-2006 according to the place of residence

Местоживеене Specification	2001	2004	2006
Стоматологични прегледи (хил.) Medical advice provided by dental technicians (in thousands)			
Град City/town	14,3	16,2	16,0
Село Village	2,4	2,3	2,3
Стоматологични прегледи, направени в държавни заведения (%) Medical advice provided by dental technicians in public institutions (%)			
Град City/town	41,1	25,9	20,8
Село Village	73,4	52,7	38,7

Source: Prepared on the basis of: Statistical Yearbook of Agriculture and Rural Areas CSO 2001, 2004, 2006

Таблица 6. Разстояние до здравните заведения през 2000 и 2005 г.  
**Table 6.** Distance to healthcare institutions from the surveyed villages in the years 2000-2005

Specification	В селото In a village	1-2 км 1-2 km	3-4 км 3-4 km	5 и над 5 км 5 km or more
Аптеки Pharmacies				
2000	5,3	5,3	28,9	60,5
2005	16,3	8,0	32,0	44,0
Лекарски кабинети Consultation rooms				
2000	14,1	9,9	29,6	46,5
2005	13,1	9,2	30,3	47,4
Медицински заведения Medical care institutions				
2000	14,7	5,3	34,7	45,3
2005	13,1	7,9	31,6	47,4

Source: Prepared on the basis of survey results carried out in 2000 and 2005

landfills, leaking cesspools and pouring sewage over fields or directing it into rivers and ditches.

All the above mentioned positive changes related to healthcare within rural areas, as well as environmental advantages (own food, fresh air, possibility to relax, as well as physical effort, which is constantly needed to perform many works) have impact on the life span of rural population, which is longer in comparison to urban population, and moreover, the life span has significantly increased in the last years (in 2006 for men it was 70.6 years, and for women – 79.9 years).

This does not, however, change the fact that rural population suffers from the same civilisation diseases as urban population. They primarily include cardiovascular system diseases and cancer. Common causes of death within rural areas are also all kinds of injuries and

poisonings, as well as respiratory tract diseases and suicides. Many of the above are chronic diseases.

Recent years revealed a number of factors at the rural areas, which have a negative impact on the level of stress in this group<sup>1</sup>. The changing economic situation in Poland and all over the world are not the only reasons of the problem, other reasons cover: unpredictable weather, time pressure, unpredictable events (natural disasters), government decisions (changes in legal regulations), harvested crops prices instability, problems with harvested crops sales, as well as geographical isolation of farmers.

<sup>1</sup> According to the National Institute for Occupational Safety and Health (NIOSH) in the US farmer is among the top ten (out of 130 surveyed) most stress-inducing occupations.

Таблица 7. Начини на осигуряване на лекарства от домакинствата при недостиг на средства през 2007 г. (%)  
**Table 7.** Reactions of respondents having problems with financial resources to buy the medicines, according to place of residence, in 2007 (%)

Градове над 500 хил. жители City with population of over 500 thousand people	Градове под 20 хил. жители City with population of less than 20 thousand people	Селски райони Village	Заети в земеделието Farmers
Искане на рецепти за по-евтини лекарства Asking the physician to prescribe cheaper medicines			
34,9	56,1	39,9	32,6
Закупуване на по-евтини заместители Buying cheaper equivalents of the prescribed medicines on the advice of the pharmacist			
43,2	46,8	44,7	43,5
Вземане пари назаем Tried to obtain additional funds to buy the required medicines			
38,8	36,7	31,0	29,2
Влизане в болница Decided to use hospital care which ensures medicines free of charge			
4,4	10,5	7,1	4,5
Отказ от купуване на лекарства Did not buy the medicines			
67,3	60,7	61,0	63,8

Source: Prepared on the basis of *Diagnoza Społeczna 2007- Warunki i jakość życia Polaków*

Таблица 8. Относителен дял на домакинствата, оборудвани със системи на технически и санитарни инсталации през 2000 и 2005 г.

**Table 8.** Percentage of households equipped with technical and sanitary facilities in 2000 and 2005

Видове системи Specification	% домакинства Percentage of households	
	2000	2005
Водопровод и канализация Water supply system and sewage system	12,5	20,0
Водопровод, канализация и парно отопление Water supply system, sewage system and central heating	11,0	17,3
Водопровод, канализация и баня Water supply system, sewage system and bathroom	12,1	19,2
Баня, топла вода и тоалетна Bathroom, boiler and toilet	65,1	71,8

Source: Prepared on the basis of survey results carried out in 2000 and 2005

The group of farmers highly vulnerable to stress are managers of agricultural holdings, because of their responsibility for the welfare of a holding. Particularly difficult is the situation of managers from two groups: the eldest, i.e. in a post-working age and the youngest. The first group mentioned is often characterised by both: lower physical fitness due to age, health condition and other features, which cause some helplessness in the face of changes in the surroundings. In the second group of managers, on the other hand, prevails the feeling of excess burden with responsibility for the future of a holding and a rather difficult chores connected with managing. All the more when it is accompanied by the so-called "pressure of environment",

i.e. assessment and comparison of actions of young managers who took over their holdings as a result of unfortunate chance event, such as father's death. The above mentioned factors, causing persistence of stress for longer periods of time, may lead to behaviour visibly decreasing the level of work safety<sup>2</sup>, as well as they can induce other health problems or even, in extreme cases, cause alcohol abuse.

<sup>2</sup> According to the mass statistics of Central Statistical Office (CSO), in 2005 psychological and physical burdens were the cause of 9.8% of the registered work accidents in agricultural holdings. (Statistical Yearbook, CSO 2006, Chapter VI. Labour Market).



### CONCLUSIONS

The health condition of rural population is influenced by a number of factors relevant to the whole society, but also by a number of conditions related to the characteristic of work in agriculture and life conditions in rural areas. To improve the health condition of rural populations it is necessary to undertake actions involving mainly better access to health care institutions. The entire health care infrastructure must be connected with communication networks (i.e. giving the possibility, both to the patient to reach this type of institution easily and efficiently, as well as to the specialised rescue team to reach the patient, but it should also provide possibility of fast phone or e-mail contact with the institution).

Health education promoting appropriate behaviour is crucial within rural areas, because the farmer's behaviour in case of emergency in many cases depends exclusively on him/her, because while performing work in the open he or she most of the time is completely isolated, he or she occupies a single job and is out of control of all other people.

Some social organisations take up actions aiming at health education at rural areas. For example, the Agricultural Social Insurance Fund (KRUS) carries out training but they are still too few. The education element together with farmer's awareness influences his or her workplace security.

Health condition and predisposition of society support other processes determining progress and socio-economic development of the country.

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Рецензент – гл.ас. Мария Заркова  
E-mail: mvzarkov@abv.bg