

## Reforms of Health Care System in Romania

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**Aim.** To describe health care reforms and analyze the transition of the health care system in Romania in the 1989- 2001 period.

**Method.** We analyzed policy documents, political intentions and objectives of health care reform, described new legislation, and presented changes in financial resources of the health care system.

**Results.** The reforms of the health care system in Romania have been realized in a rather difficult context of scarcity of financial and human resources. The Gross Domestic Product spent on health care in 2000 was 4% and the number of physicians in 1999 was 42,975. The main changes due to the legislative reforms have been the introduction of a new social health insurance and strengthening of the position of family physicians. Negative effects of the reforms have been the decrease in health care accessibility and growing inequity in utilization of health care services. Health care users still pay physicians under-the-table, and have more out-of-pocket health care expenses.

**Conclusion.** Future reforms in Romania should encourage the positive effects of current reforms: free choice of physician, autonomy of the primary health care system, and increasing financial resources for the health care system.

**Keywords:** health care reform; accessibility of health care; health care legislation; quality of health care; Romania

After the fall of communism in 1989, Central and Eastern European (CEE) countries have been undergoing major social changes, switching from a centralized planning to a market-oriented economic system. Their health care systems also went through fundamental reforms. The health care reforms in Romania differ from those in other CEE countries like Poland, Hungary, and Slovenia due to the long-lasting underfunding of the health care system during the Ceausescu regime and the low quality of medical equipment. After 40 years of central control and nationalized economy, with rather poor health status of the population, the current Romanian health care system is in a crisis (1).

The aims of this study were to describe the major changes in the health care system in Romania during the transition period (from 1989 to 2001), analyze the new legislation, present the context in which the reforms have to be implemented, and analyze the possible effects of health policy reforms.

### Historical Background of Health Care Reforms in Romania

The State Law on Health Organization passed in 1949 initiated a gradual transition from the pre-war

Bismarck system into a Semashko health care system, which was based on the principles of universal coverage, state financing, central planning, and free access to health care at the point of delivery. This system had functioned until the beginning of the 1990s. The main features of the Romanian health care system during those four decades had been government financing, central planning and management, and state monopoly over health services (2). Primary health care in Romania had been provided mainly by dispensaries, which had been part of the hospital system and had served as primary health care center for the population living in the area (3). Due to the nationalized economy, health care had been characterized by the absence of a private sector as well as by the fact that all professionals in health care had had the status of salaried civil servants (2).

At the beginning, the principles of the Semashko model, ie, free access to medical services for everybody and equity in distribution of medical provision and physicians on the entire territory of the country, brought some improvement in the health status of the population (4). However, after a few decades, the situation changed completely. Since the entire health care sector was considered unproductive, ie, requiring money rather than generating it, it was chronically

underfunded. Between 1985 and 1989, only 2.2% of Gross Domestic Product (GDP) was spent on health care (2), compared with the (official) East European average of 5.4% in 1989. It has to be kept in mind, though, that health care systems in all CEE countries were in general underfunded (5).

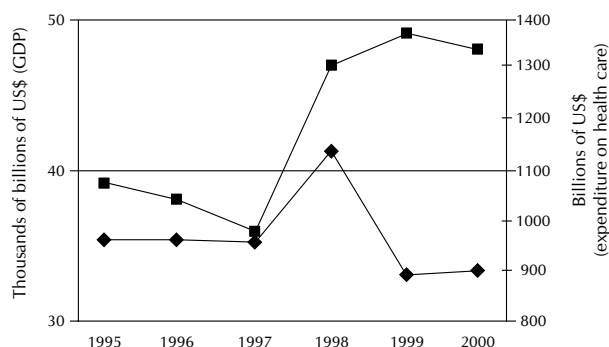
The negative effects of the changes in health policy between the 1950s and 1980s were reflected in the life expectancy of the Romanian population, which rose continually between 1956 and 1975 and then started to decrease until the beginning of the 1990s (5).

Although the Romanian government implemented measures in 1983 to allow free choice of one's own doctor (but at the same time introducing out-of-pocket payment for their services), the absence of competition or individual initiative, underfunding, inefficiency, inflexible norms, and inadequate health care equipment and facilities led to increasing pressure for reforms (2). Thus, after the breakdown of the communist regime in Romania, the reforms of the health care system began.

### Socio-economic and Political Context of Health Care Reforms

The implementation of the health care reforms in Romania interfered with the socio-economic (a transition from a state-planned to a free-market economy) and political context in the country. This resulted in both an increase in economic inequality of Romanian citizens, with high percentage of them living in absolute poverty, and an increase in unemployment (from 3% in 1991 to 13% in 2000). Politically, the process of transition into a liberal democracy was very slow and the policies were incoherent due to the very frequent changes in the management staff (6). Also, the health status of the Romanian population was extremely poor. The life expectancy of people at birth was 69.2 years in 1977, the lowest among 11 CEE countries in the region (3). Infant mortality was 22/1,000 live births, compared with 13.4/1,000 in the 11 EEC countries and 5.3/1,000 in the EU. The rate of infectious diseases, such as tuberculosis, was one of the highest in Europe (7).

As in all CEE countries in transition, health care in Romania was not one of the public financing priorities (8). The expenditure on health care services was relatively low: in terms of GDP, it was less than half of that spent by EU candidate countries and almost four times less than the average expenditure in EU countries (9). Despite a difficult economic situation, the percentage of GDP allocated to the health care system increased from 2.8% in 1997 to 4.0% in 2000 (9). Between 1995 and 2000, the health care budget increased from US\$1,088 million to US\$1,340 million and, although GDP started to decrease in 1998, the health care expenditure has continued to increase (Fig. 1).



**Figure 1.** Public expenditure (squares) on health care in Romania during 1995-2000 and gross domestic product (GDP, rhombs) (9).

### Policy Documents, Political Intentions, and Legislative Framework of the Reforms

The need for the reform of health care policy was also reported by experts from the EU and the World Health Organization (9). Thus, the Ministry of Health initiated a new health policy, which included universal accessibility to health care, solidarity in funding health services, and incentives for effectiveness, efficiency, and adequacy of health care delivery to health care needs. In addition, autonomy of health professionals and cooperation between health care and other services that influence health, such as education and social services, were to be promoted (9).

The political goals of health care reform were to improve the health status of the population and efficiency in use of resources, to change the patient-physician relationship, and to increase the level of satisfaction of both the population and health care providers (9). However, from 1991 onward, several new laws and regulations have been passed to introduce changes into the health care system.

Decentralization of the health care system, which aimed to increase local autonomy, started with the Public Administration Law passed in 1991. Public services belonging to Ministries were passed to the bodies under the authority of the Prefect (the political leader of a district) and 42 district health directorates were created, one for each district and one for the capital city, which were responsible for funding and managing dispensaries. These institutions made agreements with general practitioners (as individuals or groups) specifying services and standards (6). In 1999, each district health directorate was split into two institutions: District Directorate for Public Health and District Health Insurance Fund. Forty-two Districts Health Insurance Funds are responsible for premium collection and provider reimbursement within their respective districts. There is a National Health Insurance Fund that sets the rules and regulation for the District Health Insurance Funds and has the right to re-allocate up to 25% of the collected funds to underfinanced districts (6). The National Health Insurance Fund negotiates the framework-contract with the Romanian College of Physicians, which sets up the benefit package to which the insured are entitled

and the resources allotted by the types of care. The National Health Insurance Fund also has the right to implement regulations mandatory to all District Health Insurance Funds to insure coherence of the health insurance system (6).

The private sector in the field of health care was created in the 1993-1999 period (10), but its development has been very slow in most sectors except dentistry and pharmacy.

Since 1995, important laws and legislative measures concerning the structure and organization of the Romanian health care system have been passed (6). The most important were the Law 74/1995 (11) related to the Practice of Medical Profession, Establishment, Organization and Functioning of the College of Physicians, Law 145/1997 (12) on Social Health Insurance, Law 100/1998 (13) on Public Health, and Law 146/1999 (14) on Organization, Functioning, and Financing of Hospitals.

In the area of pharmaceuticals, the most important new regulation has been the Emergency Ordinance 152 on pharmaceutical products for human use, passed on October 14, 1999 (6).

In 1998, the Law on Social Health Insurance was implemented. This law follows a Bismarckian insurance model with compulsory health insurance and is based on the principle of solidarity functioning within a decentralized system. According to Cockerham (1), this long overdue law because of the poor state of the health care system is the first reform measure in health care since the beginning of communist rule in 1947.

The Law 146/1999 on Hospital Organization mainly stipulates forms of hospital financing, indicates the financing of teaching hospital, outlines procedures for contracting between hospitals and health insurance funds, sets out payment of hospital staff, and identifies hospital accreditation, governance, and management (6). Concerning the management and governance of hospitals, the Law states that hospitals should have an operational managerial staff and should be led by a council board. Hospitals are allowed significant autonomy in terms of decision-making processes and freedom to use the allotted budgets. Implementation of this law started in July 1999 (6).

The Law 74/1995 defines the physician's role and status. This law also establishes the College of Physicians as a professional, non-profit organization that represents the physicians' interests. It stipulates the tasks of the College of Physicians as a supporter of scientific research, organizer of scientific activities and trials for infringements of professional ethics and assures of the quality in medical services. There are 42 district Colleges of Physicians and a National College of Physicians.

The Law 100/1998 regulates the activities in the field of public health. Within the Ministry of Health there are District Directorates for Public Health for each district, including Bucharest (10,15). These are decentralized units of the Ministry of Health, representing the public health authority at the district level.

The District Directorates for Public Health implement national policies and programs at local level. These activities include preventive medicine, medical inspection, registration of new medical units, licensing control, statistical review, and financial accountability (10,15).

### Human Resources of the Romanian Health Care System

The relative number of health care professionals in Romania is low, compared with other countries (Table 1). Since 1989, the number of pharmacists, dentists, and nurses decreased due to the low income, as opposed to a slight increase in the number of physicians (Table 2) (15).

**Table 1.** Total number of Romanian health care professionals per 10,000 inhabitants compared with selected European countries in 1998

| Health care providers | Country <sup>a</sup> | No. |
|-----------------------|----------------------|-----|
| Physicians            | Romania              | 18  |
|                       | EU average           | 31  |
|                       | UK                   | 17  |
|                       | Italy                | 58  |
|                       | Hungary              | 31  |
|                       | Poland               | 23  |
| Dentists              | Romania              | 2.3 |
|                       | EU average           | 6.8 |
|                       | Hungary              | 4   |
|                       | Poland               | 4   |
| Pharmacists           | Romania              | 0.7 |
|                       | EU average           | 7.1 |
|                       | France               | 11  |
|                       | Netherlands          | 2   |
|                       | Hungary              | 5   |
|                       | Poland               | 5   |

<sup>a</sup>Source for Romania: ref. 9; and ref. 16 for other countries.

**Table 2.** Number of health care providers (No. of providers per 10,000 inhabitants) in Romania in 1989, 1995, and 1999 (9)

| Health care providers                | No. of health care providers (per 10,000 inhabitants) |                |                |
|--------------------------------------|---|----------------|----------------|
|                                      | 1989  | 1995           | 1999           |
| Physicians                           | 41,938 (18.1)   | 40,112 (17.7)  | 42,975 (19.1)  |
| Dentists                             | 7,116 (3.1)   | 6,045 (2.7)    | 5,261 (2.3)    |
| Pharmacists                          | 6,432 (2.8)   | 2,646 (1.2)    | 1,598 (0.7)    |
| Ancillary medical staff <sup>a</sup> | 135,664 (58.6)  | 128,460 (56.6) | 114,027 (50.8) |

<sup>a</sup>Ancillary staff includes medical assistants, nurses, sanitary technicians, medical administrators, midwives, laboratory assistants, and other categories of medical staff with equivalent secondary school degrees.

As far as the institutions are concerned, Romania had 428 hospitals, 3,405 dentist offices, 4,052 pharmacies, and 755 pharmaceutical offices in 1999 (7). In 1998, Romania had over 164,000 hospital beds, including short-term and long-term care beds (7.3 beds per 1,000 people). The number of beds differed from region to region, ranging from 10.5 beds per 1,000 people in the west and Bucharest to 6.9 in the south (6). The ratio of 7.3/1,000 for in-patient beds was higher than the average level of 6.9/1,000 in EU countries (16). In comparison with Sweden, Romania had almost twice as much in-patient beds. In comparison with Poland (5.3/1,000) the Romanian ratio was also higher, but lower than in Hungary (8.2/1,000) (16).

Privatization in the health care sector has been limited and has encompassed mainly the fields of

dentistry and pharmacy, whereas in primary and secondary health care the percentage of private practices has been very low (2). The number of dentist offices with private majority ownership increased to 3,405 in 1999 and the number of dental laboratories with private majority ownership to 1,151 (7).

In 1999, the number of pharmacies with private majority ownership increased to 3,518, and the number of pharmaceutical offices with private majority ownership to 715 (7). The number of surgeries with private majority ownership also increased to 3,820 in 1999 (7). At the same time, privatization of hospitals was slow; there were only 2 hospitals with private majority ownership in 1998 and 3 in 1999 (7).

**Main Romanian Health Care Reform Changes**

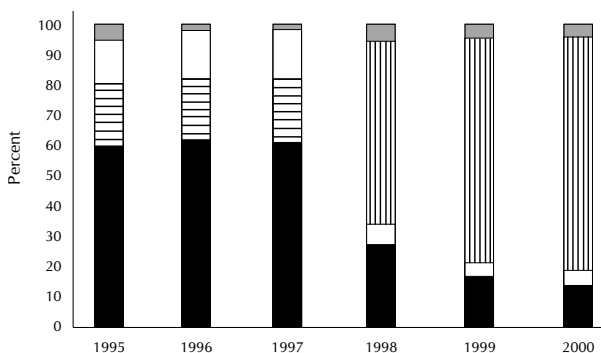
The main changes caused by the legislative measures concern health insurance system, role of health care institutions and health care providers, quality of care, and effects of the health care reforms on users.

*Health Insurance System*

Under the Social Health Insurance Law, a Bismarckian insurance model has been developed on the principle of solidarity, with compulsory health insurance.

Employees pay 7% and the self-employed 14% of their gross incomes before income tax. Employers' premium equals 7% of total salaries. Local district budgets provided by District Health Insurance Funds pay contributions for those with low incomes and those on maternity leave or caring for sick children. Premiums for the unemployed are paid from the unemployment aid budget, and for pensioners and their family members from the social security budget (2).

Since 1998, the sources of financing health care system have changed in terms of an almost complete reduction of the state budget and the introduction of the insurance fund (Fig. 2). At present, the national budget for health care has two major sources: the state budget and the health insurance funds, the latter representing more than two-thirds of the total health care budget (6).



**Figure 2.** The financial sources of health care expenditure in Romania during 1995-2000: closed bars – state budget, horizontal stripes – local budget, open bars – special fund, vertical stripes – insurance fund, and grey bars – reimbursed credits (9).

*Role of Health Care Institutions and Health Care Providers*

Before 1997, the hospitals were responsible for managing and funding both primary and secondary health care. The dispensaries had belonged to the Ministry of Health and had been administrated through the local hospital that also held territorial funds for them (6). In this way, primary health care was disadvantaged from the financial point of view. For example, in 1995 primary health care (rural and urban dispensaries and polyclinics) used only 23% of the total sum allotted to both primary and secondary health care (17).

After the new health laws had been passed, main changes occurred in the role of health care institutions and providers. The Health directorates were given responsibility to organize primary health care and GPs had to organize their own practices. The civil servant status of physicians changed into “budget holders” in primary health care; they are contracted by the public health insurance funds and their salary is combined of weighted capitation and fee-for-service payments. Also, GPs have assumed a new role of gatekeepers for secondary health care, and some have opened private medical offices. Hospitals were budgeted while the personnel were on salary in the hospitals.

The Law on Hospital Organization passed in 1999 stipulated significant autonomy of the hospitals in terms of decision-making process and freedom to use the allocated budgets to finance staff’s negotiated salaries, facilities, and expensive equipment. Only 3% of the budget goes to capital investment, forcing hospitals to raise other revenues (18). In time, this measure could stimulate the improvement of the quality of health care provided in the hospitals, leading their staff to compete on the market in order to acquire more resources. At the same time, the budget allotted to a hospital is not based on the number of staff or beds anymore, but on both performance and the profile of hospital.

Reforms left some roles and institutions unchanged, which reflected negatively on health care.

The role of the nurse remained almost unchanged. In fact, after nurse training ceased in 1978, the nurse has been brought down to a medical assistant. There has been no respect of autonomy of the nurse, little teamwork, and no understanding that skills of the nurse and that of physician are complementary. In 1990, a Romanian Nurse Association was founded to set standards and create nationally coherent policy of the profession. However, the only change in the role of nurse has been that nurses working in primary health care have started making house calls.

As for the secondary and tertiary health care, the delivery of medical services to a territorially defined population has remained unchanged, except for emergencies.

*Quality of Care*

The process of quality assurance ensures safety, efficacy, efficiency, and effectiveness for the health

**Table 3.** Major effects of the health care reforms in Romania on users

| Legislative measure        | Groups/ individuals involved as users  | Mechanisms  | Effects   |
|----------------------------|--|---|---|
| Free choice of physician   | Patients   | It may initiate more involvement of consumers in making decisions related to the health care providers and their services. In this way patients' responsiveness may stimulate their involvement.  | More autonomy; more responsibility; and possible change of the role of patient into the role of user            |
| Mandatory health insurance | Unemployed more than 27 months, without employed close members of the family (specially unemployed single parents) | After 27 months, people are no longer registered as unemployed, so they are not insured any more, unless they do not have a close family member who is insured. Therefore they have to pay for each medical service.                    | Reduced accessibility or inaccessibility of health care services  |
|                            | People working in the rural area (40% of the population)   | Usually uninsured because they are not able to pay an amount of money to the district insurance fund on a monthly basis, due to low and instable income, thus have to pay out of the pocket for each medical service.                   | Reduced accessibility or inaccessibility of health care services  |
|                            | Unofficially employed (20)   | Since employers have to pay for their employees a contribution to insurance fund (Health Insurance Law), they prefer to hire persons in an unofficial way. No social protection of such employees in the "black market" (3).            | Reduced accessibility or inaccessibility of health care services  |
|                            | People who live in the under serviced areas  | Under the Health Insurance Law, local councils can offer different incentives to physicians or nurses to provide services in underserved areas (3). But, in reality, the local budgets are very poor and cannot sustain these expenses. | Unequal distribution of health care providers; reduced accessibility or inaccessibility of health care services |

service providers and for those who finance it, and is essential to guarantee the patients' rights and satisfaction (10). "Quality of care" is mentioned in several laws in Romania. The Romanian College of Physicians has the duty to observe the quality of medical care through certification and peer review and to improve the quality of medical services (11). The Health Insurance Institute supervises the quality of health care offered through the insurance system. Private practices have to meet specific standards and rules related to the quality of care issues before being licensed.

The advantage is that Romanian medical staff is highly qualified. Physicians and pharmacists are well trained in public and private medical schools and universities. Specialization of physicians is in line with the latest standards of the European Union. Also, there are several programs of retraining nurses and other medical staff to improve the quality of their services (6).

However, there are some barriers that have negative effects on quality assurance (10). First, there are financial constraints, ie, slowly growing economy disallows more money for excellent programs. Second, incomes are low in every profession, which does not create more conscious delivery of quality care and hygiene to the consumers. Third, due to an ineffective system of public information and paternalistic behavior by most physicians, the medical culture of population is not well developed. Romanian patients usually expect from physicians only a good medical treatment, but not quality assurance or their own involvement in making decisions concerning their health.

The fourth obstacle is corruption, even in hospitals and ambulatories. Patients feel obliged to give under-the-table-money to doctors and nurses to receive good services (10).

The main quality approaches used so far have been registration and licensing of physicians and health care institutions; certification; accreditation; registration of drugs, medical devices, and blood products; and the practice of peer review. At present, the Institute of Health Management is developing uni-

fied norms and guidelines concerning quality assurance.

#### *Effects of Health Care Reforms on Users*

All changes related to the new legislation and regulations have an impact on the health care delivery and health of the population, but there is little quantitative information on the extent of this impact. However, some potential effects may be derived from the measures taken and on-going processes. Privatization in health care may stimulate competition and quality, but at the same time it may create inequality and inaccessibility of health care to specific groups. Therefore, the privatization process, kept under strong regulations, is a positive aspect of the reforms of the health care system in Romania.

There are some consequences of the new legislation. Inequity exists depending on the health insurance status and rural/urban living situation. Until 1998, universal coverage of population was assured through the National Health Service. Since 1998, the coverage for all permanent residents of the country has been assured by the legal requirement to pay health insurance contributions (3). Thus, the transition from "socialized" to "insurance" medicine (19) deprived certain categories of people, ie, the unemployed and elderly, who are the most frequent users (Table 3). With respect to districts in Romania, regional differences in health care spending per capita are large. In 1997, health care expenditure per capita in Bucharest was 167% of the average expenditure per capita for the country as a whole, whereas in Giurgiu only half of the amount of the national average was spent (6). Also, the amount of premium collected from employers is lower than expected because of the lack of experience and skills of the people who collect the revenues. At the same time, there are employers who resist paying these premiums and prefer hiring personnel unofficially.

#### **Discussion**

What will be the effects of the health care reforms on the health status of the population in Romania, on equity in accessibility to and quality of health

care, and on the role of the providers may only be answered by longitudinal evaluation research.

Physicians strongly supported the changes in the health care system, especially the compulsory health insurance, since they expected an increase in income as a result. The Romanian government thus increased the financial resources in health care (17) and started to develop a new market-driven orientation in health care (19).

The health insurance scheme presumes the existence of skilled human resources and an adequate information infrastructure. Since collected premiums are lower than the expected revenues, questions arise about the infrastructure and the effectiveness of the collection system (6). Also, the management skills of some staff-members are under discussion and there are operational problems (21). However, in some districts the health insurance offices are doing very well.

The health insurance should be imbedded in a system of social security (22). Therefore, the policy makers should initiate programs to support health care expenses of the categories of people "forgotten" by the law. For people with low income, transmitting the responsibility for their health care to local authorities is not a solution, as proved by the Russian experience (19). At the beginning, a more flexible system is recommended that insures those who cannot pay the full contribution (in time), as in Macedonia (23).

The implementation of the Social Health Insurance Law has caused the conflict between actors, as in Russia (24). The result is a delay in reimbursing the money covering the medication and consequent increase in the cost of medication.

Under-the-table-payment is an unsolved problem inherited from a past health care system, which is not on a policy makers' priority list. In a country with widening income disparities, under-the-table-payments are a serious problem that hampers the accessibility of health care for the people with low income. There is little quantitative information on the extent of informal out-of-pocket payments. According to the President of the Romanian Federative Chamber of Physicians, this unofficial payment could exceed 60% of the total amount of money in the health care system (20).

A reform should have public support if it is to be successful. However, consumers in Romania did not attend periodic meetings with the reform team as did physicians in the primary and secondary health care (2). Therefore, there is no feedback from "lay people" on the changes. Consumers' involvement in both development of reform and its implementation could be realized through organized "protection of consumers". Also, the transition from patient to user role should be sustained by political decisions. A good start may be a research on evaluation of impact of health care reforms on users, like in Slovenia (25). At the same time, some legislative measures that could stimulate nongovernmental and voluntary organizations could enlarge the consumers' involvement in health care.

Health care policy makers often use the words "privatization" and "decentralization" (policy documents and political intentions), which may have many different meanings. What they exactly mean by them is less evident. In fact, the decentralization of the Romanian health care system is being established in three ways: functional deconcentration, prefectorial deconcentration, and devolution (6). Regarding the concept of "privatization", the White Book of Ministry of Health and Family specifies that there is a "privatization of almost 100% of primary health care" (9). The term is used because the medical offices are rented to the general practitioners, who have a managerial status and a practice budget. The new legislation does not offer much real privatization (the right to dispose, right to sell and purchase, and right to use), as in Slovenia (22). As a result of this quasi-privatization, more out-of-pocket money is paid for secondary health care. In Europe, only providers perceive the difference between public and private institutions, but not users, because the insurance companies reimburse the expenses (22). This has not been the case yet in Romania. The development of the Romanian health care system raises the following question: "How much revolution and how much evolution is there in this reform?" The answer remains to be seen.

## References

- 1 Cockerham WC. Health and social change in Russia and Eastern Europe. Brighton, (NY): Brunner-Routledge; 1999.
- 2 World Health Organization, Regional Office for Europe. Health care systems in transition. Copenhagen: WHO; 1996.
- 3 Schneider M, Cerniauskas G, Murauskiene L. Health systems of Central and Eastern Europe [in German]. Augsburg: Basy; 2000.
- 4 Zarcovic G, Enachescu D. Problems related to health policies in Central European Countries [in Romanian]. Bucharest: Infomedica; 1998.
- 5 Marree J, Groenewegen PP. Back to Bismarck: Eastern European health care systems in transition. Aldershot: Avebury; 1997.
- 6 European Observatory on Health Care Systems. Health care systems in transition. Copenhagen: European Observatory on Health Care Systems, World Health Organization Regional Office for Europe; 2000.
- 7 Romanian statistical yearbook. Bucharest: National Institute of Statistics; 2000.
- 8 Orešković S. New priorities for health sector reform in Central and Eastern Europe. *Croat Med J* 1998;39:225-33.
- 9 Ministry of Health and Family. White book of government in the field of health care 2000 [in Romanian]. Available from: [http://www.ms.ro/ms/Cartea\\_alba/cartea\\_alba.htm](http://www.ms.ro/ms/Cartea_alba/cartea_alba.htm). Accessed: December 11, 2000.
- 10 Federal Ministry of Social Security and Generations. Quality policy in the health care systems of the EU accession candidates. Vienna: Federal Ministry of Social Security and Generations; 2001.
- 11 Law on Practice of Medical Profession, Establishment, Organization and Functioning of the College of Physicians. Law No. 74. Bucharest: Official Gazette No. 149 (Jul. 14, 1995).
- 12 Law on Social Health Insurance of 1997. Law No. 145. Bucharest: Official Gazette No. 178 (Jul. 31, 1997).

- 13 Public Health Law of 1998. Law No. 100. Bucharest: Official Gazette No. 204 (Jun. 1, 1998).
- 14 Law on Organization, Functioning and Financing of Hospitals of 1999. Law No. 146. Bucharest: Official Gazette No. 370 (Aug. 3, 1999).
- 15 Berciu I, Vladescu C. Legislation and health care reforms during the transition [in Romanian]. Bucharest: Cosal; 1999.
- 16 Organisation for Economic Co-operation and Development. OECD health data 2001. A comparative analysis of 30 OECD countries [user's guide on CD-ROM]. Toronto: OECD; 2001.
- 17 Vladescu C. Policy of reforming of health care system in Romania [in Romanian]. Bucharest: Infomedica; 1999.
- 18 McKee M, Healy J, editors. Hospitals in a changing Europe. European Observatory on Health Care Systems Series. Buchingham (England), Philadelphia (PA): Open University Press; 2002.
- 19 Field MG. Reflections on a painful transition: from socialized to insurance medicine in Russia. *Croat Med J* 1999;40:202-9.
- 20 National Economic Research Associates. The health care system in Romania. London: Pharmaceutical Partners; 1999.
- 21 Visschedijk J. A fresh look at health for all. *Medicus Tropicus* 1997;35 Anniversary suppl:1-18.
- 22 Černić Istenić M. Privatization of health care in Slovenia. *Croat Med J* 1998;39:288-97.
- 23 Ivanovska L, Ljuma I. Health sector reform in the Republic of Macedonia. *Croat Med J* 1999;40:181-9.
- 24 Shishkin S. Problems of transition from tax-based system of health care finance to mandatory health insurance model in Russia. *Croat Med J* 1999;40:195-201.
- 25 Markota M, Švab I, Saražin Klemenčič K, Albreht T. Slovenian experience on health care reform. *Croat Med J* 1999;40:190-4.

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