HiT summary

The former Yugoslav Republic of Macedonia

Introduction

Government and recent political history

The former Yugoslav Republic of Macedonia was established as a parliamentary democracy in 1991 when, after 45 years as part of the Socialist Federal Republic of Yugoslavia, a peaceful secession took place. The Constitution of 1991 determines the basic principles of the democratic system, establishing civil freedoms and dividing power into legislative, executive and judicial branches. The executive branch is divided between the President, the Government and the Prime Minister. Representatives of The former Yugoslav Republic of Macedonia's political institutions are directly elected by the citizens through general elections.

Population

According to the latest national census held in 2002, the total population amounts to 2 022 547 inhabitants, with 59.5% living in urban areas. In the period 1971 to 2002 the population density has increased from 64 to 79 inhabitants per km^2. The population's ethnic composition shows 64.18% ethnic Macedonians, 25.17% Albanians, 3.85% Turks, 2.66% Roma, 1.78% Serbs and 0.4% Vlachs. 64% of the population are Christian (0.5% are Catholic) and 36% are Muslim.

Average life expectancy and perinatal/infant mortality

Life expectancy at birth for both sexes has increased slightly from 72.13 years in 1991 to 73.54 years in 2003, while the gap between the sexes (with women expected to live longer) remains almost the same (4.6 years in 1991 compared to 4.9 in 2003). Life expectancy is much lower than in other European countries and in 2004 was five years below the European Union (EU) average of 78.49 years.

Thanks to this topic having been prioritized on the political agenda and a number of policy interventions having been implemented, the infant mortality rate was halved from 28.25 infant deaths per 1000 live births in 1991 to 11.29 per 1000 in 2004. As this figure is still three times higher than the EU average of 4.75, efforts will need to be continued in this field.

Leading causes of death

Circulatory diseases are the leading cause of death, accounting for nearly 57% of all deaths in 2003. The standardized death rate (SDR) per 100 000 inhabitants for circulatory diseases has increased from 527 in 1991 to 599 in 2003, which is more than double that of the EU average of 262.38 in 2003. Overall mortality from malignant neoplasms as the second most significant cause of death has also increased since the mid-1990s, from SDR 140 per 100 000 in 1991 to 165 per 100 000 in 2003, a figure which is still lower than the EU average of 184 in 2004. External causes (injuries and poisoning) are the third leading cause of death (the SDR in 2000 was 37.9). Respiratory diseases rank fourth, with

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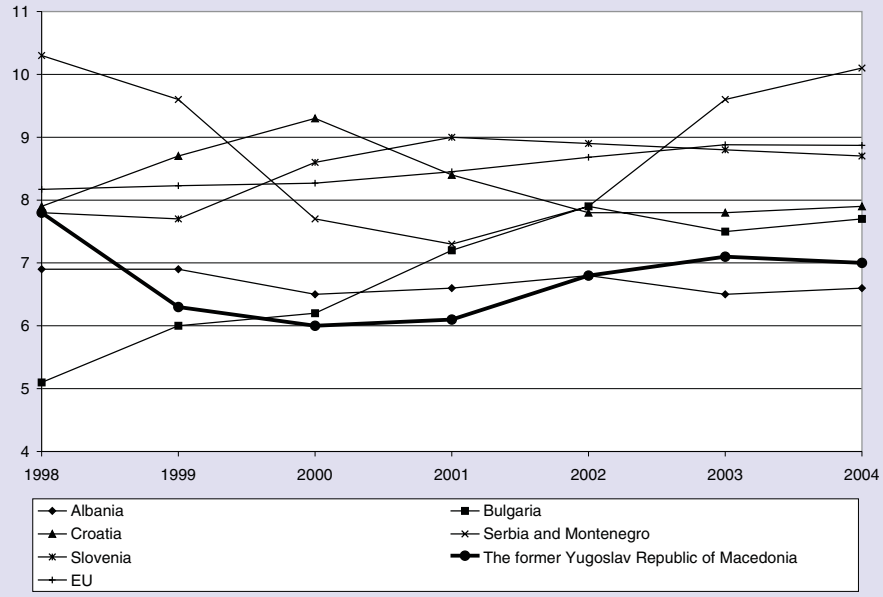
Fig. 1 **Health care expenditure as share of GDP in The former Yugoslav Republic of Macedonia, selected countries and EU averages, WHO estimates in percentages, 1998–2004**



Source: WHO Regional Office for Europe. European Health for All database, June 2006.

bronchitis, emphysema and asthma accounting for more than 60% of these deaths. Diseases of the endocrine and digestive systems – with a substantial proportion (approximately 40%) of the latter attributed to chronic liver diseases and cirrhosis – represent the fifth and sixth most significant causes of death, respectively.

Historical background of the health system

With the establishment of the Socialist Federal Republic of Yugoslavia and the creation of the Socialist Republic of Macedonia after the Second World War, the highly decentralized Yugoslavian health system was put in place: responsibility for the provision of health care was decentralized to municipal level. The system led to significant oversupply and duplication of services. Furthermore, it did not promote the functional separation of different levels of care and was faced by long-term resource constraints. The country's transition to an independent democratic state in 1991 marks the beginning of the current health insurance-based system.

Reform trends

Since independence, The former Yugoslav Republic of Macedonia has embarked on a number of reform initiatives in the field of health care. All reforms have been undertaken with the aim of sustaining access for the whole population to a comprehensive health system, as well as improving the quality of services and enhancing the system's financial sustainability.

Health expenditure

According to World Health Organization (WHO) estimates for 2004 total health expenditure as a percentage of gross domestic product (GDP) amounted to 7.0% (see Fig. 1). This represents a significantly lower figure than that of most of the other ex-Yugoslav countries and the EU,

with 8.9%. In the same year the health care expenditure in US$ purchasing power parity (PPP) per capita amounted to US$ 411, with 84% of health expenditure coming from public sources. However, data on private expenditure, specifically out-of-pocket payments, and the financial burden they might constitute, are neither detailed nor precise.

Overview

At present the system is facing a number of challenges including the need to overcome the legacies of the health system that was in place until 1991. These include: strengthening of human resources planning and training, and the rationalization of health care facilities to redistribute limited resources more effectively and thereby to significantly improve the infrastructure of facilities, as well as the quality of primary care services in particular. In this context the reorganization of medical centres at primary care level, privatization trends and reforms regarding the remuneration of providers – with the introduction of a capitation-based system at primary care level and an annual global budget allocation for inpatient care – represent important developments. Furthermore, the regulation of the pharmaceutical sector will need to be strengthened, promoting improved procurement procedures and rational drug prescription practices. Overall, sustainable health financing will need to be secured, including adequate funding for preventive programmes and capital investments. To this end the Ministry of Health will need to strengthen its policy formulation, implementation and monitoring capacities, while the Health Insurance Fund (HIF) will need to enhance its budget planning, monitoring and reporting instruments.

Organizational structure and management of the health system

As noted above, following independence in 1991, a compulsory insurance-based health system was set up. Its coverage is universal and the current benefits package is considered to be very comprehensive. The Government and the Ministry of Health provide the framework for operation and stewardship, and the established HIF is responsible for the collection of contributions, allocation of funds and the supervision and contracting of providers. The Law on Health Care of 1991, as well as the Health Insurance Law of 2000, enshrine the basis of the current health system structures. The main actors of the health system are discussed in the following sections.

The Ministry of Health

The Ministry's core functions focus on health policy formulation and implementation, priority-setting and monitoring of the health system's performance. It has established a number of specialized units to supervise the health sector including the HIF, the pharmaceutical sector, etc. However, the need has been acknowledged to strengthen the Ministry's role as the leader of strategic development in the health sector – its capacity has to be developed further, for example to monitor the financial and general performance of the HIF (though the ministry is part of the fund's management board), to actively steer human resource policy, etc.

The Health Insurance Fund

The HIF was set up in 1991 with the aim of establishing the health insurance system and helping to restructure the greatly decentralized health system. The fund supervises the insurance system, collects the contributions and contracts the providers. The fund has a central office in Skopje and 30 branch offices at municipal level aiming to guarantee uniformity in its performance throughout the country.

The HIF needs to improve its budget planning, monitoring and reporting capacities as well as enhancing health care delivery by implementing reforms as regards the contracting and payment of providers.

Ministry of Finance

The Ministry of Finance, in cooperation with other ministries, agrees the state budget, including the funds to be allocated to the health sector for, for example, preventive public health programmes. The Ministry of Finance is involved in the planning and approval of the HIF budget and it is also part of the HIF management board and takes turns with the Ministry of Health to chair it.

Ministry of Education

The Ministry of Education is responsible for the teaching (at school and university level) as well as the practical training and specialization programmes of physicians, dentists, pharmacists, nurses and other health professionals.

Ministry of Local Self-Government

In the ongoing process of decentralization of the health system the Ministry of Local Self-Government cooperates closely with the Ministry of Health. With this in mind, the municipalities have been asked to appoint representatives in the management boards of primary health care (PHC) institutions. Decentralized activities in the field of preventive health care and health promotion have yet to start.

Professional groups

The doctors', dentists' and pharmacists' chambers are responsible for licensing and supervising the professional conduct of their respective professional groups.

The professional associations are responsible, among others, for the preparation of clinical guidelines.

Nongovernmental sector

At present, the role of civil society in the health sector is limited. However, there is political commitment to expanding the involvement of nongovernmental organizations in areas such as mental health, HIV/AIDS prevention, and others.

Private sector

The legal provisions allow for large-scale privatization trends: in the PHC sector in particular, a very intensive process of privatization has started. The privatization of dentists' offices at PHC level has been completed recently, and the process of privatizing publicly owned pharmacies by sale or leasing has been initiated.

Decentralization of the health system

The Macedonian system represents an interesting case study of a transition from decentralized structures to recentralization and to decentralization again. As stated above, the system in place in the Socialist Federal Republic of Macedonia (pre-1991) was highly autonomous and decentralized, with health service provision and financing controlled and managed at municipal level. With the transition to an independent country, there was a need for central health planning. However, since 1995 the importance of local involvement in decision-making has increasingly been acknowledged and the process of decentralizing the health system has started.

Health care financing and expenditure

In the compulsory health insurance system the funds generated by the collection of contributions represent the main source of financing of the health sector. In 2004 the contributions accounted for more than 95% of the public resources

available for health care delivery and other health insurance-related benefits and activities. Co-payments by insured people and transfers from the state budget constituted additional, though rather small, sources of revenue. Even though premium collection mechanisms need to be strengthened, in view of the necessary expenditure, the revenue is insufficient.

The benefits package

The current package is considered very comprehensive and very costly. Against this background it will need to be revised, taking demographic and epidemiological characteristics as well as fiscal sustainability issues into account.

Complementary sources of finance

Co-payments have to be made by insured people for using health services and drugs (specified on a list) at all levels of care. Limits for co-payments exist, as do regulations on exemptions. The experience to date suggests that the system of co-payments has had a limited impact on reducing excess demand for inpatient treatment and the consumption of prescription drugs. Furthermore, it does not seem to lead to significant resource increases to finance health care.

As mentioned above, the legal provisions stipulate that the state budget shall provide resources for the implementation of a number of health promotion and disease prevention programmes, as well as to cover the treatment costs for the individuals not covered by the health insurance system. In practice, however, for a long time the share of resources from the central budget in the total revenue of the HIF was less than 1% and significant delays have been associated with payments.

The health care institutions furthermore receive some revenue from enterprises to perform occupation-related health check-ups; from insured people for services not covered by the compulsory health insurance benefits package; and from donations and contributions of national and international organizations.

The legal provisions are in place for individuals to sign up for voluntary health insurance (VHI) in addition to the compulsory health insurance. At present, however, VHI is not established and there are grounds in the comprehensive basic benefits package that seem to limit the need for supplementary insurance.

Health care expenditure

According to WHO estimates for 2004 total health expenditure as a percentage of GDP in The former Yugoslav Republic of Macedonia amounted to 7%. This represents a significantly lower figure than that of most of the other ex-Yugoslav countries as well as the EU with 8.9%. In the same year the health care expenditure in US$ PPP per capita amounted to US$ 411, with 84% of health expenditure coming from public sources. In this context it needs to be noted that data on private expenditure, specifically out-of-pocket payments and the financial burden they might constitute, are neither detailed nor precise. There is some evidence, however, that direct cash payments are also an increasing occurrence in public facilities and this should be monitored closely.

Health care delivery system

Health care is delivered through a system of health care institutions, covering the country's territory relatively evenly. The health facilities range from health care stations and centres at PHC level and specialist-consultative and inpatient departments at secondary level, to university clinics and institutions at tertiary level.

Primary health care

PHC is provided by health stations (most often found in rural settlements and staffed by a nurse and a visiting physician) or at health care clinics and centres (at municipal level and staffed by a number of nurses and physicians). Recently, the functional and legal separation of primary care

on the one hand and specialty-consultative and hospital care on the other has been introduced in the health centres. Implementation at operational level, however, has yet to take place.

Primary care is provided through physicians with and without specialization in general practice, paediatricians, gynaecologists and dentists. At present the sector faces a number of challenges including non-rational prescription, high referral rates and/or a large number of people aiming to bypass the primary care level altogether, as service quality is perceived to be low (especially in rural areas, where poorly-equipped facilities exist), and there is a lack of coordination between different levels of care.

Since 1991 privatization trends, especially in the PHC sector, have picked up, with many private practices opening, all dental offices having already been privatized and the pharmacies being in the process of privatization.

Preventive health care

Preventive health care services have been very successfully established, which is reflected in very good immunization coverage of the population.

Specialized care is provided by the Republic Institute for Health Protection in Skopje, 10 subordinated regional institutes for health protection and 21 hygienic-epidemiological sanitary units. Patronage (visiting nurse) services also include a series of public health functions.

Secondary and tertiary health care

Secondary care is provided by the general hospitals that were established following the legal and functional split of medical centres. It includes specialty-consultative as well as inpatient care. The Clinical Centre in Skopje and a number of additional specialized hospitals, institutes and clinics provide tertiary health care. Furthermore, they have all taken on board educational functions and pursue scientific research activities alongside delivering secondary health care.

As a legacy of the pre-1991 established system there is evidence of surplus, inappropriate capacities and regional disparities, which calls for a rationalization of both facilities and services. Moreover, while the EU countries have been recording a constant decrease in the number of hospital beds in recent years, the Macedonian bed numbers have been relatively static (see Fig. 2), though at a lower level than the EU average (see Table 1). More than half of the hospital beds are to be found in specialized and tertiary care institutions and the capital Skopje shows a pronounced oversupply of beds in this sector.

Social care

Social services are provided for vulnerable population groups, such as children lacking parental care, individuals with special needs, minors with behavioural problems, minor offenders, etc. Care is provided in specialized institutions or ambulatory settings. Care for the elderly, traditionally provided by the families at home, is mostly offered in hospitals; so far only a small number of homes for the retired exist.

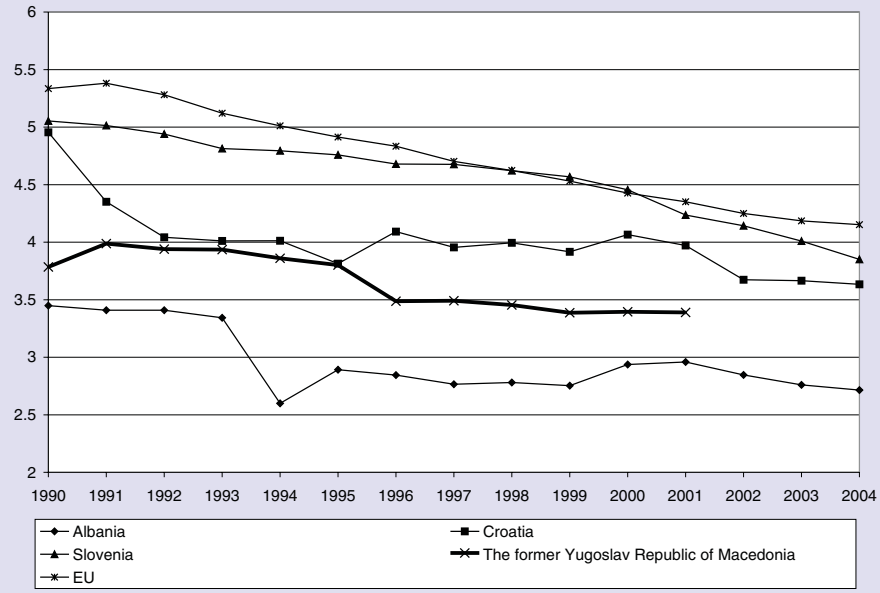
Mental health

Psychiatric care is provided mainly in publicly owned institutions and there appears to be scope for improvement. Recently, activities have been initiated for mental health to be given more attention politically and for moving the sector towards community-based service provision.

Human resources and training

Studies point to a surplus of health personnel. This seems to be a result partly of the relatively high obligatory number of medical staff as defined in the system in place before 1991 and partly of the absence of a strict quota for professional training. With slightly more than 2 doctors per 1000 inhabitants the number of medical staff per 1000 inhabitants is lower than the EU average. National data suggest, however, that the picture may be distorted and the actual figure is probably more than 3 per 1000 inhabitants, a ratio approaching the EU average.

Fig. 2 Number of beds per 1000 inhabitants in acute care hospitals in The former Yugoslav Republic of Macedonia, selected countries and EU average, 1990–2004



Source: WHO Regional Office for Europe. European Health for All database, June 2006.

At present, undergraduate studies undergo a reform process, to enable credit transfer through the Bologna process. Furthermore, there is an ongoing process to introduce a new accreditation and licensing system, as well as to strengthen continuing medical education (CME). Pilots with this focus show very positive results and have contributed to improving job satisfaction and motivation on the part of health staff, as well as improving the quality of care provision.

Health technology assessment

Currently, most of the medical equipment available in health care facilities is outdated and requires frequent repairs. Procurement is carried out on a case-by-case basis and is limited by financial constraints. In the absence of amortization rates to assess the value of medical equipment, purchase projections reflect the needs of the health sector only to a very limited extent and no planning regarding capital investment takes place. At present refurbishment mainly depends on donations and humanitarian aid.

Pharmaceuticals

The pharmaceutical sector currently operates on the basis of a positive list of drugs (PLD) that defines which drugs are eligible for reimbursement by the compulsory health insurance. The HIF engages in procurement processes with manufacturers to purchase the PLD drugs for subsequent provision and distribution in the public health system. The sector is supervised by the Bureau for Drugs, which is part of the Ministry of Health. The challenges faced concern improving the sector's regulation and supervision, and enhancing procurement procedures to ensure that the health system is supplied with high-quality drugs in sufficient quantity and at the best possible prices. Furthermore, the HIF budget set aside for drug procurement should reflect anticipated needs, to be established

Table 1 **Utilization and performance in all hospitals in The former Yugoslav Republic of Macedonia, selected countries and EU averages, 2004 (or latest available year)**

	All hospitals per 100 000 population	Total beds per 100 000 population	Admissions per 100 population	Average length of stay in days
Albania	1.6	300.7	8.7	6.4
Bulgaria	3.9	613.1	19.6	8.2
Croatia	1.8	553.0	16.4	10.7
Serbia and Montenegro	0.4[b]	598.9[b]	9.3[b]	12.1[b]
Slovenia	1.5	479.9	17.3	7.5
The former Yugoslav Republic of Macedonia	2.7[c]	493.6[c]	9.0[c]	11.8[c]
EU average	3.1	591.5	17.9[a]	9.5[a]
EU-15 average	3.2[a]	583.6[a]	18.3[b]	9.7[a]
EU-10 average	2.7	649.6	19.5	8.6

Source: WHO Regional Office for Europe. European Health for All database, June 2006.

Notes: [a] 2003; [b] 2002; [c] 2001; EU: European Union; EU-15: Member States before 1 May 2004; EU-10: Member States joining the EU on 1 May 2004.

through regular and thorough needs assessments. The generic drugs sector needs strengthening and this must be reflected in the PLD. Rational prescribing practices are to be encouraged through the training of medical professionals and the development of evidence-based guidelines. As mentioned above, the process of privatizing publicly owned pharmacies by sale or leasing has been initiated.

Financial resource allocation

With independence in 1991, a fee-for-service payment system of health facilities was set up. As this failed to exert proper financial control over the health institutions, it was replaced over the years by a system based on transfer of funds to cover the minimum needs of the health care institutions. In 2003 it was decided to introduce a payment system based on diagnosis-related groups (DRGs). To this end a pilot with a selected group of hospitals was initiated in 2005, with full implementation expected by 2008. The new reimbursement system is expected to improve the motivation of health professionals as well as the efficiency and quality of services. The implementation of the DRG-based system is seen to be hampered, however, by the facilities' deteriorated infrastructure, owing to the long absence of capital investment. Furthermore, the enhancement of staff performance may depend on the willingness to grant managers the right to reward staff and/or to make employment decisions in general.

Health care professionals employed in public facilities receive salaries which take into account, among others, professional profile, complexity of tasks, work experience, overtime, on-call shifts, general working conditions, etc. The majority of health professionals see scope for improvement in the existing payment system. For the PHC sector a capitation-based payment system has been introduced and successfully piloted with contracted private providers (job satisfaction and quality of services could be improved). Introduction of this in the public facilities is expected in the near future.

Health care reforms

All reforms have been undertaken with the aim of sustaining access for the whole population to a comprehensive health system, as well as improving the quality of health services and enhancing financial sustainability. Despite improvements in some sectors, substantial challenges remain, with the reforms needing to address the oversupply of medical staff, strengthening of CME, the rationalization of health care facilities, strengthening of the pharmaceutical sector and, last but not least, the overall financial sustainability of the sector, including enhanced transparency and accountability.

Conclusions

The Macedonian health system represents an interesting case study of transition from highly decentralized autonomous structures to recentralization and to decentralization again. Since independence in 1991, the country has been facing various structural, economic and political challenges, in light of which the preservation of the publicly funded health system is a success in itself. The coverage of the established compulsory health insurance system is in effect universal and the current benefits package comprehensive.

At present the system is facing a number of challenges, including the need to overcome the legacies of the health system that was in place until 1991. These include: strengthening of human resources planning and training; and rationalization of health care facilities to redistribute limited resources more effectively and thereby to significantly improve the infrastructure of facilities, as well as the quality, especially of primary care services. In this context, the reorganization of medical centres at primary care level, privatization trends and reforms regarding the remuneration of providers – with the introduction of a capitation-based system at primary care level and an annual global budget allocation for inpatient care – represent important developments, as discussed. Furthermore, the regulation of the pharmaceutical sector will need to be strengthened, promoting improved procurement procedures and rational drug prescription practices. Overall, sustainable health financing will need to be secured, including adequate funding for preventive programmes and capital investments. To this end the Ministry of Health will need to strengthen its policy formulation, implementation and monitoring capacities, while the HIF will need to enhance its budget planning, monitoring and reporting instruments.

HiT summary

The former Yugoslav Republic of Macedonia

The Health Systems in Transition (HiT) profile on The former Yugoslav Republic of Macedonia was written by Dragan Gjorgjev (Republic Institute for Health Protection), Angelina Bacanovic and Snezana Cicevalieva (both from the Ministry of Health), Zlate Sulevski (Health Insurance Fund, Skopje) and Susanne Grosse-Tebbe (European Observatory on Health Systems and Policies). Susanne Grosse-Tebbe also edited the profile with Jennifer Cain (then European Observatory on Health Systems and Policies) editing earlier versions. The HiT builds upon an earlier edition, published in 2000, that was prepared by Steve Hajioff in cooperation with Gordana Pecelj and Fimka Tozija.

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