

BABEȘ-BOLYAI UNIVERSITY OF CLUJ-NAPOCA
FACULTY OF GEOGRAPHY
DEPARTMENT OF REGIONAL GEOGRAPHY

DOCTORAL DISSERTATION
THE TOWN OF CLUJ-NAPOCA – A MEDICAL GEOGRAPHY STUDY
- Resume -

Scientific Coordinator

UNIV. PROF. DR COCEAN POMPEI

Graduate: **DANIELA DRĂGAN**

CLUJ-NAPOCA

2010

TABLE OF CONTENTS

INTRODUCTION	5
CHAP. 1. MEDICAL GEOGRAPHY: THEORETICAL AND METHODOLOGICAL BASIS	16
1.1. Medical Geography: definition and evolution of the concept	16
1.2. Medical geography notions and concepts	24
1.3. The methodology of research in medical geography	42
1.3.1. The theoretical and conceptual basis of medical geography	42
1.3.2. Methodological coordinates (principles, methods)	42
1.3.3. Medical geography and the transdisciplinary paradigm	52
1.4. The history and evolution of medical geography research	55
1.4.1. The evolution of health problematic approach	55
1.4.2. The international history of research	56
1.4.3. The history and development of medical geography in Romania	57
CHAP. 2. THE TOWN OF CLUJ-NAPOCA: TERRITORIAL, DEMOGRAPHIC AND FUNCTIONAL EVOLUTION	61
2.1. Geographic settlement	61
2.2. The territorial, demographic and functional evolution of the town of Cluj-Napoca	63
2.2.1. The ancient town	64
2.2.2. The medieval town	67
2.2.2.1. The town of Cluj in the XV-th century and the first half of the XVI-th century	72
2.2.3. Modern age Cluj	72
2.2.3.1. Cluj at the middle of the XVI-th century and the end of the XVIII-th	72
2.2.3.2. Cluj during the XVIII-th century and the first half of the XIX-th century	74
2.2.3.3. The modern town expansion (Cluj during the XIX-th century)	77
2.2.3.4. Cluj between 1900 – 1945	79

2.2.4. Contemporary age Cluj	81
2.2.4.1. Cluj between 1945 – 1989	81
2.2.4.2. Cluj between 1989 – 2009	83
2.2.4.3. Conclusions	88
2.2.4.4. Favorable premises for the development of the urban area	90
CHAP. 3. THE ANALYSIS OF THE HEALTH CONDITION IN THE TOWN OF CLUJ-NAPOCA	92
3.1. Health and the factors that influence it	94
3.2. Natural factors that influence health condition	94
3.2.1. Physical-geographic factors in the manifestation of health condition	94
3.2.1.1. Climatic factors	94
3.2.1.2. Physical-chemical and meteorological factors	98
3.2.2. Climatic elements and their influence on the human organism.....	102
3.2.2.1. The evolution of climatic elements in Cluj-Napoca	104
3.2.2.2. The influence of temperature on the human organism	108
3.2.2.3. The influence of precipitations on the human organism	109
3.2.2.4. The influence of wind on the human organism	111
3.2.3. Contaminating the air, water and soil with chemical, physical, biological substances, harmful to the health	112
3.2.3.1. Air pollution	112
3.2.3.2. The effects of air pollution on health condition	119
3.2.3.3. Water pollution and health	125
3.2.3.4. The effects of water pollution on health condition	129
3.2.3.5. Soil pollution and health	134
3.2.3.6. Sound pollution	139
3.3. Behavioral factors that influence the population's health condition.....	145
3.3.1. The population's way of life	145
3.3.1.1. Alimentary behavior	145
3.3.1.2. Alcohol consumption	147
3.3.1.3. Tobacco consume	148

3.3.1.4. Housing	149
3.3.1.5. Stress	149
3.4. The analysis of the health condition of the Cluj population	150
3.4.1. The demographic index dynamic	150
3.4.1.1 Life expectation at birth	156
3.4.2. Mortality analysis	156
3.4.2.1. General mortality	156
3.4.2.2. Mortality on both genders	157
3.4.2.3. Infant mortality	158
3.4.2.4. Mortality, structured on the main causes of death	159
3.4.3. The analysis of general morbidity	168
3.4.3.1. Chronic disease morbidity	176
3.5.3. Conclusions	180
CHAP. 4. THE MEDICAL SYSTEM IN CLUJ	180
4.1. The medical-sanitary system in Cluj: concept and structure	180
4.2. The Medical School of Cluj	183
4.2.1. The history and evolution of the medical school in Cluj	183
4.2.2. The Medical School of Cluj	185
4.2.2.1. The historic roots of the Medical School of Cluj	187
4.2.2.2. The characteristics of the Medical School of Cluj	188
4.2.3. The Pharmaceutical School of Cluj	190
4.2.4. Mentors of the Medicine and Pharmaceutical School of Cluj	191
4.3. The medical-sanitary infrastructure in Cluj	192
4.3.1. The evolution of the medical-sanitary infrastructure in Cluj	192
4.3.2. The typology of the medical-sanitary units in Cluj	194
4.3.2.1. The Hospitals (evolution and typology)	200
4.3.2.2. The Polyclinics (evolution and typology)	204
4.3.2.3. The Pharmacies	205
4.3.2.4. The general medicine dispensaries	206
4.3.2.5. Private, general medicine or specialized medical cabinets	206

4.3.3. The characteristics of medical-sanitary units in Cluj	207
4.3.4. Spatial distribution of the medical infrastructure in Cluj	209
4.3.5. The S.W.O.T. analysis of the Cluj medical-sanitary infrastructure	214
4.4. Cluj medical-sanitary personnel	215
4.4.1 The medical-sanitary personnel	215
4.4.2. The sanitary environment personnel	218
4.4.3. The auxiliary sanitary personnel	220
4.4.4. The pharmacists' number evolution	221
4.5. The functionality of the Cluj medical system	221
4.5.1. Medical-sanitary services	222
4.5.2. The medical-sanitary services index	224
4.5.3. Financial resources	226
4.5.4. Conclusions	231

CHAP. 5. THE MEDICAL POLARIZATION OF THE TOWN OF CLUJ-NAPOCA	233
5.1. Medical polarization: conceptual clarification	233
5.2. Types of polarization	237
5.2.1. Forming educational polarization	237
5.2.2. Polarization induced by the multicultural characteristic	245
5.2.3. Polarization induced by great specializations	251
5.2.3.1. The Oncologic Institute	251
5.2.3.2. The Heart Institute	252
5.2.4. Psychological polarization induced by tradition	259
5.2.5. Polarization induced by facilities	260
5.2.6. Polarization through unique institutes and specific units	270
5.2.6.1. The TBC hospital	270
5.2.6.2. The Military hospital	273
5.2.7. Polarization determined by the quality of the medical assistance	274
5.2.7.1. Public medical assistance	274
5.2.8. Conclusions	286

CHAP. 6. HEALTH CONDITIONS IMPROVEMENT STRATEGIES	286
6.1. The characterization of the health condition of the population of Cluj-Napoca	286
6.1.1. Negative aspects, which affect the health condition of the Cluj population	288
6.1.2. Positive aspects impacting on the health condition of the Cluj population	289
6.2. Aspects regarding the condition of the health system	289
6.2.1. The main modifications in the organization and financing of the health system	289
6.2.2. The sanitary system resources.	290
6.2.2.1. The health systems reform in Europe	291
6.2.2.2. The health system reform in Romania	292
6.2.3. Major problems that health system is dealing with	293
6.3. Identifying strategies for improving the health condition	298
6.3.1. Optimization of the impact of behavioral factors	298
6.3.2. Optimization of the impact of socio-economical factors	300
6.3.3. Optimization of the environmental factors	301
6.3.4. Optimization of the impact of the Cluj medical system	302
CONCLUSIONS	303
BIBLIOGRAPHY	311
APPENDIX	325

Key-words: medical geography, town of Cluj-Napoca, health condition, public health, illness condition, Cluj medical system, prophylaxis, medical polarization, medical services, climatic factors, environmental factors, behavioral factors, life expectancy at birth, mortality, infantile mortality, morbidity, the Cluj medical school, medical-sanitary personnel, Cluj medical-sanitary infrastructure, medical-sanitary infrastructure index, health condition optimization strategies.

Introduction

The ultra diversified and continuously transforming contemporary society, that man itself is obliged to comply with, has imposed on **geography** to embrace trends radically different than the ones several decades ago. **Geography** is a complex science tangent to and in close connection with other sciences. In parallel, as an independent branch, **medical geography** was developed, with a keen orientation, on the one side, on the revealing of illnesses in a geographic territory, and on the other, on the measure in which the natural and social environment can influence illness manifestation and the health level of the population.

This **medical geography study**, applied to the town of Cluj-Napoca has been realized according to a methodological arsenal and an original conceptual theoretical concept, which houses an ample approach, structured in six chapters. The sections of our study have been organized as follows:

Introduction – where I have stated the reasons for my choosing this research subject and have underlined several general considerations regarding the study object aimed at.

Chapter 1. Medical Geography: theoretical and methodological basis – where I have defined and explained the concept of medical geography and the evolution of this concept. Also, I have clarified the object of study for medical geography, I set out the theoretical, conceptual and methodological frame of the discipline, as well as the history of concerns and research on health condition, and highlighted the most important steps in the field, both internationally and nationally.

Medical geography represents a sub-branch of **social geography** and is different from the others sub-branches in that it intersects medical studies on health, which has determined various authors and various discursive instances to propose names such as: **geographic medicine** or **geomedicine**, the **medical ecology geography**, **pathological geography**, **the geography of health and illnesses** and more recently, **the medical assistance geography**, **the geography of health and sanitary services**.

Geography is a spatially and socially complex science, although concepts such as “space” or “social” are not exclusively used by geographers. The fundamental problems that geography touches at are structured on the major distinction of: physical geography, human geography and regional geography. The present study focuses on human geography, a branch of geography that has developed research directions, has overspecialized in order to give birth to new sub-branches, knowledge domains and even autonomous sciences : population geography, economic geography, the geography of settlements, the geography of tourism, the geography of circulation, politic geography, social geography. Medical geography is a recent science which has appeared within the context of the new epistemological paradigms brought forth during the second half of the XX century and which aims at creating connection bridges and a true dialog between various sciences. It is a sub discipline of the social geography, which deals with interactions between humans and the environment. The object for study of the medical geography is the health condition seen from a Holistic perspective. It includes society and space and idealizes, at the same time, *the role of the location, emplacement and geography in health*, as well as health conditions and illness.

Medical geography approaches health from a spatial perspective and from the point of view of its dynamics in time. Being, as it is, a relatively recent field of study, lacking a well-founded methodological basis, not only in our country, but on an international level as well, it has been insisted both on the quantitative and qualitative dimensions of human health, but highlighting evaluation patterns and their interpretation through the biases of statistic and “on the field” investigations (Dumitrache, Liliana, 2004).

Medical geography recognizes the importance of *context, place and level of spatial approach* – from global to local, in order to establish the causes and benefits

linked to the health condition. The key factors of the health condition are complex, thus requiring an integrated, multi and trans disciplinary approach in order to guarantee the certainty that the research work offers relevant qualitative proof for the founding of health condition politics. The problematic on which medical geography casts its concerns is very ancient so that we can talk about an evolution and a dynamic of specific medical geography concerns.

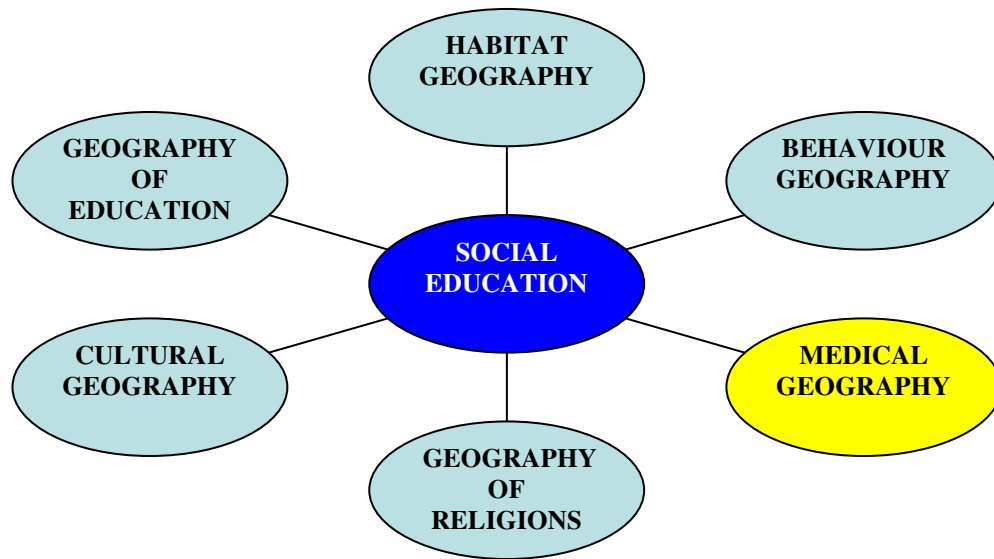


Fig.1. The place of medical geography within social geography (model of Cocean, P., Rotar, Gabriela, Ipatiov, F., 1994)

Understanding *human health* in connection to the *environment* represents the contribution of medical geography, individualized by the fact that it opens “the health problematic” towards the social system as well as towards the geographic space.

Chapter 2. The town of Cluj-Napoca: territorial, demographical and functional evolution, represents a thematic segment where the town of Cluj-Napoca is presented, equally, as a necessary support to the continuation of human existence, but also as a theoretical, spatial and conceptual frame which assumes the development of biologic, physic, anthropic and cultural processes; this section is set out to be a statement and explanation of the historical evolution of the spatial context, which will grant us a better comprehension of the spatial reference frame to which our study is applied.

This chapter has tried to seize the urban genesis and its dynamics from a territorial, demographic and functional perspective. Aside from being a really old town, the town of Cluj-Napoca is also the result of a long and dynamic process of shaping of a geographic space within the frame of very sinuous line.

The study has highlighted the structuring and development steps starting from the ancient times, with a reflux during the second half of the Christian millennium, reviving to a genuine reference point in the Transylvanian and central-European space during the Middle Ages, followed by being crowned a true political, but even more so cultural capital of Transylvania and culminating with the flourishing metamorphosis during the contemporary age. The town of Cluj-Napoca, is without a doubt, since the beginning of the third millennium, a space of becoming, an ever more complex urban model and a reference point of the topos where tradition meets and ennobles modernity.

Chapter 3. The analysis of the health condition of the population in the town of Cluj-Napoca analyzes the health condition of the population in Cluj through various geodemographic factors, environment and behavior factors, inventorying elements that will constitute a specific dynamic of health that will be quantified under the form of a specific model of the population's health from this geographic environment. The particular model of the health condition of the population in Cluj was built through the juxtaposition of some morbidity and mortality models and due to the capacity of the medical system in Cluj to deal with challenges in this area, having as a result the amelioration and improvement of the health condition. The territorial system in Cluj can be understood only in relation with the environmental context which supports and develops it, and equally in relation with the behavioral factors and with the general mentality of the Romanian culture. The analysis revealed that there are notable differences in terms of hope of life and general mortality, especially the infantile mortality, between the median national values and the ones registered at the municipality level. From a structural point of view, the main causes of the "mortality in Cluj" are not different from the Romanian or European model, but the balance percentage confirms the necessity of very strong mechanisms, capable to differentiate, to modify and to singularize the casuistry of mortality. Likewise, the general morbidity model maintains broadly the features of the Romanian model, keeping to the main categories of diseases,

but with significant mutations in the balance percentage. In the case of chronic morbidity there is a firm and specific reconfiguration, having at the top the cardio-vascular diseases, followed by hyperglycemia, chronic pulmonary diseases, cirrhosis and chronic hepatitis. Generally, chronic diseases are the consequences of the way of living and influenced by its circumstances. The chronic morbidity model confirms an appreciation in the importance of the place and manner of living. Therefore, we can state, on the basis of our analysis, that in Cluj-Napoca *one lives and especially dies otherwise*. The analysis highlights a model of refinement and individual and collective assumption of the entire “health potential”. This specific model of health evidences that the existence in the area of a specific topos characterized by socio-economic conditions, environmental conditions and having a specific behavior and mentality, could determine a certain structure of the health condition in that geographic area.

Chapter 4. The medical system in Cluj was defined as a functional sub-system within the same territorial system, responsible for the practice of the medical functions through the medical services they deliver in the purpose of maintaining, promoting, optimizing and developing the health condition of the population. It is structured starting with the medical school in Cluj, it uses a complex medical-sanitary infrastructure and it has a professional medical-sanitary personnel, which all contribute to the functionality of the medical system through the valuing of all medical resources inside the territorial system in Cluj. The confirmed hypothesis was that the medical system in Cluj represents a sub-system within the territorial system, responsible for the practice of the medical-sanitary function. The analysis demonstrated the great evolution of the medical system in Cluj, the dynamics of each component, starting with the tradition of the medical school in Cluj built-up on the work of the great professors and mentors that is structured around the University. The medical system in Cluj develops a performing medical infrastructure as well as an exceptional staff, successfully transforming them in high quality medical services, especially within the professional institutes, authentic models of competency and professionalism. In relation with the multiple comparative references, the study of the medical system’s dynamics in Cluj invariably revealed the systemic performance, the infrastructure’s quality, its diversity and practical relevance, shown by the evolution of the *index of the medical-sanitary services* as well.

The study of the infrastructure and of the medical-sanitary staff evidenced their diversity and high quality, which may represent the sustainable foundation for the maintenance of the health condition of the population; furthermore, they can be considered as a veritable frame of reference for the maintenance and the care for the health condition of a wide spectrum of the population in the county of Cluj, in the North Western development region and even in the entire Transylvania, outlining a real “region” having a variable geography, in which it exercises its polarizing medical function. The study revealed the features of the medical-sanitary infrastructure in Cluj, distinguishing its dynamics and evolution, the morpho-functional diversity, the structural modernity applied in medical activities, its irrefutable high quality and significant polarizing nature, in a variable geographic space. Obviously, our inquiry highlighted a series of deficiencies in the system as well, due to both the general evolution of the Romanian society and, especially, the indistinct and inconsistent vision of the reform waves in the Romanian medical system.

Chapter 5. Using methodological instruments specific to the medical geography, *the medical polarization of the town of Cluj-Napoca* allowed us to define medical polarization as the result of the functionality of the medical system in Cluj, as well as the structure of these polarization forms. Medical polarization is a specific type influence on the environment, performed by a polarizing center, throughout its excess of medical resources.

The analysis of the medical polarization led to a structure of polarizing types and forms induced by factors such as: educational medical institutions, the tradition of medical school in Cluj, medical residencies, the quality of the human resources and of the medical-sanitary infrastructure. All these criteria describe the degree of appropriateness and usage of the medical resources that the “center” - represented by the medical system in Cluj – has and uses in the manifestation of its medical function. In order to perform a systemic approach, we endeavored to unfold, in the first instance, a series of references to the elements “center” and “area of influence” from a theoretical-conceptual point of view, and secondly, throughout a system of quantification and valoric determination of the flows and complex relationships established between the center and the area of influence.

The analysis of the medical polarization led to a structure of polarizing types and forms induced by the following factors:

- Educational medical institutions;
- Cultural and multicultural institutions;
- Medical residencies;
- Medical school's tradition in Cluj;
- High quality of the medical-sanitary infrastructure;
- High quality of the medical assistance (human resources);
- Reputed specialists.

All these polarization forms were studied in the purpose of obtaining a more precise image of the amplitude of the medical flows and the degree of appropriateness and usage of the medical resources that the “center” has and uses in the manifestation of its medical function.

Through the power of tradition and as an actual estate created by the interaction of some objective factors, the town of Cluj-Napoca is one of the largest medical-sanitary center in our country, both from the point of view of the extremely high volume of health-related services offered to the population, and from the point of view of their diversity and quality. Due to all these, it is perceived as a gravity center towards which, principally, the population of the rural environment of the county of Cluj-Napoca is directed, but also the population of the North Western regions, of Transylvania and of other counties in the country.

Chapter 6. The strategy of optimizing health condition was shaped starting with the description of the health condition of the population of Cluj-Napoca, re-building the model of specific health. The negative and positive aspects having an impact on health condition were indentified and a radiography of the working, financing and transforming of the medical system in the European, national and local context was performed. In a comparative perspective with the European level, both the national medical system and the medical system in Cluj, face some major challenges that can be expressed through the following symptoms: sub-financing and inefficient usage of resources, low and inequitable access to thorough-bred services, bad management of human resources, poor

attention to the health promoting services and bad management of the information. Having this diagnosis as a starting point, we outlined a discursive effort capable to offer punctual and systemic answers so that the local medical system, as well as the national one, could be optimized to become a support frame that facilitates and improves the health condition of the population. In the light of this final synthetic analysis, we identified and described a series of objectives and strategic relatively general targets through which we aimed at creating a constructive perspective on the optimization of Cluj population's health condition. The projection targeted the altering of key health condition factors, the optimization of the impact of behavioral, socio-economical and environmental factors and the optimization of the medical system in Cluj.

Conclusions:

The present doctoral dissertation entitled *The town of Cluj-Napoca – a medical geography study* has proven to be, from a medical geography point of view, a complex analysis of the town's population dynamics.

From a transdisciplinary perspective and by integrating the data provided by the statistic, medical and sociological approach within the geodemographical dynamics of phenomena and its anthropological and cultural dimension, the purpose of this intercession was focused on the complex analysis of the health condition of the population in Cluj-Napoca in relation to the factors that determine it, thus building a methodic approach specific to the recent studies in medical geography.

The results of this study are useful to local public authorities, medicines, non governmental organizations, public institutions and private companies by offering them starting points for actions meant to improve local health risk factors, actions through which the Cluj community can act to the benefit of its own health and become its own creator.

To conclude with, it can be stated that, far from loosing its importance during this informational age of technology, the *human factor* must learn to protect and improve its health condition, its welfare, because it determinately reverberates in any system, on any continuous development. The effort of this research has risen in our minds a more

profound query on the health of the people in Cluj-Napoca, on the possible development of this space and on what the people here can and will become...

BIBLIOGRAPHY

1. **Achimaș, C.**, (1999), *The Medical Scientific Research Methodology*, EMU "Iuliu Hațieganu", Cluj-Napoca.
2. **Alexandru, Gh.**, (2004), *The Management of Medical Services*, Editura Eficon Press București.
3. **Armaș Iuliana** (2006), *Geographic Theory and Methodology*, Editura Fundația România de mâine, București.
4. **Ardeleanu, Elena**, (2002), *Primary assistance of the health condition*, Editura Eurostampa, Timișoara.
5. **Armean, P.**, (2002), *The Management of Health Services Quality*, Editura C.N.I. Coresi, București.
6. **Alicu, D. și colab.** (1995), *Cluj-Napoca, from the beginning until the present times. A Historic and Turistic Guide*, Edit. Clusium, Cluj-Napoca.
7. **Arseni, C., Drăgănescu, M.** (1984), *The Health Problematic, today and in the future*, Editura Academiei R.S.R., București.
8. **Athanasiu, A.**, (1993), *Medical psychology elements*, Editura Medicală, București.
9. **Bardac, D.**, (2003), *The environment hygiene and psychology. A Public Health Treaty*, vol.II, Editura Hermannstadt.
10. **Bălan, A.**, (1997), *Behavior and Health*. Asociația de Științe Cognitive din România, Cluj-Napoca.
11. **Bărbulescu, M., Deletant, D.**, (2007), *The History of Romania*, Editura Corint, București.
12. **Bălțeanu, D.**, (2000), *Current Orientations in Geographic Research* în revista „Terra” nr. 1, București.
13. **Barnea, M.**, (1979), *Human Ecology*, Editura Medicală, București.
14. **Barry, N.**, (1998), *The Welfare*, Editura Style, București.
15. **Beaujeau-Garnier, Jacqueline, Chabot, G.** (1971), *Urban Geography*, Edit. Științifică, București.
16. **Benedek, J.**, (2004), *Territory setup and regional development*, Editura Presa Universitară Clujeană, Cluj-Napoca.
17. **Bogdan, A. și colab.** (1967), *A Contribution to the organization of the pre-townal area of Cluj*, în Studia Universitatis Babeș-Bolyai, Series Geologia-Geographia, 12, nr. 2, Cluj-Napoca.
18. **Bocancea, C., Neamțu, G.** (1999), *Social Assistance Elements*, Editura Polirom, Iași.
19. **Boia, L.**, (1985), *The Virus Factor: the Epidemics, A Historical Geography*, Curs litografiat, Universitatea București, Facultatea de Istorie.
20. **Bologa, V.L.**, (1962), *From the History of Romanian and Universal Medical History*, Editura Academiei R.P.R., București.

21. **Bologa, V.L.**, (1962), *From the History of Romanian and Universal Medical History*, Editura Academiei R.P.R., București.
22. **Borzan, Cristina, Mocean, Floarea** (2002), *Public Health*, Editura Medicală Universitară „Iuliu Hațieganu”, Cluj-Napoca.
23. **Brătescu, Gh.**, (1970), *The History of Medicine*, Editura Medicală, București.
24. **Brătescu, Gh.**, (1981), *Past and future in Medicine*, Editura Medicală, București
25. **Brătescu, Gh.**, (1983), *Moments from the past of Medicine*, Editura Medicală, București.
26. **Brătescu, Gh.**, (1985), *Medical Retrospectives. Studies, Notes and Documents*, Editura Medicală, București.
27. **Burcu, A., Burcu, Al.**, (2006), *The Ecological Education and the Quality of Life* Editura Mega.
28. **Buta, I., Bodea, Mihaela, Edroiu, N.** (1989), *City Guide, Cluj-Napoca*, Edit. Sport-Turism, București.
29. **Buzea, O.**, (1939), *Cluj between 1919-1939*, Edit. Cartea Românească, Cluj-Napoca.
30. **Cace, S., Vlădescu, C.**,(2004), *The Health Condition of the Rrom population and their access to health services*, Editura Expert, București.
31. **Calmic, V.**, (2007), *The Optimization of the Health Education Activity and the promotion of the Healthy Way of Life under new Socio-Economical Conditions*. Teză de doctorat UMF „Nicolae Testemițanu”, Chișinău.
32. **Caude, R.**, (1964), *Methodology, Towards a science of action*, Entreprise Moderne, d’Edition, Paris.
33. **Cătălina, Ancuța**, (2008), *The geographic study of the territorial disparities from Banat*, Editura Mirton, Timișoara.
34. **Chelcea, S.**, (2007), *How to write a license dissertation, a doctoral dissertation a scientific article in the social-human sciences domain*, Editura Comunicare.ro, București
35. **Chelcea, S.**, (2007), *The Methodology of sociologic research, quantitative and qualitative methods*, Editura Economică, București.
36. **Ciangă, N.**, (2004), *The bio-climates and the diversity of spa functionality*, Studia Universitatis „ Babeș-Bolyai”, Geographia, 1 , Cluj-Napoca
37. **Ciangă, N., Rațiu Ramona.**(2003), *The human Geography of Romania. Tutorial works guide* , Editura Dimitrie Cantemir, Târgu-Mureș
38. **Ciobanu, V., Ancușa, M.**, (1998), *Public Health Condition matters*, Volumul II, Editura Mirton, Timișoara.
39. **Ciobanu, V., Ursoniu, S.**, (2005), *Tutorial works guide in Public Health*, Editura Solness, Timișoara.
40. **Cocean, P.** (2005), *Regional Geography: Evolution, Concepts, Methodology*, Ediția a II-a Editura Presa Universitară Clujeană, Cluj-Napoca.
41. **Cocean, P., Rotaru, Gabriela, Ipatiov, F.**, (1994), *Social Geography - a Cornerstone Discipline of Human Geography*, în „Studii și Cercetări de Geografie” vol.XL, Editura Academiei, București.
42. **Cojan, Adela**, (2003), *The Methodology of Medical Scientific Research*, Editura Universității, București.

43. Crișan, I. H. și colab., (1972), *The archaeological repertory of Cluj*, Institutul de Istorie și Arheologie, Cluj-Napoca.
44. Cucu, V. ,(1970), *Towns of Romania*, Edit. Științifică, București.
45. Cucu, V. ,(1976), *Geography and Urbanization*, Edit. Științifică, București.
46. Culic, Irina, (2004), *Advanced Methods in Social Research*, Editura Polirom, Iași.
47. Curșeu, Daniela, (2006), *Environment and Health*, Editura Medicală Universitaria "Iuliu Hațieganu", Cluj-Napoca.
48. Damaschin, Floarea, (1998), *Hygiene-Ecology*, Editura Surix Med., Constanța.
49. Damaschin, Floarea, (1999), *The Evaluation of Environmental Factors and of the Risk for Health Condition*, Editura Comandor, Constanța.
50. Damaschin, Floarea, (2005), *Environmental Factors and their Influence on Health Condition*, Editura Medicală, București.
51. Dobrescu, E. M., (1998), *The Sociology of Communication*, Editura Victor, București.
52. Donea, Ș., (1997), *On the Tares of the Current Health System*, Camera Federativă a Medicilor din România, București.
53. Domnariu, Carmen (coord.), Vulcu. I., Filip Ioana, Cioran Nicoleta (2003), *The Health Condition in Sibiu*, Editura Universității” Lucian Blaga”, Sibiu.
54. Deszi, Ș., (2006), *The Land of Lapus -a study of Regional Geography*, Editura Presa Universitară, Cluj-Napoca
55. Dicken, S.N., Pitts, F.R. (1963), *Introduction to Human Geography*, Blaisdell Publishing Company, University of Oregon, U.S.A.
56. Dîncu, V.S. (1995/1996), *The Cultural Function of Cluj-Napoca*, Studia Universitatis Babeș-Bolyai, Sociologica, XL-XLI,1-2, Cluj-Napoca.
57. Dorobanțu, I.,(1985), *Education for Health*, Editura Medicală, București.
58. Drăgan, Daniela, (2008), *The Evolution of the Medical School in Cluj and its Impact on the Population’s Health Condition in Current Trends of Geography Teaching and Learning , vol. VI*, Presa Universitară Clujeană Cluj-Napoca p.139-146.
59. Drăgan, Daniela, Ianăș Ana-Neli, (2008-2009), *The Structure of the Medical System of Cluj in Terra, year XXXVIII-XXXIX (LVII-LIX)*, Editura CD Press, București p.104-108.
60. Drăgan, Daniela, Filip, Marinela, Lidia, (2009), *Education for Health - a condition for durable development in Current Trends of Geography Teaching and Learning vol.VIII*, Presa Universitară Clujeană, Cluj-Napoca,p.109-115
61. Drăgan, Daniela, Gingulescu, Maria, Doina (2009), *Medical Geography - an Avatar from Inter-disciplinarity to Trans-disciplinarity in Current Trends of Geography Teaching and Learning vol.VIII*, Presa Universitară Clujeană, Cluj-Napoca, p.403-410.
62. Drăgan, Daniela, (2009), *The Cluj School of Medicine în Studia Universitatis, Babeș-Bolyai, Geographia, nr.1* , Cluj-Napoca, p.203-208
63. Drăgan, Daniela, (2009), *Disparities of the Medical-Sanitary Infrastructure în the North-West Development Region în Review of Regional Studies. Journal of the Centre for Regional Geography, volume V, number 1*, Presa Universitară Clujeană, Cluj-Napoca, p.83-90

64. **Duma, O.**, (1999), *Prevention Methods and Means against HIV/AIDS*, Teză de doctorat UMF Iași.
65. **Dumitrescu, Anca**, (2000), *The Communication of the Environment Generated Risk for Health*, Institutul de Sănătate publică, București.
66. **Dumitrache, Liliana, Armaș, Iuliana**, (1998), *The Health Condition of the Geographic Regional Population “Communications of Geography”*) vol.IV, București.
67. **Dumitrache, Liliana**, (2003), *Medical Geography: Methods and Means of Analysis*, Editura Universitară, București.
68. **Dumitrache, Liliana**, (2004), *The Health Condition of Romania’s Population, A Geographic Approach*, Editura Univers Enciclopedic București.
69. **Enăchescu, D., Marcu M.**, (1995), *Public Health and Sanitary Management*, Editura Economică, București.
70. **Enăchescu , C.**, (2007), *Scientific Research Theory Discourse*, Editura Polirom, București.
71. **Enăchescu, D.**, (1992), *Social Medicine –Remarks and Handouts* , INSSC, București.
72. **Florea, M.**, (2000), *The Medical School of Cluj*, Editura Casa Cărții de Știință, Cluj-Napoca.
73. **Florea, M.**, (2004), *Medical University, Medical School and Hospitals in Cluj*, Editura Casa Cărții de Știință, Cluj-Napoca.
74. **Florea, M.**, (2004), *The Pharmacy School in Cluj*, Editura Medicală Universitară ” Iuliu Hațieganu”, Cluj-Napoca.
75. **Florea, M.**, (2006), *Medicine in Cluj in wise words and ideas*, Editura Casa Cărții de Știință, Cluj-Napoca.
76. **Fornade, D.**, (2007), *Figures of Cluj (1800-2007)*, Editura Casa Cărții de Știință Cluj-Napoca.
77. **Furtunescu, Florentina, Neagoie, Adina** (2004), *Impoverishment and Health Condition*, Revista Acta Medica Transilvanica nr.4
78. **Greco, I.**, (1999), *The Romanian Society of Pharmacy History*, Editura Imprimeriei de Vest, Oradea.
79. **Gross, Lidi**, (2004), *Medieval Associations in Transylvania (XIV-XVI century)*, Editura Grinta, Cluj-Napoca.
80. **Gusti, G.**, (1974), *New Geographic Location Types*, Edit. Tehnică, București.
81. **Gyarmati, Z.**, (2000), *Contributions for Cluj Modernization*, în *Studii de istorie a Transilvaniei*, Edit. Accent, Cluj-Napoca.
82. **Howe, G.M.**, (1972), *National Atlas of Disease in Britain, A Medical Geography through the Ages*, The Chaucer Press Ltd, Bungay, Suffolk.
83. **Ianoș, I.**, (2000), *Territorial Systems, A Geographic Approach*, Editura Tehnică, București.
84. **Ianoș, I., Talangă Cr.**, (1989), *The Town and the Romanian Urban System in terms of the Economy Market*, Editura Academiei.
85. **Ianoș , I., Humeanu, J. B.**, (2000) , *The Theory of the Human Settlements Systems*, Ed. Tehnică, București.
86. **Ielencz, M.**, (2000), *General Geography. Physical Geography*, Ed. Fundației România de mâine, București

87. **Ionac, Nicoleta**, (1998), *The Climate and the Human Behavior*, Editura Enciclopedică, București.
88. **Ionac, Nicoleta**, (2000), *Short Discourse in Medical Geography*, Editura Universității din București.
89. **Ionuț, C.**, (1995), *The Environment and the Population's Health Condition*, în vol. Simpozionul "Conservarea naturii - Conservarea vieții", Baia Mare.
90. **Ionuț, C., Ionuț R.**, (1996), *Lead Toxicity for Children. The Contribution of Environmental Factors*, Clujul Medical.
91. **Ionuț, C.**, (coord) (2001), *Food Hygiene – practical remarks*, Editura Medicală Universitară "Iuliu Hațieganu", Cluj-Napoca.
92. **Irimuş, I.A., Kirschner-Singeorzan Cristina**, (1995), *The Evaluation Model of the Impact: pollutant factors – environment*, Analele Universității din Oradea, Oradea.
93. **Laza, Valeria, Ionuț, Carmen**, (2001), *The Environmental Health, Context and Challenge*, Editura Medicală Universitaria Iuliu Hațieganu, Cluj-Napoca.
94. **Lucuț, Gr., Rădulescu, S.**, (2000), *Quality of Life and Social Indices*, Editura Lumina Lex.
95. **Lupu, I., Zanc I.**, (1999)^a, *Medical Sociology. Theory and Practice*, Editura Polirom, Iași.
96. **Lupu, I., Zanc I.**, (1999)^b *Medical Sociology. Theory and Applications*, Editura Polirom, Iași.
97. **Mac.,I.**, (2000), *General Geography*, Editura Europontic, Cluj-Napoca.
98. **Maier, A.**, (1995/1996), *The Offer of the Geographic Framework*, Studia Universitatis Babeş-Bolyai, Sociologia, XL-XLI,1-2, Cluj-Napoca.
99. **Marcu, A., Marcu, Gr. M.**, (2000), *Management Guide for Health Programs*, Institutul de sănătate publică.
100. **Marian, M.**, (2005), *Psychological Perspectives on Health and Disease*, Editura Universității din Oradea, Oradea.
101. **Mărginean, I.**, (1994), *Research Strategies for life quality*, în „Calitatea Vieții”, nr.1-2, București.
102. **Meade, S., Melinda, Earickson, J. R.**, (2000), *Medical Geography*, The Guildford Press, New York, London.
103. **Mehedinți, S.**, (1999), *Civilization and Culture*, Editura Trei, București.
104. **Mihail, Gr., Marcu, Dana, Mirea, G.**, (2002), *Public Health and Sanitary Management*, Editura Universității Carol Davila.
105. **Mic, Simona**, (2008), *The Effect of Physical-Geographical Factors on Public Health in Bistrița-Nasaud*, Teză de doctorat, Cluj-Napoca.
106. **Mihăilă, V., Vâlceanu, C.**, (1997), *Financial Management, Intensive Course of Introduction in Management*, Institutul de Management al Serviciilor de Sănătate, București.
107. **Miftode, V.**, (1995), *Sociological Methodology*, Editura Porto Franco, Galați.
108. **Mincu, I.**, (2000), *Food Universality. Food History and Peculiarities in Romania* Editura Enciclopedică, București.
109. **Miron, Ioana**, (2004), *The Methodology of Medical Scientific Research* Lito UMFF, Timișoara.

110. Molnar Maria, (1999), *Impoverishment and Social Protection*, Editura Fundației România de mâine, București
111. Molnar, E., Onișor, T., Sofalvi, B., Susan, Aurelia (1962), *The Change of Functional Structures of Border Towns in the Transylvanian Plain between 1910-1956* , în Studia Universitatis Babeș-Bolyai, Fasciculus1, Cluj-Napoca.
112. Morariu, T., Savu, Al., (1970), *The County of Cluj*, Editura Academiei Române, București.
113. Morariu, T., Pascu, Șt., (1957), *The Urban Evolution of Cluj*, Buletinul Științific, Secția de geologie și geografie, Tomul II, nr.1, Cluj-Napoca.
114. Mureșan, Cornelia, (1999), *Demographic Evolution of Romania's Population*, Presa Universitară Clujeană, Cluj-Napoca.
115. Mureșan, P., (1989), *Handbook for Mathematical Methods in the Health Condition Analysis*, Editura Medicală, București.
116. Mureșan, P., (1980), *Handbook for Sanitary Statistics*, Editura Medicală, București.
117. Nae, Mirela, (2006), *The Geography of the Urban Quality - Analysis Method*, Editura Universității, București.
118. Nemeti, S., (2000), *Public Space in the Old Roman Towns of Transylvania*, în Studii de istorie a Transilvaniei, Editura Accent, Cluj-Napoca.
119. Nicolae, I., (2002), *Sub-urbanism as a Geographic Phenomenon in Romania*, Edit. Meronia, București.
120. Opincariu, C., (2004), *Quality Service Management in Sanitary Organizations*, Editura C.N.I., Coresi, București.
121. Orient, I., (1981), *The History of the Pharmacy in Ardeal*, Editura Cartea Românească, Cluj-Napoca.
122. Pascu, Șt., (1971), *The Voivode of Transylvania*, vol.I, Editura Dacia, Cluj-Napoca.
123. Pascu, Șt., (1974), *The History of Cluj*, Consiliul Popular al Municipiului Cluj.
124. Pascu, Șt., Marica, V., (1969), *Medieval Cluj*, Editura Meridiane, București.
125. Păun, R. (1983), *Internal Medicine Discourse*, vol .I, bolile aparatului respirator, Editura Medicală București.
126. Pervan, A., (1995/1996), *Functional Guidelines of the Medical-Sanitary System in Cluj-Napoca*, în Studia Universitatis Babeș-Bolyai, Sociologia, XL-XLI,1-2, Cluj-Napoca.
127. Petraș, Irina, coord. (2008), *Cluj in Words*, Casa Cărții de Știință, Cluj-Napoca.
128. Petri, Doina, (2002), *Bistrita-Nasaud - Health Condition in the Real Environment*, Editura Supergraph, Cluj-Napoca.
129. Petrișor, D., Lucrețiu, R., (2007), *The Environmental Health*, Editura Sitech, Craiova.
130. Poenaru, M., (1998), *Social Politics. Social Indicators*, Editura ALL, București.
131. Pop, Gr.,(2001), *The Depression of Transylvania*, Editura Presa Universitară Clujeană, Cluj-Napoca.
132. Pop, Gr., (2003), *Social-politic and administrative-territorial Organizational Types*, în Studia Universitatis Babeș-Bolyai, Geographia, XL VIII, 2, Cluj-Napoca.

133. Pop, Gr., (2007), *The County of Cluj*, Editura Academiei Române, București.
134. Pop, Gr., Bodocan, V., (2000), *Transylvanian Towns in the Last Century and a Half (1850-1996)*, în Integrated Urban Systems and Sustainability of Urban Life, Edit. Tehnică, București.
135. Pop, Gr., Ipatiov, F. (1994), *Causeway Events in Cluj in 1993. Social-Geographic Consequences*, Studia Universitatis Babeș-Bolyai, Geographia, XXXIX, NR. 2.
136. Popa, Monica, (1997), *Aspects of Interior Pollution and their Relation with the Population's Health Condition*, Teză de doctorat, Universitatea de Medicină și Farmacie "Iuliu Hațieganu", Cluj-Napoca.
137. Popa, N., (1999), *The Land of Hateg – the Development Potential of Human Settlements, The Study of Rural Geography*, Editura Brumar, Timișoara
138. Popa, N., (2006), *Frontiers, Trans-borderline Regions and Regional Development in Median Europe*, Editura Universității de Vest, Timișoara
139. Rădoane, Maria, Dumitru, D., Ichim. I., (2006), *Geomorphology*, Ediția a II-a, vol.I-II, Editura Universității Suceava, Suceava.
140. Rădulescu, D. C.,(1994), *The Impact of Impoverishment on the Romanian Society in 1848-1989*, Revista Calitatea vieții, nr.2,București.
141. Rădulescu, S. M., (2002), *Health and Disease Sociology*, Editura Nemira, București.
142. Rosenberg, M.,Wilson K., (2005), *Remaking medical geography*, Territoris Universitat de les Illes Balears, Num.5, p.17-32. ISSN: 1139-2169.
143. Rotariu, T., (1999), *Statistic Methods applied in Social Sciences*, Ed. Polirom, Iași.
144. Rotariu, T., Iluț, P., (1999), *The Sociological Investigation and the Survey of Opinions*, Editura Polirom Iași.
145. Rusu, R., (2007), *The Organization of the Geographic Space in Banat*, Editura Mirton, Timișoara.
146. Sabău, N.,(2002), *Historical-architectural Guidelines for the Town's Development in Cluj and in the Peri-urban Region. Studii ambientale*, editori V. Cristea, C. Baci, D. Gafta, Edit. Accent, Cluj-Napoca.
147. Sălăgean, T., (2007), *Cluj - the treasure town of Transylvania*, Muzeul Național de Istorie al Transilvaniei, Editura Argonaut, Cluj-Napoca.
148. Spânu, R.C., (2000), *Introduction in the Study of Territorial Settlement, Regional and Spatial Planning*, Editura Mediamira, Cluj-Napoca.
149. Spânu, R.C., (2003), *Cluj Stronghold, Rezervația de arhitectură*. Proiect director, Cluj-Napoca.
150. Spânu, R.C., (2003), *Urban Planning*, Edit.Mediamira, Cluj-Napoca.
151. Spânu, R.C., (2006), *The Development Strategy Of Cluj*, Cluj-Napoca.
152. Suci, M., (2000), *Economical Geography and Regional Development*, Curs litografiat, Cluj-Napoca.
153. Surd, V., (2001), *Geodemography*, Presa Universitară Clujeană, Cluj-Napoca.
154. Surd, V., (2004), *The Geography of Settlements*, curs litografiat, Cluj-Napoca.
155. Surd, V., Ipatiov, F., (1993), *The Monopoly Function of Cluj-Napoca in the Domain of Medical Assistance in Transylvania*, în Studia Universității Babeș-Bolyai Geographia XXXVIII nr.2, Cluj-Napoca.

156. Susan, I., (1969), *Daily Travelling of the Work Force towards Cluj*, în *Studia Universitatis Babeş-Bolyai, Series Geologia-Geographia*, Fasciculus 1, Cluj.
157. Susan, I., (1973), *Municipality of Cluj – A study of Economical Geography*, rezumat teză de doctorat, Iași.
158. Susan, I., (1971), *The Cultural Function of Cluj*, *Studia Universitatis "Babeş-Bolyai"*.
159. Șimandan, D. (2000), *Cultural Fundaments of the American Model: A Transdisciplinary intercession to Human Geography*, Editura Dacia, Cluj-Napoca.
160. Tănăsescu, P., Ionescu, Luminița, (1998), *Social Health Insurances in Romania*, Editura Fundația România de Mâine, București.
161. Teodoreanu, Elena, (2002), *Human Bio-climatology*, Editura Academiei Române, București.
162. Teodoreanu, Elena, (2004), *Medical Geography*, Editura Academiei Române, București.
163. Thomas, P., (2007), *Meteo-sensibility*, Editura Științelor Medicale.
164. Triboi, I., (2004), *Scientific Research, General Methodology, Doctorate*, Editura Universității, Ploiești.
165. Truță, L., (2005), *The Water of Cluj*, Editura Studia, Cluj-Napoca.
166. Țarcă, M., (1997), *Demography*, Editura Economică, București.
167. Vâlsan, G. (2001), *Anthropo-geographic, Ethnographic and Geopolitical Studies* editate de Ion Cuceu, Editura Fundației pentru Studii Europene, Cluj-Napoca.
168. Vădineanu A., (1998), *Tenable Development: Theory and Practice*, Editura Universității din București, București.
169. Verdinaș, Tr., (1992), *Sociology and Geography*, Editura Științifică, București.
170. Vlăsceanu, Gh., Ianoș, I., (1998), *Towns of Romania*, Casa Editorială Odeon, București.
171. Vlădescu, C., (2000), *Health Services Management*, Editura Expert, București.
172. Vlădescu, C., (2002), *Public Health and Sanitary Management*.
173. Vlăsceanu, L., (1982), *The Methodology of Sociological Research. Trends and Problems*, Editura Științifică și Enciclopedică, București.
174. Vulcu, L., Tălău, G. (1999), *The Social Determinative of Health*, Editura Etape, Sibiu.
175. Vulcu, L. (2005), *Epidemiology in Public Health*, Editura Universității „Lucian Blaga”, Sibiu.
176. Vulcu, L., (2005), *Health is an Economical Good*, Editura Universității „Lucian Blaga”, Sibiu.
177. Vulcu, L., Cojocaru, Adela, Marcu, Aurelia, (2003), *Health Promotion and Preventive Strategies*, Editura Universității „Lucian Blaga”, Sibiu.
178. Zamfir, C., (1999), *Social Politics in Romania*, Editura Expert, București
179. Zamfir, C., (1984), *Indices and Variation Sources of the Quality of Life*, Editura Academiei, București
180. Zamfir, Elena., (1995), *Impoverishment, Theories and Factors, Social Politics in Romania*, București.

181. Zamfir, Gh., (1979), *The Effects of certain Pollutants and their prevention*, Editura Academiei, București
182. Zlate M. (2000), *Introduction in Psychology*, Editura Polirom, Iași
183. *Surse statistice, publicații sau rapoarte ale unor organizații naționale și internaționale* (Statistic Sources or Reports of National and International Organizations)
184. S.S.C.C.(2005) **The Sanitary Statistic and Calculation Center** *The Health Condition of European Population at the beginning of the XXI century and the prognosis for the years 2020-2025.*
185. S.S.C.C. (2005), *The Evolution of the Main Demographic Indices in Romania during 1990-2004*, București.
186. S.S.C.C., (2005), *The Health Condition of the Population in Romania during 1990-2004*
187. S. S. C.C..M.D. **The Medical Documentary, Sanitary Statistic and Calculation Center** (1994), *Juvenile Mortality in Romania (decades 8 and 9, assessments until 2000)*
188. C.C.S.S.D.M. (1995), *Investigation Pattern*, București.
189. C.C.S.S.D.M. (1995), *Sanitary Statistics Annuary*, București.
190. C.C.S.S.D.M. (1997), *The Medical Investigation on the Population's Health Condition*, București.
191. C.C.S.S.D.M. (2001), *Sanitary Statistics Annuary*, București
192. C.C.S.S.D.M. (1996), *Informative Bulletin no.1.*, București.
193. C.N.S., The National Statistics Committee, (1975-2001) *Romania's Statistic Annuary*, București.
194. C.N.S., (1995), *Informative Buletin no. 3*, București.
195. C.N.S., (1995), *The Environment in Romania. A Compendium of statistical data*, București.
196. C.N.S., (1996), *The demographic Annuary of Romania*, București.
197. C.N.S., (1997), *Income, expenses and the consume of the population in 1996*, seria „*Calitatea vieții*” nr. 1, București.
198. C.N.S., (2000), *Romania's demographic annuary*, București.
199. I.N.S. National Statistics Institute (2000), *The mortality evolution in Romania during 1990-1999*, București.
200. I.N.S., (2001), *Deceased in 2000*, București.
201. I.N.S., (2001), *Social Trends*, București.
202. I.N.S., (2001), *The Health Condition of the Romanian population*, București.
203. I.N.S., (2001), *Mortality tables for years between 1998 et 2000*, București.
204. M.S.O.M.S., (1992), *The Health Systems and General Medicine Reform*, The Regional Office for Europe, The National Institute for Health and Leadership Services, Documentary book no.9.
205. M.S W.H.O., (2000), *Investment for Health în Romania*, Copenhaga.
206. W.H.O., (World Health Organization), (1997),
207. World Bank, (1997), *Health, Nutrition and Population*. Washington D.C.
208. ***(1995), *Sanitary Statistics Annuary*, București.
209. ***(1999), *The Cluj Statistic Annuary*, The National Statistics Committee, Cluj General Statistics Direction.

210. ***(2001), *Sanitary Statistics Annuary*, București.
211. ***(2002), *The Cluj Statistic Annuary*, The National Statistics Committee, Cluj General Development Direction, Informative Bulletin no 1.
212. ***(1999), *The Cluj Statistic Annuary*, The National Statistics Committee, Cluj General Statistics Direction.
213. ***(2001), *The Cluj Statistic Annuary*, The National Statistics Committee, Cluj General Statistics Direction.
214. ***(2001), *Cluj-Napoca, an European Town*, Editura Studia, Cluj-Napoca.
215. ***(2002), *The Cluj Statistic Annuary*, The National Statistics Committee, Cluj General Statistics Direction.
216. ***(2009), *The Cluj Statistic Annuary*, The National Statistics Committee, Cluj General Statistics Direction.
217. ***(2005), C.C.S.S., *The Romanian Population's Health Condition (1990-2004)*.
218. ***(1986), *The Spa Treatment. Pros and Cons*, Editura Medicală.
219. ***(1985-1998), *Statistic Notebooks 1985 - 1998*, Cluj Regional Statistics Direction.
220. ***(1998), *Medicin Dictionnary* Larousse, Editura Universul Enciclopedic, București.
221. ***(1998), *The Romanian Explicative Dictionnary*, Editura Univers Enciclopedic, București.
222. ***(1914), *The Romanian Statistic Dictionnary (The 19th of December 1912 Census)*, I-II, București.
223. ***(1999-2004), *Town records during 1999-2004*, Cluj Regional Statistics Direction.
224. ***(1987), *The Geography of Romania, III, The Carpathians and the Transylvanian Depression*, (under the guidance of D. Oancea, Valeria Velcea, N. Caloianu, Ș. Dragomirescu, Gh. Dragu, Elena Mihai, Gh.Niculescu, V.Sencu, I .Velcea), Edit. Academiei, București.
225. ***(2003), *The County of Cluj, An Atlas*, Editura, Suncart, Cluj-Napoca.
226. ***(2004), *The lay out plan of the North-Western Region territory*, Editura Presa Universitară Clujeană, Cluj- Napoca.
227. ***(1992), *The Reform of the Health and General Medicine Systems*, The Regional Bureau for Europe, National Institute for Health and Leadership Services, Documentary Book.
228. ***(2005), *Small Encyclopedic Dictionnary*, Editura Univers Enciclopedic, București.
229. ***(1940), *The 29th of December 1930 General Population Census*, IX, Institutul Central de Statistică, București.
230. ***(1956), *The 21st of February 1956 General Population Census*, Direcția Generală de Statistică, București.
231. ***(1968), *The 15th of March 1966 General Population Census*, Regiunea Cluj, vol.I, Direcția Centrală de Statistică, București.
232. ***(1980), *The 5th of January 1977 Population and Accommodation Census* vol.II, Direcția Centrală de Statistică, București.
233. ***(1994), *The 7th of January 1992 Population and Accommodation Census*, vol.I și II, Comisia Națională pentru Statistică, București.

234. ***(1996), *Transylvania. The 1850 Census*, în *Studia Censualia Transsilvanica*, Edit. Staff, Cluj-Napoca.
235. ***(1997), *Transylvania. The 1880 Census*, în *Studia Censualia Transsilvanica*, Edit. Staff, Cluj-Napoca.
236. ***(1997), *Transylvania. The 1857 Census*, în *Studia Censualia Transilvanica*, Edit. Staff, Cluj-Napoca.
237. ***(1999), *Transylvania. The 1900 Census*, în *Studia Censualia Transsilvanica*, Edit. Staff, Cluj-Napoca.
238. ***(2002), *The 18th of March 2002 General Population Census*, date preliminară, Comisia Națională pentru Statistică, București.
239. ***(2005-2008), *A Memoir on the Environment condition in the County of Cluj*, Agenția Pentru Protecția Mediului, Cluj-Napoca.
240. ***(2004), *The National Strategy for Public Health*, Documente elaborate de Ministerul Sănătății de către Centrul pentru Politici și Servicii de Sănătate, în cadrul împrumutului Băncii Mondiale.
241. ***(2006), *Development Strategy for the Town of Cluj-Napoca*.