

THE RECENT DYNAMICS OF THE ROMANIAN POPULATION HEALTH STATE WITHIN A EUROPEAN CONTEXT

LILIANA DUMITRACHE

University of Bucharest, Romania

This paper analyses the state of health of the Romanian population between 1990 and 2000. This was assessed through the use of an aggregate index obtained from well-established indicators of the state of health such as general mortality rate, specific mortality rate by main causes of death, infant mortality rate, specific morbidity rate, and life expectancy. For a better understanding of the Romanian situation, this index was analyzed from an evolutionary and comparative point of view, within the European context. Analyzing the spatial distribution of these values it was possible to identify certain areas within the country with different health status. This yearly spatial variation of the index showed certain evolutionary typologies. It is important to determine accurately the Romanian situation in comparison with other European countries in order to understand the existing disparities and also to establish the action necessary to reduce them, especially within the context of Romania's future plans for integration into the European Union. It is also important to emphasize the national trends and variations from a spatial perspective, so, those areas with severe health problems can be identified and appropriate social and economic policies and health resources can be targeted where they are most needed.

Key words: *population health state, specific mortality rate by main causes of death, health index*

Introduction

The state of health of a population is influenced by various factors associated with the economic, social and cultural environments. The population health status of a country often reflects its economic and social situation, the concern which that country pays to health, through economic and social policies, and the lifestyle of its inhabitants. An accurate assessment of the dimension of some phenomena, the understanding of the starting level and later developments are all currently important consideration within the context of Romania's future plans for integration into the European Union. The existing disparities between the countries of Western and Eastern Europe are evident and they are manifest in various domains, starting with the economy and also including health. The economic and social policies introduced by the political regimes in power after the Second World War

within Eastern Europe have blocked or changed the normal evolution of demographic, economic and social phenomena. As a result there is a continuously increasing differentiation between the countries of Central/Eastern Europe and those of Western Europe. Despite the favored slogan of the Communist Regime – the creation of the 'new man' – issues of health were completely neglected, as will be shown in this paper. An overview of some characteristic indicators for the assessment of health state, established for the European countries show that, even before 1990, the countries of Western Europe generally had a much better health status than those of Central/Eastern Europe. In addition, even within the latter group there were significant differences. Romania stands out, even before 1990, for its poor health state, a fact which is demonstrated by the high values for general and infant mortality and also for the reduced life expectancy of the Romanian population, compared

both with the countries of Western Europe and the other countries of Central/Eastern Europe.

During the last years of the totalitarian regime the Romanian population experienced a serious lack of household economic resources (meaning foods and other basic consumer goods) although, according to the principal of equal distribution of goods and income, poverty did not exist in Romania. In reality, the largest part of the population faced significant deprivation and hardship.

A systematic deterioration of the socialist economy, beginning in the 1970s and intensifying in the 1980s resulted in the reduced resources for population support, a fact which led to a continuous decrease in the quality of goods and services offered to the population. Thus, public services were completely ignored and under-financed. Health was the most badly affected. The health care system experienced a severe lack of personnel, drugs, medical equipment and instruments. Investments were seriously reduced and eventually stopped altogether. This situation led to a rapid degradation of the health care system, which, in any case, was unable to cope with the new pressures determined by changes in the morbidity model. In the last years of the totalitarian regime, Romania's social and economic situation was completely unable to maintain and improve the health status of the population.

Despite the fact that the major political and economic changes introduced after 1989 were orientated towards correcting the malfunctions, in reality they generated new problems, which in their turn, had a negative impact on the population health status. The structural changes produced within the economy have generated new problems such as low

productivity, unemployment and job insecurity. At the same time prices have increased while salaries have decreased in real terms. This situation has impoverished some population groups, especially elderly people and large families who have experienced a decline in living standards. The chronic under-financing of the health care system through the reduction in resources and the deterioration of existing financial and material resources as a result of rapid inflation had a negative impact on the structure and quality of health care provision. Significant problems such as increasing costs and poor resources and conditions have resulted in delay in implementing the health reform. All these aspects, along with poverty, have contributed to the continuous deterioration of the population's health state.

The health state of the population, inherited from the communist regime, is poor and its future improvement depends largely on economic and health care policies undertaken by the post-communist governments, as well as the way in which the authorities understand the importance of maintaining the health of the population and the long-term financial benefits of prioritizing 'prevention' over 'cure'.

The Dynamics of the State of Health of the Romanian Population: an Overview within the European Context

In order to assess the health state of the Romanian population relative to that of other European countries, and also to identify the changes within the Romanian health state a *Health Index* was calculated. This was obtained through standardizing and aggregating existing indicators such as general

mortality rate, specific mortality rate, infant mortality rate, life expectancy and incidence of certain diseases. This index reflects the changes produced over time at the health status level and also spatial disparities. Its values range between 0 and 1: the lower the value, the better the health state of the population, and the higher the value, the lower the health state. The negative trends of indicators of health registered in Romania before and after 1990 have a negative influence on the health state of the population. Romania is not unique from this point of view: the majority of Central/Eastern European countries have displayed similar trends, at least up to 1990. The differences between the formerly socialist countries of Central/Eastern Europe and Western capitalist countries became significant after the 1970s when economic and political failure of the socialist countries affected all aspects of social life, including health.

If, up to 1990, the countries of Central/Eastern Europe experienced a deterioration of living standards and public services, with significant impacts on population health states, after this date the former communist countries sought to reduce disparities in health state, although each country has gone about it in its own way.

The disadvantaged position of the Central/Eastern European countries meant that it was difficult for them to catch up with the Western European countries since after the fall of the communist regimes they faced new phenomena which amplified or deteriorated the existing situations, sometimes generating crisis. According to abilities of the public authorities in these countries to cope with the situation and also according to the policies adopted in all socio-economic sectors, the achievements are more or less significant. Thus, according to the levels of some social and economic indicators, by 2000 the Central/Eastern European countries have tended to reach a situation, which is closer to that of the Western European countries.

The values calculated for the health index characteristics calculated for 1980 in selected European countries clearly show the poorer health state for the countries of Central/Eastern Europe compared with those of Western Europe. At this time, the highest values of the health index were registered for Romania (0.633) and Hungary (0.644) indicating the poorest state of health, compared both with countries of Western Europe and other Central/Eastern European countries. (see Figure 1)

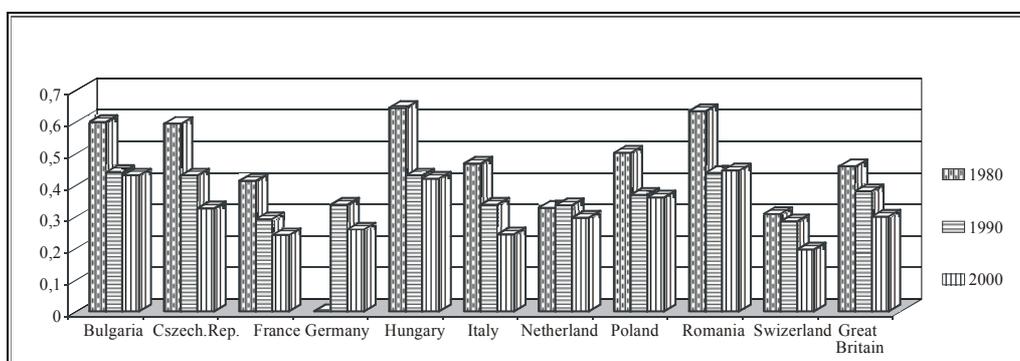


Figure 1. The Evolution of Health Index in Selected European Countries

However, the difference between Romania and Hungary and other Central/Eastern European countries is not that significant, taking into account the values of the health index of 0.600 in Bulgaria and Czechoslovakia, but a lower value in Poland (0.501). Among the Western European countries the highest value for the health index is found in Italy (0.467) and the lowest in Switzerland (0.308).

Between 1980 and 1990 the progress within the medical field determined an improvement in the population health state in the majority of European countries, demonstrated by lower values of the health index. The most significant progress was apparent in some Central/Eastern European countries where the values had formerly been highest. Even so, the CEE countries were in an unfavourable position compared to the Western European ones. The *health index* for Romania was 0.438, which indicates a better health state compared with 1980 but the situation is still poor compared to other countries of both Western and Eastern Europe. The disparities are certainly more significant in relation to Western European countries.

At the same time the highest value of the health index is found in Great Britain and the lowest in Switzerland (0.284). After 1990 the CEE countries show different trends: Czechoslovakia and Poland register evident progress while in others (such as Hungary and Bulgaria) progress is less significant.

Romania is a special case, being the only studied country in which the *health index* registers an increase from 0.438 in 1990 to 0.445 in 2000, fact that proves a deterioration of the population health state.

Though the disparities between East and West are still noticeable, the population of the Western countries being characterized by a much better health state than the one in the former communist countries, the latter are currently in barked in a catching up process. In countries such as Hungary and Romania, the process seems to be more difficult, even worst, Romania experiencing an amplified negative dimension of it.

This process of Romania's population health state deterioration it is not a continuous one, between 1990 and 2000, the health index registered yearly variations. (See Figure 2)

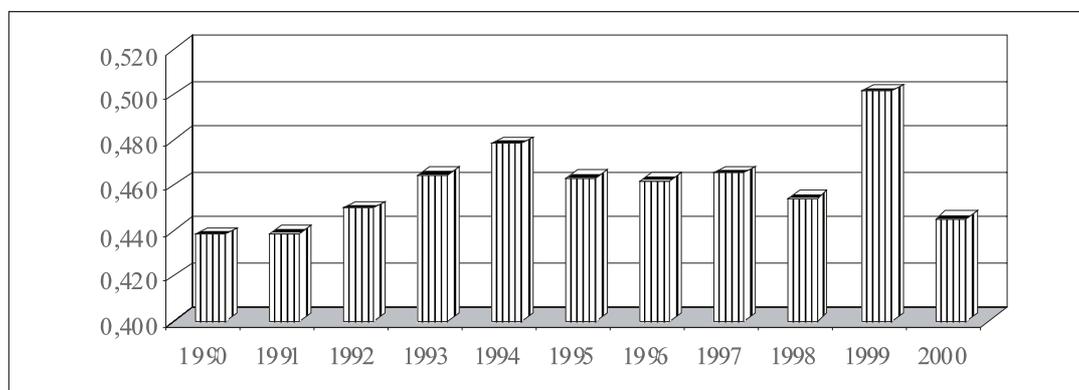


Figure 2. The Evolution of Health Index in Romania

Generally speaking one can notice three time slots, characterized by differentiated evolution of health index.

Thus, the period between 1990 and 1994 is featured by an positive evolution of health index starting from 0.438 to 0.478, with a highest rate between 1992 and 1994. This tendency shows a continuous deterioration of the population health state starting with 1990.

The next period, 1994-1997, is characterized by a constant health index which reaches values comparable with 1993 (0.465). This stagnation in the health index value proves the lack of clearly oriented policy toward health and the failure of the health programmes. In fact, this is a long-term effect of unsuccessful economic social and health policies, implemented by the former regimes still acting.

The latest period, 1997-2000, the health index presents fluctuant values with a climax in 1999, when the health index reaches the highest level for the whole period of 1990-2000 (0.445) but also higher than 1990.

Practically, after eleven years, the Romanian population health state has continuously deteriorated. IN addition, the later health index fluctuant dynamics do not show a clear descending tendency in its evolution, fact which would suggest a near improvement of the health state.

This yearly fluctuant level of health index influenced by more or less controlled factors demonstrates once again a lack of coherent health policy and inefficient health expenditures.

This situation it is not singularly generated by the health care system but also by the other factors of cultural, social or economic nature similarly important for the population health state.

Spatial Disparity in Health Index Dynamic

The health index shows differentiated evolutions at the territorial level, some regions such the Central and Western ones being characterized by a better health status while in the others the health status is considerable low.

Significant differences can be noticed at the county level (a total of 41 administrative areas) the health index presenting various evolutions for the studied period of time according to the relative contributions of some indicators such as general mortality rate, mortality by the main causes of death, infant mortality rate and the life expectancy.

Thus, the health index evolution for the last eleven years followed different tendencies the county level, generating various situations possibly synthesized such as (See figure 3):

- *Ascending dynamic without significant yearly fluctuations*

This category includes about ten counties where the population health state registered a continuous depreciation, with increasing values for health index (for example the counties of Prahova, Buzau, Vrancea, Braila, Vaslui, Botosani, Bihor, Maramures).

- *Ascending dynamic with significant yearly fluctuations*

In this category can be included counties such as Teleorman, Calarasi, Iasi, Satu Mare where the values of health index registered important variations by year.

Though the general tend was an ascending one, some times the yearly fluctuations have reduced the dimension of the phenomena, the above mentioned counties registered progresses for selected period of

time with episodic improvement of the population health state, eliminated by the later evolutions.

- *Descending dynamic without significant yearly fluctuations*

This category include those counties where the population health state registered a continuous

improvement, the health index values decreasing during the studied period of time.

Unfortunately, this positive situation is only characteristic for a small number of counties such as Suceava, Covasna, Timis. (see figure 3)

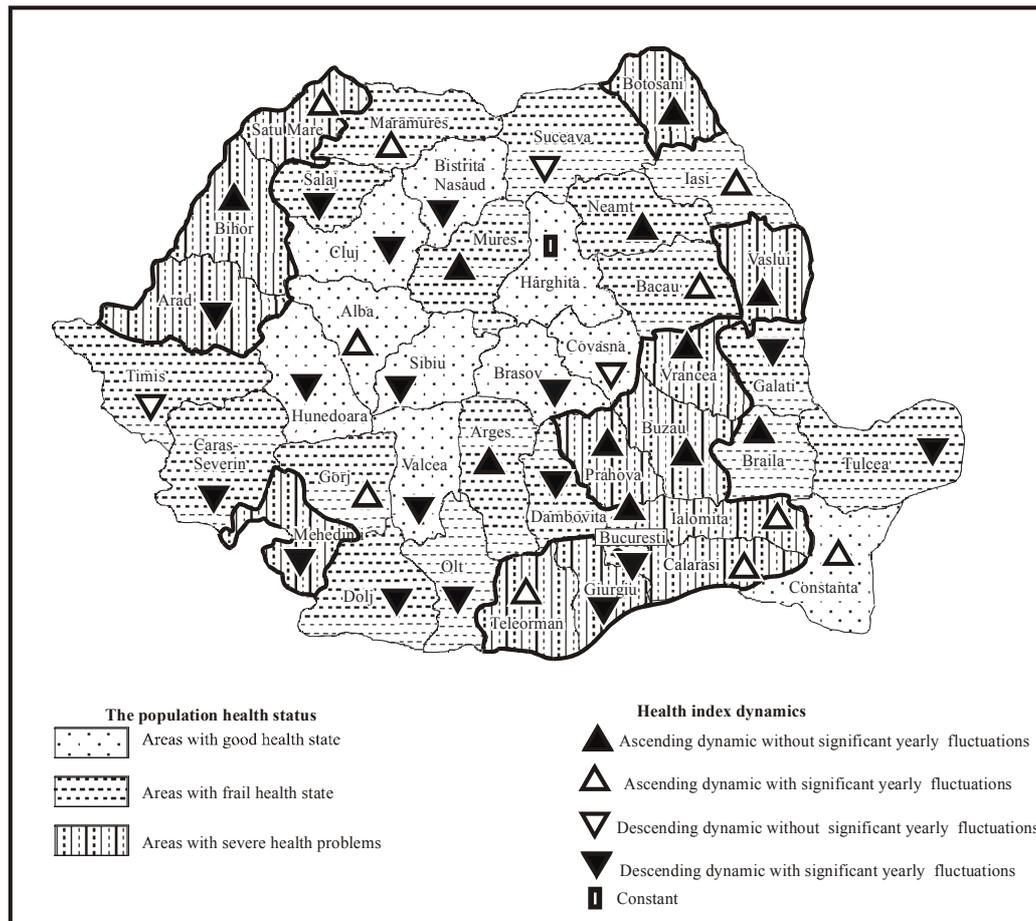


Figure 3. The Health State of the Romanian Population (1990-2001)

- *Descending dynamic with significant yearly fluctuations*

This situation is characteristic for an important number of counties as Caras Severin, Mehedinti, Olt, Giurgiu, Cluj, Salaj. Here, despite the general increasing trend of health index values for the whole period of time, the health state of the population didn't necessarily improved; the fluctuations of

health index being some times significant, with alternance of high and low values times slots, the previously progresses occurred could diminish lately.

According to the depth of the yearly fluctuations the counties included in this category are characterized through different aspects concerning the health status.

- *Constant dynamic*

Shows stagnant values of health index for the whole studied period. This is a case of Harghita county, which doesn't register any yearly variations between 1990-2000.

Romania's counties find themselves in different situations, according to the health index way of evolution after 1990, resulting in differentiations from a population health status point of view.

By considering the 'distance' between counties health index values and the multi annual average one can identify "unfavorable cases" for the counties with health index value much higher than the average and "favorable cases" for those where the health index values are lower than the average.

Against multi annual average value of 0.460, the counties such as Giurgiu (0.609), Teleorman. (0.578), Botosani (0.576) are the "most unfavorable cases" and counties such as Brasov (0.347), Sibiu (0.351), Harghita (0.351), are the "most favorable cases".

On an overall, 22 counties with health index values higher than the multi annual average have a population health state deteriorated at various rate.

In the same time, 18 counties with health index values lower than the multi annual average can be considered positive cases, with acceptable health state. (See figure 4)

The spatial distribution of the health index multi annual average by county shows territorial clusters of counties with similar or close health state. According to the health index values and their evolution for the studied period, the following areas can be identified: *areas with acceptable or good health state, areas with frail health state and areas with severe health problems.* (see figure 3)

The last two categories should be paid special attention in terms of health resources and policies.

The reduced dimension of the areas with acceptable or good health state compared to the areas with frail or precarious health state proved that Romanian population is confronted after 1990 with serious health problems.

In addition, taking into account the number of counties with frail health state it easily foreseen that sensible changes in some determinant factors for health will further deteriorate.

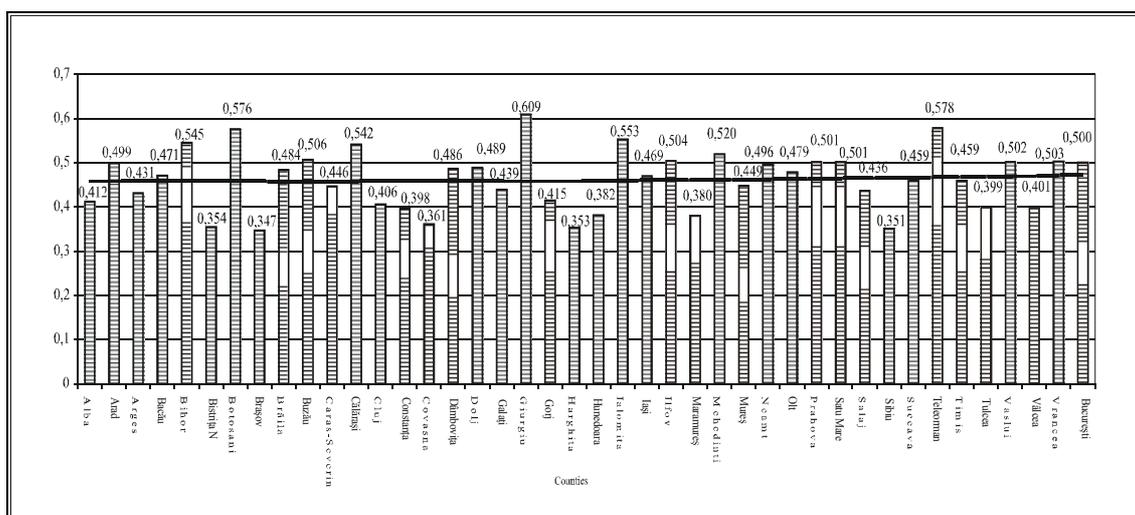


Figure 4. The Romania's Counties Population Health State

Health Index Territorial Changes after 1990

Assessing Romanian population health state at the beginning and the end of the studied period of time one could notice some territorial variations, the majority of the counties have registered health state changes meaning either an improvement or a decrease for the last eleven years.

Identifying the counties with worsens health state and its degree it's very important, thus contributing to a correct report for a better management or orientation of health funds.

It is similarly important to know the situations where the health status significantly and evidentially

improved, assessing the generating factors being useful for better understanding the key elements respectively actions needed to adjust the unfavorable situations, characteristic for an important number of counties.

If at the national level the population health state worsen for 2000 compared to 1990, proved by a higher health index value in 2000 (0.445) as opposed for 1990 (0.438), at the territorial level the situations are slightly differentiated, many counties having by the end of the studied period of time a better health status or at least considerably better compared to the beginning of it. (see figure 5)

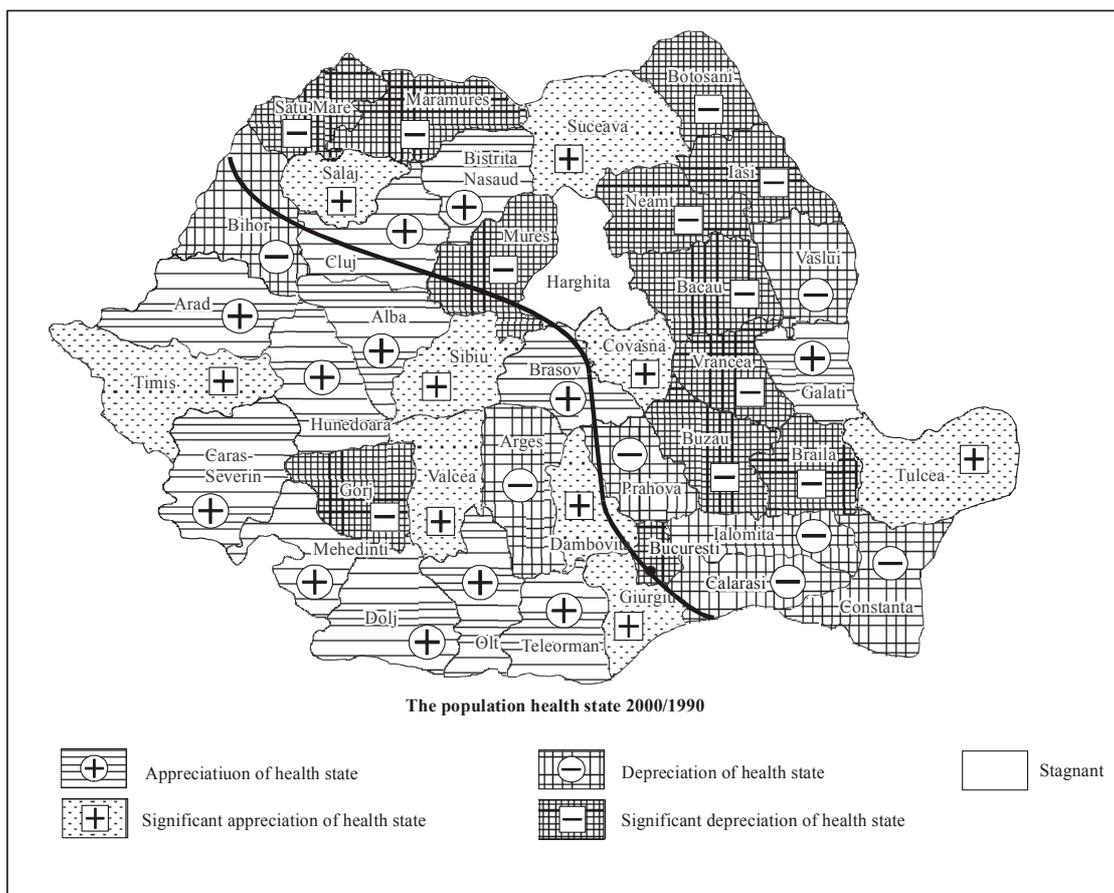


Figure 5. The Health State of the Romanian Population 1990/2000

Taking into consideration the health index values for 1990 and 2000, one can notice the following territorial cases:

- Significant deterioration of the population health state. This is evident for the northern and eastern parts of the country.
- Deterioration of the population health state. This situation is especially characteristic for counties in south east Romania (Calarasi, Ialomita, Constanta). Others examples are scattered all over the country (Vaslui, Bihor, Arges, Prahova).
- Appreciation of population health state. This situation is characteristic for the western and south western part of Romania, where counties registered positive aspects in population health status evolution, with decreasing values of health index (Alba, Arad, Hunedoara, Cluj).
- Significant appreciation of population health state. This is the most favorable situation, which unfortunately is characteristic for a small number of counties, predominantly located in western and Central Romania (Timis, Sibiu, Valcea).

- Stagnant population health state. There are rare situation, characteristic for one county only, where the health index value didn't registered any changes over the studied period of time (Harghita).

Conclusions

The evolutionarily and comparative approach in studying the population health state has proved the fact that Romania inherited a precarious health state, this being showed by the value of health index.

Analyzing these values within an European context has showed the existing disparities between Romania and both eastern and western European countries.

The yearly variations of the health index between 1990 and 2000 showed that population health state has continuously decrease after 1990.

Spatially, this deterioration was not continuous, the value of health index registering different evolutions, generating different typologies and from a general point of view, the "most favorable" cases and the "unfavorable cases" becoming evident.

BIBLIOGRAPHY

- C.C.S.S.D.M. (Centrul de Calcul, Statistică Sanitară și Documentare Medicală) (1996), *Buletin Informativ nr. 1.*, București.
- C.C.S.S.D.M. (1995), *Anuar de Statistică Sanitară*, București.
- C.C.S.S.D.M (2001), *Anuar de Statistică Sanitară*, București.
- C.N.S. (Comisia Națională de Statistică), 1975-2001, *Anuarul Statistic al României*, București.
- C.N.S. (1995), *Buletin Informativ nr.3.*, București.
- C.N.S. (1995), *Mediul înconjurător în România. Culegere de date statistice*, București.
- C.N.S. (1996), *Anuarul demografic al României*, București.
- C.N.S. (1999), *Analize demografice*, București.
- C.N.S. (2000), *Anuarul demografic al României*, București.
- C.N.S. (2001), *Statistică teritorială*, București.
- C.N.S., (1990-1997), *Anuarul Statistic al României*, București.
- C.N.S., (1997), *Aspecte privind calitatea vieții populației în anul 1996*.
- C.N.S., (1998), *Decedați în anul 1997*, București.
- C.N.S., 1997, *Veniturile, cheltuielile și consumul populației în anul 1996*, Informații statistice operative, Seria *Calitatea vieții*, nr. 1.
- Dumitrache, Liliana, Armaș, Iuliana, (2000), *Health and Health Care in Post-Communist Romania*, in „Post-

- Communist Romania: Geographical Perspectives”, Liverpool Hope Press, Liverpool.
- Enăchescu, D., Marcu, M., (1995), *Sănătate publică și management sanitar*, Ed. Economică, București.
- Erdeli, G., Dumitrache, Liliana (2001), *Geografia populației*, Ed. Corint, București.
- I.N.S. (Institutul Național de Statistică), (2000), *Evoluția mortalității în România în perioada 1990-1999*, București.
- I.N.S. (2001), *Decedați în anul 2000*, București.
- I.N.S. (2001), *Social Trends*, București.
- I.N.S. (2001), *Starea de sănătate a populației României*, București.
- I.N.S. (2001), *Tabele de mortalitate pentru perioada 1998-2000*, București.
- I.N.S. (2001), *Health Status in Romania*, București.
- Ministerul Sănătății (1995), *Raport privind activitatea desfășurată în perioada nov. 1992-oct.1995*, București.
- P.N.U.D. (Programul Națiunilor Unite pentru Dezvoltare) (1996-2000), *Raportul Național al Dezvoltării Umane*, România, București.
- PNUD – PPCS, (1980), *Coordonate ale sărăciei în România. Dimensiuni și factori*.
- U.N.F.P.A., (United Nation Population Fund), (1991), *Romania Report*, New York.
- U.N.I.C.E.F., (United Nation Children’s Fund), (1994), *Situația copilului și familiei în România*, București.
- U. N., (United Nations), *Economic & Social Affairs. The Costs of Poverty and Vulnerability*, New York.
- W.H.O (World Health Organization) (2000), *W.H.O. H.F.A Indicators for the New Health Policy in Europe, Report on a W.H.O. Expert Group Meeting*, The Hague, Netherlands.