Original scientific papers

Економика пољопривреде
Број 2/2009.
УДК: 614.79(475)

SELECTED ASPECTS OF LIFE AND HEALTH CONDITION OF THE RURAL POPULATION IN POLAND

Agnieszka Wrzochalska[1]

Abstract. In the years 2000-2007, positive changes relating to the equipment of rural areas of Poland were noted, both with respect to selected elements of technical infrastructure and to fixed assets. An existing disproportion between particular groups of households and cities is still visible.

The assessment of the issues related to health condition of the rural population is very complex, as it includes not only hygiene, medical treatment, prevention and nutrition, but also questions related to culture and 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 the health condition and health predispositions of the society are conditioned upon the general social and economic development, which translates to the educational achievements of the society.

Properly organised healthcare system offering successful treatment and encouraging disease prevention may contribute to the improvement in the state of health and the elongation of life span of rural population.

Key words: rural population, accession, health, EU, households, Poland

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."

[1] Agnieszka Wrzochalska Department of Social and Regional Policy, Institute of Agricultural and Food Economics - National Research Institute, ul. Swietokrzyska 20, 00-950 Warszawa, Poland, email: wrzochalska@ierigz.waw.pl

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 and vocational training, migration, collecting data and academic research, but also due to health care (which influences life span, vitality, strength and verve of people).

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 people 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, 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 2000-2005, increased the percentage of people that paid for medical services from their own resources (Table 2).

There is significantly less healthcare institutions within rural areas, and in consequence, the number of people per one such facility is twice as big in

comparison to a town or city (Table 3 and 4). 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.

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

11.0-10.1% GDP		9-8% GDP		7-6% GDP	
1999					
Germany	10.7	France	9.4	Italy	7.8
		Norway	8.8	Spain	7.7
		Sweden, Greece,	8.7	Czech Republic	7.2
		Belgium	8.5	United Kingdom	7.1
		Denmark	8.4	Finland	6.9
		Portugal	8.2	Ireland, Hungary	6.8
		Netherlands	8.1	Poland	6.2
		Austria		Slovakia	5.8
2005					
France	11.1	Netherlands	9.2	Finland, Ireland	7.5
Germany	10.7	Denmark, Norway,	9.1	Czech Republic	7.2
Belgium	10.3	Sweden	8.9	Slovakia	7.1
Portugal, Austria	10.2	Italy	8.3	Poland	6.2
Greece	10.1	United Kingdom,	8.2		
		Luxembourg	8.1		
		Spain			
		Hungary			

Source: Prepared on the basis of OECD data

Within rural areas the number of dental advice per one person is significantly lower in comparison to people in towns or cities (Table 1). It should be, however, emphasised that the value, also in case of urban population, is relatively low. Although recently the overall number of newly established pharmacies in Poland is not as high as it was in the 90. of the last 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 2).

Table 2 The percentage of citizens using healthcare institutions in the years 2000-2005, according to their place of residence (in %)

Specification	Healthcare institutions financed by					
	National Health Fund		own resources (i.e. paid by patients themselves)		employer (purchased subscription)	
	2005	2007	2005	2007	2005	2007
Poland in general	72.4	76.2	25.5	29.9	3.2	3.4
City with population of over 500 thousand people	77.7	76.9	37.0	42.6	7.4	9.8
City with population of less than 20 thousand people	70.0	74.0	23.4	26.6	2.5	3.4
Village	**68.7**	**74.4**	**20.8**	**23.6**	**1.4**	**1.8**
Farmers	**63.9**	**71.6**	**18.9**	**24.3**	**0.5**	**0.3**

Source: Prepared on the basis of Social Diagnosis 2007 – Objective and Subjective Quality of Life in Poland

The material status of rural population has a significant 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 6).

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 PLN 21 per person and are slightly higher than expenditure allocated to alcohol and cigarettes.

Table 3 Healthcare institutions in Poland in the years 2001-2006, according to the place of residence

Specification	2001	2004	2006
Healthcare institutions			
City/town	5 466	9 036	9 955
Village	2 545	3 065	3 518
Including public (%)			
City/town	39.8	22.5	21.3
Village	62.0	43.7	33.1
people per 1 institution (in thousands)			
City/town	4.3	2.6	2.4
Village	5.7	4.8	4.2

Source: Prepared on the basis of: Statistical Yearbook of Agriculture and Rural Areas CSO 2007, 2006, 2005

Table 4 Medical advice provided by physicians in Poland in the years 2001-2006 according to the place of residence

Specification	2001	2004	2006
Medical advice provided by physicians			
City/town	178539	198109	208946
Village	34408	35227	38591
percentage of medical advice provided within rural areas	14.7	13.7	14.3
including expert advice within rural areas (in %)		5.4	7.0
Medical advice per 1 citizen			
City/town	7.6	8.4	8.9
Village	2.4	2.4	2.6
Medical advice provided in public institutions (%)			
City/town	58.5	42.8	37.0
Village	73.4	44.6	38.8

Source: Prepared on the basis of: Statistical Yearbook of Agriculture and Rural Areas CSO 2007, 2006, 2005

Table 5 Medical advice provided by dental technicians in Poland in the years 2001-2006 according to the place of residence

Specification	2001	2004	2006
Medical advice provided by dental technicians			
City/town	14309	16146	15973
Village	2397	2263	2259
Medical advice provided by dental technicians per 1 citizen			
City/town	0.61	0.69	0.68
Village	0.16	0.15	0.15
Medical advice provided by dental technicians in public institutions (%)			
City/town	41.1	25.9	20.8
Village	73.4	52.7	38.7

Source: Prepared on the basis of: Statistical Yearbook of Agriculture and Rural Areas CSO 2007, 2006, 2005

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 6).

Table 6 Percentage of households equipped with technical and sanitary facilities in 2000 and 2005

Specification	Percentage of households	
	2000	2005
Water supply system and sewage system	13	20
Water supply system, sewage system and central heating	11	17
Water supply system, sewage system and bathroom	12	19
Bathroom, boiler and toilet	65	72

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

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

Table 7 Percentage of households, which differently reacted to lack of money to buy medicines in 2007, according to place of residence (in %)

City with population of over 500 thousand people	City with population of less than 20 thousand people	Village	Farmers
Asking the physician to prescribe cheaper medicines			
34.9	56.1	39.9	32.6
Buying cheaper equivalents of the prescribed medicines on the advice of the pharmacist			
43.2	46.8	44.7	43.5
Tried to obtain additional funds to buy the required medicines			
38.8	36.7	31.0	29.2
Decided to use hospital care which ensures medicines free of charge			
4.4	10.5	7.1	4.5
Did not buy the medicines			
67.3	60.7	61.0	63.8

Source: Prepared on the basis of Social Diagnosis 2007 – Objective and Subjective Quality of Life in Poland

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 (Table 8), 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 (Table 8). 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[2]. 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..

Table 8. Life span in Poland in the years 2001-2006, according to the place of residence

Years	City/town		Village	
	men	women	men	women
2000	69,9	77,7	69,4	78,4
2005	70,9	79,1	70,3	79,5
2007	71,2	79,5	70,6	79,9

Source: Prepared on the basis of: Statistical Yearbook of Agriculture and Rural Areas CSO 2007, 2006, 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[3], as well as they can induce other health problems or even, in extreme cases, cause alcohol abuse.

[2] 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.
[3] 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.

Good health directly translates into work engagement and work efficiency of a person, his or her educational achievements, and all of the above translates into achievement of social welfare.

Bibliography

1. Cież J. 2007. Stres jako przyczyna wypadków przy pracy w rolnictwie w świetle literatury zagranicznej, materiały z XIV Międzynarodowego seminarium ergonomii, bezpieczeństwa i higieny pracy, Instytut Medycyny Wsi, Lublin, 41-42.
2. Czapiński J., Panek T. 2007. Diagnoza społeczna 2007. Warunki i jakość życia Polaków, Rada Monitoringu Społecznego, Warszawa, 64, 88, 146.
3. Diagnoza Społeczna 2005 - Warunki i jakość życia Polaków, pod red. J. Czapiński i T. Panek, Wyższa Szkoła Finansów i Zarządzania, Warszawa 10.01. 2006
4. Roczniki Statystyczne GUS 2000-2006

5. Roczniki Statystyczne Rolnictwa i Obszarów Wiejskich GUS 2007, 2006, 2005

6. Sikorska A. 2006. Przeobrażenia w strukturze społeczno-ekonomicznej wsi objętych badaniem IERiGŻ-PIB w latach 2000-2005. Projekt badawczy nr 1 H02C 03528. IERiGŻ-PIB, Warszawa, 47-48, 83.

7. Sikorska A. 2007. Przeobrażenia w strukturze społeczno-ekonomicznej wsi a proces włączania się Polski do wspólnej polityki rolnej Unii Europejskiej. Synteza, Projekt badawczy nr 1 H02C 035 28. IERiGŻ-PIB, Warszawa. 45-49, 91-95.

8. Wrzochalska A. 2006. Poziom życia wiejskich rodzin rok po akcesji do UE. Raport nr 36. Program wieloletni. IERiGZ-PIB, Warszawa, 45-50.

9. Wrzochalska A. 2005. Wybrane cechy społeczno-ekonomiczne ludności wiejskiej a rozwój wsi i rolnictwa. Raport nr 3. Program wieloletni, IERiGZ-PIB, Warszawa, 19-23.

10. Zwoliński Ł, Wrzochalska A. 2008. Промени в социално-икономическото положение след влизането на Полша в ЕС", (Przemiany warunków społeczno-ekonomicznych po wstąpieniu Polski do UE), Икономика и управление на сепското стопанство, № 3/ 2008, София

11. Wrzochalska A. 2008. Условия на живот и здравословно състояние на селското население след присъединяването на Полша към ЕС, (Warunki życia i zdrowia ludności wiejskiej po akcesji Polski do UE), Икономика и управление на сепското стопанство, № 3/ 2008, София

12. Wrzochalska A. Zwoliński Ł., Dudek M. 2007. Ocena zmian w strukturze społeczno-ekonomicznej wsi w latach 2000-2005, Raport PW nr 79, IERiGŻ-PIB, Warszawa

13. Zwoliński Ł. 2007. Wybrane cechy demograficzne ludności wiejskiej w latach 2000-2005, Raport nr 58, Program Wieloletni, IERiGŻ-PIB, Warszawa.

Примљено: 17.01.2009. Одобрено: 26.06.2009.