Physical Rehabilitation Services in South East Europe

Dr. Pascal Granier

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This document was written by Dr. Pascal Granier, Physical Medicine and Rehabilitation Programme Coordinator for Handicap International in South East Europe.

The author coordinated a team of consultants who undertook data collection about PMR services in each country / province.

Those consultants were Dejan Babalj for Bosnia and Herzegovina, Dr. Iliriana Dallku for the Province of Kosovo, Lidija Krstevska-Dojcinovska for the Former Yugoslav Republic of Macedonia, Dr. Sonja Kosac for Montenegro, Merita Myftari for Albania, and Dr. Predrag Vidakovic for Serbia.

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PHYSICAL REHABILITATION SERVICES IN SOUTH EAST EUROPE

FOREWORD

THE DISABILITY MONITOR INITIATIVE FOR SOUTH EAST EUROPE

For decades the disability movement despite its diversity, is beginning to unify its voice to promote a global shift of paradigm: moving from a charity and medical approach to considering disability as a human rights issue. Acknowledging this change, for the past three years, the United Nations is working on defining a convention that aims to ensure that people with disabilities fully enjoy their rights as anyone else in society. People with disabilities from around the world are present in this process represented by their organizations and their personal testimonies which universally conclude that discrimination, poverty, and exclusion are still the main characteristics for the 500 million people with disabilities living around the globe.

In the frame of this global movement some initiatives are emerging at national and international levels to monitor the situation of people with disabilities. Most recently, the International Disability Rights Monitor launched a regional report on the Americas in 20041.

In South East Europe, the legacy of an overprotective medical approach to disability in addition to the difficult transition to a market economy including the collapse of the social welfare system and 15 years of civil conflict, have contributed to leaving people with disabilities excluded, marginalized and over represented among the most vulnerable populations in the region.

All the countries in the region face similar challenges regarding transition and disability issues. They also share a common perspective in terms of the European Union accession process. As a result, reforms are on going at a solid pace in all sectors.

With the new disability paradigm arising, there are new roles and responsibilities for stakeholders from the public, private and non-profit sector. The new political, economical and social context beginning to take shape in the region gives people with disabilities and their allies the unique opportunity to participate in building an inclusive society rather than a disabling one.

The Disability Monitor Initiative for South East Europe aims at supporting local stakeholders to face these new challenges. The objective is to monitor how local organizations, authorities, governments, and international agencies develop and support social innovation and policy reforms that promote and enable the full participation of people with disabilities.

This first working paper provides an overview of Physical Medicine and Rehabilitation (PMR) services that exist in Western Balkan Countries. As a pre-condition for social participation, PMR services are one of the issues to which people with disabilities pay central importance. Significant investments were made in this field by the international community, notably through the implementation of assistance programs for war victims. Even though some progress has been achieved in various areas, nowadays the quality of PMR services in the region remains uneven, and access to those services unequal. This report provides the reader with a comprehensive view of the situation describing, by country, the overall framework of the health care system, the PMR facilities, and the situation regarding professionals working in this field. Analyzing strong points and gaps, the report identifies the key elements for future improvement in the broader frame of the change process towards an enabling system of services for people with disabilities.

This assessment of PMR services is a base for further research and the Handicap International South East Europe team is aware that some very interesting initiatives or relevant sectors might not be covered. Any comments, additions, or propositions are most welcome and can be sent to disabilitymonitor@hi-see.org.

Finally Handicap International would like to thank the whole team for its work as well as all the local organizations and institutions that contributed with their meaningful experiences and knowledge. We would also like to thank the U.S. State Department via the International Trust Fund for their financial support.

Alexandre COTE
Regional Director
Handicap International
South East Europe

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The report gives a comprehensive overview of Physical Medicine and Rehabilitation (PMR) services in South East Europe, more precisely in Albania, Bosnia and Herzegovina (BiH), the Former Yugoslav Republic of Macedonia (FYROM), Serbia and Montenegro and the UN Administered Province of Kosovo. It is the result of the knowledge developed by Handicap International in that field during a period of more than 12 years of presence in South East Europe. Information presented in the report was updated by a field investigator in each country, between May and November 2003.

For each of the above-mentioned countries, the report provides general information about the organisation of the health care system (historical background, care delivery system, health care financing and population’s health status) extracted from a recent literature review. It then maps and describes the PMR facilities existing at primary, secondary and tertiary level, including ortho-prosthetic centres. Finally, the report provides an analysis of the existing educational system for PMR professionals in each country, and gives the number of professionals working in PMR.

As emphasised by the UN Standard Rules on the Equalisation of Opportunities for Persons with Disabilities, rehabilitation is a precondition for equal participation of persons with disabilities. A major finding is that the analysis of PMR services in South East Europe shows a dramatic lack of such services at primary health care level, which leads to social exclusion of persons with disabilities, mainly those with severe or multiple impairments who often have no other alternative but to stay locked in their homes or to be hosted in residential institutions. Additionally, due to conflicts and economic crisis, the quality of services provided tended to decrease in many places, and significant inequalities in access to PMR services appeared, affecting mainly the poorest part of the population.

In order to improve access to rehabilitation in the local community in these countries, there is a need to mainstream disability within existing medical, education and social services available in those local communities. Training and sensitisation of PMR professionals, but also general professionals, is to that end a crucial issue.
INTRODUCTION

The present report aims at giving a comprehensive overview of Physical Medicine and Rehabilitation (PMR) services in South East Europe, more precisely in Albania, Bosnia and Herzegovina (BiH), the Former Yugoslav Republic of Macedonia (FYROM), Serbia and Montenegro, and the UN Administered Province of Kosovo. Mapping facilities, describing the situation of various PMR professions, analysing the access to PMR services in each country, the report highlights the main resources and the gaps within PMR services delivered in each country.

FROM VICTIM ASSISTANCE TO EQUAL OPPORTUNITIES FOR PERSONS WITH DISABILITIES

During more than 12 years of presence in the Balkans, Handicap International has developed a thorough knowledge of PMR services in the region. Initially our organisation deployed emergency relief programmes notably targeting persons with disabilities hosted in residential or rehabilitation institutions - whose living conditions had dramatically worsened in contexts of political and socio-economic crisis (in Romania or in Serbia and Montenegro for instance) or conflicts (like in BiH or in Croatia) - and landmine victims seeking prosthetic fitting and medical rehabilitation. Whilst the region was regaining stability, those emergency relief programmes were gradually turned into capacity-building programmes aiming at strengthening existing local capacities, in the fields of ortho-prosthetics, physiotherapy or community based rehabilitation. Those programmes were implemented in collaboration with local PMR structures, universities and associations of professionals.

Now that all those countries are engaged, at various levels, in processes of socio-economic transition with the integration into the European Union as a prospective, Handicap International’s regional experience, Handicap International animates regional networks of organisations of persons with disabilities, of professionals and researchers involved in the development of inclusive services for persons with disabilities at community level. Our organisation supports those stakeholders involved in the change process towards equal opportunities and full participation through trainings, small grants, coordination and exchange, information management and dissemination of best practises.

REHABILITATION: A PRECONDITION FOR EQUAL PARTICIPATION

On the way towards full participation of persons with disabilities, rehabilitation is a crucial step. Referring to the UN Standard Rules on the Equalisation of Opportunities for Persons with Disabilities, medical care and rehabilitation are considered as pre-conditions for equal participation.

The UN Standard Rules clearly put the emphasis on the principles of accessibility, proximity and participation. The importance of a comprehensive approach to disability in rehabilitation, encompassing the biomedical, functional, psychological and social dimensions of disability, is also strongly underlined. This comprehensive approach implies interdisciplinary interventions, adapted to the individual needs and expectations of each person.

THE LEGACY OF AN OVERPROTECTIVE REHABILITATION SYSTEM

Quite the opposite, the rehabilitation systems that were formerly developed in the countries that are analysed in the present report relied on a very medical and protective approach to disability. The planning and delivery of services for persons with disabilities followed the logic of overspecialisation of professionals and institutions. As a result, services were often concentrated in a small number of specialised institutions, far away from the places where persons with disabilities lived. This situation led to segregation. Indeed, many

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UN Standard Rules on the Equalisation of Opportunities for Persons with Disabilities

**Rule 2. Medical care (extracts)**
- States should work towards the provision of programmes run by multidisciplinary teams of professionals for early detection, assessment and treatment of impairment. (...) Such programmes should ensure the full participation of persons with disabilities and their families at the individual level, and of organisations of persons with disabilities at the planning and evaluation level.
- Local community workers should be trained to participate in areas such as early detection of impairments, the provision of primary assistance and referral to appropriate services.
- States should ensure that persons with disabilities are provided with any regular treatment and medicines they may need to preserve or improve their level of functioning.

**Rule 3. Rehabilitation (extracts)**
- States should ensure the provision of rehabilitation services to persons with disabilities in order for them to reach and sustain their optimum level of independence and functioning.
- States should develop national rehabilitation programmes for all groups of persons with disabilities. Such programmes should be based on the actual individual needs of persons with disabilities and on the principles of full participation and equality.
- Such programmes should include a wide range of activities, such as basic skills training to improve or compensate for an affected function and counselling of persons with disabilities and their families.
- All persons with disabilities, including persons with severe and/or multiple disabilities, who require rehabilitation should have access to it.
- Persons with disabilities and their families should be able to participate in the design and organisation of rehabilitation services concerning themselves.
- All rehabilitation services should be available in the local community where the person with disabilities lives. However, in some instances, in order to attain a certain training objective, special time-limited rehabilitation courses may be organized, where appropriate, in residential form.

persons with disabilities - this is mainly true for persons with severe or multiple impairments - had no other choice but to stay locked in their homes or to be hosted in residential institutions. Nevertheless, all the countries from the former Socialist Federal Republic of Yugoslavia have inherited, to various degrees, a network of well-equipped PMR facilities with qualified professionals. The quality of services provided, as for the rest of the health care system, was acknowledged as good. But the impact of conflicts and socio-economic crisis brought about destructions, deterioration of premises and equipment and decreased salaries in the health care system. In Albania the situation has always been different, with very poorly developed PMR services.

**METHODOLOGY**

In each country or province, a Handicap International staff member or an external consultant with a PMR background spent 2 weeks to one month to gather updated data on PMR structures, on the number of PMR professionals and the educational systems. This data collection was performed between May and November 2003. A common form was prepared for the assessment. Data was obtained directly from each structure. All the structures were contacted. Each of them responded, except in BiH and in Serbia where responses were obtained only from two thirds of the structures identified. In those two countries information was completed thanks to data provided by Ministry of Health, National Employment Office and professional associations. In the countries assessed there is no distinct centralised database on PMR professionals, which are not registered separately but within other groups (for instance physiotherapists are usually put in the category "nurses"). Similarly, many rehabilitation institutions are usually referred to as special hospitals rather than rehabilitation centres, and the categories may vary from one country to another. The figures presented here below might thus in some cases slightly differ from those obtained from other sources.

For each country or province the report also presents general information about the organisation of the health care system (historical background, care delivery system, health care financing and population's health status) that are needed for understanding the organisation of PMR services. Such information is extracted from a review of recent literature on the topic.
1.1. HEALTH CARE SYSTEM

**Historical background**

Before the Second World War, Albania had few doctors (the country did not have its own medical school), and only a small number of health institutions run by religious groups. Most of the population did not have access to health care facilities. After 1945, a health care system was developed following the Soviet model, which brought a significant improvement in the population's access to health care services. Initially, sanitary-epidemiology centres were set up in each district. Then the primary health care system was developed during the 1960s, and during the 1970s hospitals and polyclinics were built in each district.

The organisation of the health care system was very centralized, with the Ministry of Health (MoH) being responsible for direct administration of health care structures. It had weak management capacities and information systems.

All citizens were entitled to free health care with small co-payments for drugs. But despite these significant achievements in terms of access, at the end of the 1980s the quality of services remained poor, with little continuing medical education and outdated equipment. The system was not able to prevent the outbreaks of infectious diseases that arose in the 1980s.

After the collapse of the communist regime, the health care system was affected by riots during 1991-1992 and again after the collapse of pyramid saving schemes in 1997. Many health posts, health centres and hospitals were destroyed or looted, and public health programs were disrupted.

Recently, the massive influx of refugees fleeing from Kosovo in April 1999 has challenged Albania's health care system, but has also brought international support and funding opportunities.

**Health care delivery system**

The health infrastructure is reportedly very unevenly distributed, in some areas lacking basic equipment, supplies, drugs and qualified staff, and not having electricity 24 hours a day. Accessibility to health care is problematic especially in the northern part of Albania. The Health care system is organised into 3 levels:

- **Primary Health care:**
  Primary health care (PHC) is mainly delivered through a network of Health Posts and Health Centres all over Albania that provide the whole range of Primary Health Care services, including some occupational health. Each Health Centre is staffed by family practitioners, nurses and midwives. Health Posts are staffed at least by one midwife or nurse. However, in rural areas some health facilities have been closed due to staff shortage or lack of equipment.
  Most of the drug delivery system was privatised in 1994. Patients can get drugs in private pharmacies and pharmaceutical posts.

- **Secondary Health Care**
  Secondary health care is provided at the level of 35 health care districts. Patients in need of specialised diagnosis and care must be referred by their general practitioner to Polyclinics, located in district towns, which function as the outpatient specialist health care facilities of the District Hospitals. But this referral system doesn't function, and many patients are by-passing PHC.

  Hospital care is provided in 41 District Hospitals, 9 Regional Hospitals, and 4 Hospitals for chronic patients (psychiatric hospitals).

- **Tertiary Health Care:**
  Patients are referred from the secondary level. The 4 existing Tertiary Hospitals are all located in Tirana, including the University Hospital Centre of Tirana, which also serves as the secondary care referral centre for Tirana city, receiving referrals from the polyclinics and family practitioners. It is therefore overloaded.

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PHYSICAL REHABILITATION SERVICES IN SOUTH EAST EUROPE

ALBANIA

Health care financing

Sources of financing:
Public expenditures remain the main source of health care financing, but have decreased since 1992, which resulted in an increase in households’ contributions. In 2001, health expenditures were financed 64.6% from public sources (including 12.5% from the health insurance system), 23.1% from household out-of-pocket payments, and 12% from private prepaid health insurance plans. Total health expenditures were only 3.7% of GDP, which is very low compared with other countries from Central and Eastern Europe. Per capita total expenditure on health was 48 USD per person in 2001 (at average exchange rate). A comparative table with figures from all the countries included in this report is shown in annex 4.

Financing mechanisms
The Ministry of Health is directly financing Hospitals’ expenditures. The Ministry of Finance pays for some PHC costs (staff salaries except doctors, maintenance and equipment of premises) through local governments.

The Health Insurance Institute (HII) was created in 1995 with the goal to secure additional sources of funding for the health care system, and to ensure equitable access to a broader range of health services. It is an autonomous national statutory body, accountable to the Parliament. The HII is financing a limited health care package, which has been progressively expanded. It started in 1995 with the goal of securing additional sources of funding for the health care system, and to ensure equitable access to a broader range of health services. The list of essential drugs has been expanded (308 drugs in 2001), and since 2001 outpatient care in the Tirana Prefecture and Hospital care in Durres have also been financed by the HII, as a pilot project. In 1999 the HII received more than 17% of all health funds, (8.5% from the state budget, 4.3% from employers and 4.4% from individual contributions).

Health care benefits
All persons covered by the HII (and their dependants) have access to free primary health care and essential drugs. Children under one year, war veterans and patients treated for cancer or tuberculosis are entitled to receive 100% subsidized drugs, but this seems to be rarely enforced. For other users, a co-payment is required for drugs. The HII is covering all workers who paid their contributions and most of the unemployed population. However, 30% of the population (mainly farmers) remains uncovered, but in practice they seem to have the same access to health services as the insured population.

All citizens are entitled to free of charge hospital care. However, due to the scarce financial resources in most of hospitals, patients are very often asked to pay for drugs and medical consumable.

Persons with disabilities are theoretically treated free of charge for everything that is related to the main cause of their impairment, but this right is rarely enforced.

Under-the-table payments are reportedly widespread in Albania, especially in public hospitals, but the magnitude of this phenomenon has not been measured.

Reforms in Health care system
Reforms in Health sector were initiated in 1993, based on the following principles:
- Guarantee the population full access to all preventive and most curative care at an affordable price;
- Improve the quality of services;
- Give priority to the forms of health care that offer the best chance of improving health at the lowest price, and thus strengthen PHC and public health.
- Reform the health care financing in order to secure stable funding for health care system, and introduce market elements into health care financing;
- Decentralise and improve health care management.

Many of the reform suggestions were implemented, but the process is not completed yet, and so far it had little impact on the quality of services and on the access.

Population health
Albania is in the midst of its epidemiological and demographic transition. The prevalence of infectious diseases continues to be high, but chronic illnesses are rising. Some selected demographic and health indicators for the year 2002 are presented in Table 1:

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5 Figures from WHO Core Health Indicators: http://www3.who.int/whosis/country/indicators.cfm
PHYSICAL REHABILITATION SERVICES IN SOUTH EAST EUROPE

ALBANIA

Table 1 - Selected demographic and health indicators for Albania (2002) *

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>3,141,000 habitants</td>
</tr>
<tr>
<td>Percentage of population aged 60+ years</td>
<td>9.4</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>67.3 (males)/74.1 (females)</td>
</tr>
<tr>
<td>Infant mortality rate (per 1,000 live births)</td>
<td>22</td>
</tr>
<tr>
<td>Child mortality (probability of dying under age 5 per 1,000)</td>
<td>27 (males)/23 (females)</td>
</tr>
</tbody>
</table>

*A comparative table with all the countries from the analysis is available in annex 2.

2.2. PMR STRUCTURES

PMR services were poorly developed under the former communist regime in Albania. The country did not have any training facility for PMR professionals, and had only a small number of rehabilitation institutions, with a poor geographical coverage. Even though various initiatives have tried to tackle this problem over the past 7 years with some encouraging success, this legacy still undermines the living conditions of most of persons with disabilities.

PMR services within Primary Health Care

Neither Health Centres nor Health Posts provide any rehabilitation service. Polyclinics do offer outpatients physical therapy at district level, but with insufficiently qualified staff and lack of space and equipment. The quality of services is reportedly very low.

Rehabilitation Centres

Rehabilitation Centres are under the responsibility of Ministry of Health. We identified 3 such structures:
- The Physical Rehabilitation Department in Tirana University Hospital receives children with physical impairments, and provides medical consultations, medical care, and physical therapy. There are rooms for 12 inpatients.
- The National Centre for Growth, Development and Rehabilitation in Tirana is a former hospital for persons with muscular dystrophy, which has successfully reorganized itself in 1999, with the support from Caritas Switzerland, to become a dynamic resource rehabilitation centre for children with disabilities, troubles in development or malnutrition. This National Centre provides diagnosis and rehabilitation services through consultations or short hospitalisation, as well as counselling to parents and home visits in the surrounding communities. It is also active on training medical staff from PHC centres on detection of disability and early intervention.
- The Orthopaedic Department within Military Hospital has a physiotherapy department, mainly for patients who underwent trauma or orthopaedic surgery.

Development Centres

In addition to a number of residential social institutions that host persons with disabilities among other social welfare recipients, the Ministry of Social Affairs also manages some “Development Centres”. They have the mandate to accommodate and to provide rehabilitation services (physical therapy and recreational activities) for persons with disabilities, often from childhood. They host between 25 and 50 persons. There are:
- 5 residential development centres (Berat, Durrres, Korca, Shkoder, Tirana)
- 2 day-care development centres (Lezhe and Shkoder).
These development centres are often in need of properly trained medical rehabilitation professionals, psychologists or social workers due to the poor development of those professions. In some of those facilities the staff benefited from training provided by foreign organisations.

Ortho-prosthetic (OP) Centres

2 ortho-prosthetic centres exist:
- One is public, the National Ortho-Prosthetic Workshop in Military Hospital. It provides prosthetic and orthotic fitting, and orthopaedic shoes. It is staffed with 1 physician, 1 physiotherapist, 6 OP technicians, and 3 shoemakers. Prosthesis are provided free of charge. The centre is struggling to purchase raw material and components, and survives thanks to provision of components by the International Committee of the Red Cross (ICRC).
- ADRF is a local NGO that runs a prosthetic workshop and produces wheelchairs. Patients are asked to contribute with 10 EUR for prostheses, and 35-70 EUR for a wheelchair (that costs 260 EUR).

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2.3. PMR PROFESSIONALS

Professions such as physiotherapy or physiatry (physician specialised in PMR) did not exist under the former Albanian regime. Despite of recent initiatives aiming at training such type of professionals, there is still no long-term solution adopted for the country to catch up.

Education of PMR professionals

Physiatrists
Physical Medicine and Rehabilitation is not identified as a medical speciality in Albania. Medical students follow a 60 hour course on rheumatology - physiotherapy during their studies. The few existing "physiatrists" are general practitioners who followed nine-month physiotherapy training (which does not exist any longer).

Physiotherapists
Up to very recently, Albania did not have any educational program for physiotherapists or occupational therapists. The persons working as "physiotherapists" are either physical education teachers or nurses. Nursing education is post-secondary college level, and it should soon be brought up to university level. A Nursing Faculty has already been established in Vlora. Nurse colleges' curriculum usually includes lectures on physiotherapy and logopedy (speech therapy). Some international organisations (Caritas Italia, Sant Edigio) have provided short-term physiotherapy programs (few months to one year), for a total of 100 persons between 1995 and 1998. Tirana Nursing College used to provide one-year specialisation in physiotherapy, but this has not occurred since 1996. Then, in September 2002, they established a 3 year physiotherapy education program, for a single generation of 33 students, with the support from foreign teachers from the University of Padova, in Italy. These 33 students are expected to graduate in July 2005.

Psychologists
Neither psychologists nor social workers are properly speaking PMR professionals. However, they should be part of an interdisciplinary rehabilitation team. In Albania none of those two professions existed under the communist regime. A Psychology educational program was established in 1996, as a part of the Department of pedagogical sciences and psychology. It is a 4 years post-secondary State Diploma, enrolling 30 to 35 students per generation. It includes few lectures on disability.

Social workers
It is a recent profession in Albania, which still seeks full recognition. The Department of Social Work was created within the Faculty of Social Sciences in 1991. It is a four year training, which includes some lectures on mental health and disability. Some of the graduates will work in special schools or development centres.

Prosthetists and Orthotists
There is no training capacity in the country. Ortho-prosthetic technicians currently working are mostly handcrafters who received on the job training.

Special education
Neither special education nor defectology existed as a distinct profession in Albania until now, but a special education school (post-secondary college level) was created on 2003 in Vlora, with foreign expertise support from ASED. The first generation is expected to graduate in June 2006.

Number of PMR professionals
Together with Turkey, Albania is the country in Europe and Central Asia with the smallest number of health professionals per inhabitant: 1.3 physicians for 1000 inhabitants, and 3.7 nurses for 1000 inhabitants. The situation for PMR professionals is even worse. Only 3 physiatrists are registered for the whole country, and there is no figure available on physiotherapy workers, as they are not identified as a profession.
3.1. HEALTH CARE SYSTEM

Historical Background

In the former Socialist Federal Republic of Yugoslavia, the Health Care System was initially organised and controlled in a centralised way, but during the sixties the reforms on self-management decentralised the provision of health services. The health system was financed locally through institutions called "self-managed communities of interest", which provided health service insurance, social security and disability insurance to employees and their families. Particularly, a high responsibility was given to local communities (municipalities) for planning, financing and prioritising primary health care. Resources were collected through compulsory contributions of employees and employers.

The comprehensive health safety net that was developed allowed remarkable improvements in population health indicators. But the self-management system and the lack of coherent global planning resulted in an uncontrolled growth of hospital capacities, number of health professionals and specialised care, at the detriment of prevention and family medicine. It was also unable to correct the significant discrepancies that existed between republics and regions. Furthermore, during the eighties the health care entitlements became higher than what the capital investment in the system would have allowed.

In BiH the health care system was then heavily affected by the war. According to government statistics, between 1992 and 1995 around 30% of the health facilities were destroyed or severely damaged, and the country lost about 30% of its health professionals.

In the aftermath of the conflict, based on the Dayton Agreement, BiH’s health system fell under the sole jurisdiction of the Entity Level. In the Republika Srpska (RS) the health care system is centralized, whereas in the Federation of Bosnia and Herzegovina (FBiH) it is decentralized, with the responsibility for health care administration and financing being shared between the federal level and each of the ten cantons. In addition, since its creation in March 2000, the Brcko District is also responsible for organizing and financing its own health care system.

This division of the health care system into 13 distinct units (the RS, 10 cantons in the FBiH, and the Brcko District) resulted in a very complex legal, administrative and financial organisation, with an increased management cost. It also created an uneven territorial distribution of health facilities, which hinders equitable access to health services.

Health care delivery system

Primary Health care

Primary health care (PHC) is provided through a network of medical facilities called “ambulanta” and “dom zdravlja”. In each small village, an ambulanta provides basic ambulatory PHC (clinical check up, prescription of basic drugs, and referral to dom zdravlja). It is staffed by a nurse with minimal equipment and a general practitioner visiting at least once a week.

“Dom zdravlja” represents a health centre set up in each main village of a municipality, providing a set of general and specialised medical services, together with basic medical imagery and laboratory examinations. The first aid centres, “hitna pomoc”, are located in the “dom zdravlja” facilities. They are open 24 hours a day, can be called by phone, and provide first aid, emergency care and medical transportation. The “hitna pomoc” net is well organized, and provides a good geographical coverage. But in rural areas the lack of resources and sufficient equipment often hinders its efficiency, and in some places it can take up to 3 hours following a call for an ambulance to arrive on-site.

Both public and private pharmacies exist in BiH. Primary health care is intended to cover 70-80% of all medical cases, but reportedly only 10-20% of all cases are being dealt with at this level.

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11 Ibid., p 25.
Secondary Health care

Secondary health care is provided within General Hospitals, theoretically after referral from primary health care level. They are usually located in each capital of Canton / Region and in Brcko District, the exceptions being Canton 8 (West-Herzegovina) and Region 5 (Bosnia-Podrinje). General Hospitals must provide a panel of specialised medical and surgical specialties, with both hospital care and outpatient polyclinics. The conditions of equipment may vary significantly from one place to another.

Tertiary Health care

Tertiary Health care is provided within Clinical Centres, situated in Sarajevo, Mostar, Tuzla, Banja Luka and Foca / Srbinje. They are often associated with a University. They should provide all type of diagnosis and medical or surgical treatment. All patients from the corresponding region should be referred to them when the necessary expertise or treatment is not available at General Hospital Level.

Health care financing

Sources of financing

In 2001, total health expenditures accounted for 7.5% of BiH's GDP, with only 36.8% of total health care expenditure being financed from public sources, and 63.2% from household out-of-pocket payments. Per capita total expenditure on health was US$ 85 per person in 2001 (at average exchange rate) (a comparative table with figures from all the countries included in this report is shown in annex 4).

Financing mechanisms

The public Health Insurance Funds collect financial contributions from all BiH residents receiving regular income, and provide coverage for insured persons and their family members. The unemployment office and pension fund pay contributions for unemployed persons and pensioners. Officially employed persons, pensioners, registered unemployed persons and social welfare recipients should all be insured.

Whereas there is a single Health Insurance Fund in RS (with 8 regional offices), the FBiH has one Federal Health Insurance Fund, which controls, supervises and provides reinsurance to 10 cantonal health insurance funds. Each cantonal authority is responsible for defining the contribution rates and the extent of health care coverage for its health insurance fund. The FBiH Ministry of Health is responsible for setting legal standards and norms for the health insurance schemes.

Health care benefits

This compulsory health insurance scheme theoretically covers health care assistance, paid sick leave and health care related travel costs. Insured persons are nevertheless required to contribute directly to health costs by a fixed percentage of the total cost of their treatment (participation). Some categories are exempted from participation, for instance Disabled Veterans throughout Bosnia and Herzegovina, and Civilian Victims of War with disability over 60 % only in some Cantons in the FBiH, (like Sarajevo, Una Sana and Zenica-Doboj cantons), but not in the RS. In the absence of insurance coverage, patients must pay the full cost of medical services. Nevertheless in case of medical emergency assistance must be provided regardless of the ability to pay.

In practice, unequal access to health care services exists, affecting mainly vulnerable groups such as refugees, returnees and persons in social need. This is notably due to the fact that contributions collected are far insufficient to cover the whole costs from the legislated entitlements, and to the low inter-Entity/ inter-Cantonal cooperation (the insurance coverage is valid only in the geographical area of the health insurance fund where the person is insured). This situation leads to an implicit rationing and to a wide practice of under-the-table payments. A large private health sector has also developed, mostly informal, without an accreditation system or pricing guidelines.

Reforms in Health care system

Reforms were initiated to tackle these problems, aiming at harmonising health care systems and at ensuring an equitable access to basic health care services.

Collaboration between health insurance funds was improved with the signature of an inter-entity and inter-cantonal agreement in December 2001. A Federal Solidarity Fund was established in January 2002, which should enable movements of insured persons from one canton to another, and establish an inter-cantonal risk-pooling. It receives 8% of the resources collected by each cantonal health insurance fund, to be matched by the federal government budget. Reportedly in practice those legal provisions are far from being enforced throughout the BiH territory.

In December 2000, the RS Health Insurance

12 Figures are from WHO Core Health Indicators: http://www3.who.int/whosis/country/indicators.cfm
13 According to UNDP in 2001 78 % of the total population was insured ("BiH Human development report 2003" - p 129).
14 According to a rough estimation reported in "BiH Human development report 2003 (UNDP)", 31.85 millions KM would be needed for Bosnia and Herzegovina in order to reach a minimal insure level for all citizens, in addition to the 589.7 millions total yearly cumulated budget of both Health Insurance Funds.
Fund laid down the Basic Benefit Package, defining public funded and universally covered health care services. Implementation commenced after its validation in May 2001, but full population coverage is still to be reached.

There would be a need for a FBiH-wide package as well, with schemes to ensure equal access to this package among the Cantons.

The Social Insurance Technical Assistance Credit Project initiated by the World Bank in both Entities in 2003, will support definition of health strategies, rationalisation of the provider network, development of inter-Entity and inter-Cantonal coordination and risk-pooling mechanisms, and development of options to expand the population covered.

Population’s health

Some selected demographic and health indicators about BiH for the year 2002 are presented in the Table 2.15

3.2. PMR STRUCTURES

This section gives an overview of the PMR facilities existing in BiH. More detailed information can be found in the report earlier published on landmine victim assistance in BiH.16 The assessment conducted by Handicap International revealed significant discrepancies between data given by health care authorities and by managers or professionals in visited health care facilities regarding number of beds, number of professionals and health care financing. Information presented must therefore be interpreted cautiously. However those discrepancies can be considered as witnessing for the fragmentation, weak management and lack of transparency of health care system in BiH.

PMR facilities are well developed in BiH, and many of them benefited from reconstruction projects and training programs, mostly in the frame of landmine victim assistance programs. However, the analysis of PMR facilities shows the same weaknesses as for the whole health care system in BiH: a lack of coordination between those facilities within a fragmented system, and worrying inequities in access to those services due to financial reasons. The quality of services may vary from one place to another, partially due to the absence of quality standards.

PMR services within Primary Health Care

In the FBiH, 38 Community-Based Rehabilitation (CBR) centres and Community Mental Health services were established in the period 1996 - 1999, with the support from the World Bank and the Canadian Government. CBR is part of the PHC system, and located in the "dom zdravlja". Each CBR centre covers a population of 50,000 to 80,000 inhabitants. Each CBR centre is staffed with a minimum of a physiatrist, a physiotherapist, an occupational therapist, a nurse and a psychologist. All professionals were educated through CBR training implemented by Queen’s University. The CBR system has significantly improved access to rehabilitation services at the community level. Civilian Victims of War, Disabled Veterans, pensioners below 170 KM pension and children below 15 years of age are treated free of charge. Others have to participate with 1 to 3 KM.

The system was initially envisioned to function on a community based approach, building an inter-disciplinary referral system with community stakeholders from various sectors. This was not always achieved due to transportation constraints, reluctance from some professionals or lack of time.

Similarly in 2002, Republika Srpska initiated the development of a network of 22 Community Based Rehabilitation centres and Community Based Mental Health centres integrated into the "Dom Zdravlje" facilities. The project is supported by the Japanese International Cooperation Agency and the Canadian government. Each CBR team is comprised of one physiatrist, one high-level physiotherapist, one nurse and 2 physiotherapy technicians. CBR services were included in the Basic Benefit Package of the RS Health Insurance Fund from January 2004. Civilian Victims of War

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Table 2 - Selected demographic and health indicators for BiH (2002).

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>4,126,000 habitants</td>
</tr>
<tr>
<td>Percentage of population aged 60+ years</td>
<td>15.3</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>69.3 (males)/ 76.4 (females)</td>
</tr>
<tr>
<td>Infant mortality rate (per 1,000 live births)</td>
<td>15</td>
</tr>
<tr>
<td>Child mortality (probability of dying under age 5 per 1,000)</td>
<td>20 (males)/ 15 (females)</td>
</tr>
</tbody>
</table>

*A comparative table with all the countries from the analysis is available in annex 2.


and Disabled Veterans are treated free of charge. As previously mentioned, Community Based Mental Health (CBMH) services were developed together with CBR centres in both FBiH, and RS. The CBMH teams include a psychiatrist, 1 psychologist, 1 social worker, and nurses.

**Rehabilitation centres and spas**

Similarly as in the rest of the former SFRY\(^7\), the difference between Rehabilitation Centres that were initially dedicated to long-term specialised rehabilitation, and Spas ("banja") that were initially climatic centres for workers and pensioners, is nowadays not so clear. Many structures providing at the same time medical rehabilitation services and water cures are associated to other physical therapies (such as parafangotherapy or electrotherapy). This is a way for them to attract self-paying clients, and to increase their revenues. However, in most of the cases there is neither clear distinction between the two types of services, nor distinct allocation of material and human resources. This confusion of services, without defined standards for PMR services provided by those facilities, and the unclear financing mechanisms contribute to creation of significant discrepancies in the quality of services provided, and in the patients' access to those services. Reportedly many patients cannot afford the rehabilitation services they would need.

In this paragraph, listed as "Rehabilitation Centres" are those facilities which provide rehabilitation services covered by the Health Insurance Funds, and as Spas ("banja") those in which patients have to pay the full cost of the services provided.

**In the FBiH**, 3 Rehabilitation Centres are being financed by the Health Insurance Fund. These are the Rehabilitation Centre in Fojnica, the Centre for Physical Medicine and Rehabilitation in Gradacac, and the Rehabilitation Centre "Gata" close to Bihac. The Centre for Paraplegics in Sarajevo is also a public structure.

**In Republika Srpska**, there are 3 public Rehabilitation Centres. The Institute for Physical Medicine and Rehabilitation "Dr Miroslav Zotovic" in Banja Luka is the tertiary level referral institution. The two others are the Institute for Medical Rehabilitation, Physical Medicine and Balneoclimatology Mljecanica, and the Rehabilitation Centre Kasindo in Srpsko Sarajevo.

**Hospitals**

In addition to the above mentioned Rehabilitation Centres and Spas ("banja"), most General Hospitals and Clinical Centres also have Physical Medicine and Rehabilitation (PMR) capacities. Some smaller district hospitals may also provide PMR services. From one hospital to another, those capacities may vary from few rehabilitation nurses providing basic physical therapy to inpatients in medical and surgical departments; to a distinct PMR department staffed by physiatrists, high level physiotherapists and physiotherapy technicians that in addition provides outpatient rehabilitation care, and in some few places even a small inpatient ward.

Outpatients PMR services are usually covered by compulsory insurance schemes, with participation fee (0.5-1.5 EUR per session), except in case of exemption.

Brcko General Hospital has a PMR department receiving an average of 100 outpatients a day, which is the sole public rehabilitation facility of the Brcko District.

Additionally, 3 psychiatric hospitals exist in BiH, 2 in RS (in Sokolac and Modrica, with together a total number of 550 beds), and 1 in the FBiH (Jagomir Psychiatric Hospital in Sarajevo, 70 beds). Hospitalisation is free of charge.

**Ortho-prosthetic centres**

We identified 27 ortho-prosthetic workshops in BiH\(^8\).

**In the FBiH** there are 8 public and 7 private ortho-prosthetic workshops. Facilities are unevenly distributed, with 4 workshops in Sarajevo for instance, while 3 cantons (Posavina, Bosnia-Podrinje, and West-Herzegovina Cantons) do not have any. In these four cantons, Health Insurance Funds usually have a contract with ortho-prosthetic workshops in other cantons, in

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**Table 3 - Number of rehabilitation centres and spas in BiH**

<table>
<thead>
<tr>
<th>Rehabilitation centres</th>
<th>Number</th>
<th>Total capacity</th>
<th>Financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBiH</td>
<td>4*</td>
<td>818 beds</td>
<td>Free for Disabled veterans, pensioners below 170 KM pension, children &lt;15. Others: 20% - 25% of 50 to 89 KM</td>
</tr>
<tr>
<td>RS</td>
<td>3</td>
<td>335 beds</td>
<td></td>
</tr>
<tr>
<td>Spas/Banja</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FBiH</td>
<td>2</td>
<td>~250 beds</td>
<td>Self financed facilities mostly. Self-payment, except war invalids. 35-40 KM a day</td>
</tr>
<tr>
<td>RS</td>
<td>5</td>
<td>~800 beds</td>
<td></td>
</tr>
</tbody>
</table>

*(3 rehabilitation centres + 1 centre for paraplegics in Sarajevo Physical Rehabilitation Institute).

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\(^{7}\) Refer to the chapter on Serbia and Montenegro.

\(^{8}\) Those 27 facilities are listed in "Landmine victim assistance in BiH - Handicap International, Unicef - December 2003*
order to allow insured persons to have access to ortho-prosthetic devices.

In Republika Srpska, we identified 4 public and 7 private ortho-prosthetic workshops. Six of them are concentrated in Banja Luka. The RS Health Insurance Fund has a contract with a total number of 15 ortho-prosthetic facilities, but this figure includes some centres that only sell ready products and some that produce only orthopaedic shoes.

There is one public ortho-prosthetic workshop in Brcko District, affiliated to the "Prosteticka Radiona" in Bjeljina.

The different workshops vary dramatically from one place to another in terms of equipment, staff, range and quality of appliances produced, and volume of production. From this assessment, it appears that only 6 ortho-prosthetic workshops in the FBiH and 2 in RS can be considered as very well equipped and staffed with basic skilled professionals.

Ortho-prosthetic appliances are covered by Health Insurance Funds. But with limited financial resources available, the high cost of artificial devices made according to European standards is a major problem that hinders patients' access to these appliances. For example, according to the RS Health Insurance Fund's pricelists19, below-knee prosthesis cost approximately 1,000 EUR, above-knee prosthesis costs approximately 1,900 EUR, and above-elbow functional prosthesis costs approximately 1,350 EUR.

The participation fee varies according to the type of device and from one Entity or even Canton to another. In the FBiH in Una-Sana Canton for instance, the participation fee is 15 % of the total price for prosthesis and for lower limb orthoses, 20 % for corsets, 50 % for eye devices, 40 % for orthopaedic shoes and 10% for mechanical wheelchairs20. However, in some other Cantons this participation fee can be higher, and make up to 50 or 60% of the total cost of limb prosthesis. In the RS, the participation fee is set at 10 % for orthotic and prosthetic limb devices, 30 % for corsets, 10 % for hearing devices, 20 % for ocular prosthesis, 10 % for mechanic wheelchairs, and 30 % for orthopaedic shoes21. This participation fee is a major obstacle for many patients in getting ortho-prosthetic devices.

Prosthesis can be renewed between 30 and 48 months depending on the type of prosthesis and on the Entity / Canton own regulations. In most of the places this period for renewal is the same for adults and children, while a new prosthesis would be needed in average each year to adapt to the child’s growth.

### 3.3. PMR PROFESSIONALS

Like most of other countries from the former Yugoslavia, BiH has quite many of PMR professionals, but the system inherited is very hierarchical and still follows a medical and overspecialised approach to the treatment of disability. The development of university level education for physiotherapists in Sarajevo is an encouraging sign of evolution towards higher professional standards in physiotherapy.

#### Education of PMR professionals

**Physiatrists**

Physiatrists are medical doctors who completed their medical studies (6 years) and an additional 3 years specialisation in physical medicine and rehabilitation. They are responsible for evaluation, diagnosis, and treatment planning. They coordinate the rehabilitation team, and liaise with other specialists.

**Physiotherapists and physiotherapy technicians**

The education system for physiotherapy workers in BiH is two-tiered, inherited from the former Yugoslav educational system:

- **Medical secondary schools** provide a 4-year education program for various future health technicians (such as physiotherapy technicians, nurse technicians, lab technicians, pharmacy technicians...etc). Those medical secondary schools are located in the main municipalities. Students are enrolled after finishing primary school, usually at age 14. In most municipalities a new generation of physiotherapy technician students is enrolled only once every second or third year. After completing medical secondary school with last year specialisation in physiotherapy, graduates are entitled to work as physiotherapy technicians. Their role in rehabilitation facilities is to provide hydrotherapy, massage, electrotherapy, and basic physical therapy treatment.

Physiotherapy technicians can also continue with post-secondary education at Physiotherapy College, which is an additional 2 year study. Such Colleges exist in Sarajevo, Tuzla, Mostar, Bihac, Banja Luka, Foca/Srbinje.

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20 Decision on Direct Participation of Insured Persons in the Health Care Expenses on the Territory of Una-Sana Canton ("Official Gazette of Una-Sana Canton", no. 6/99).

21 RS Law on Health Insurance ("RS Official Gazette" no. 18/99), and RS Decision on personal participation of insured persons for health care expenses, June 20th 2001.
Programs vary between schools and range from 2 to 4 year degree programs. In Sarajevo for instance, the physiotherapy post-secondary program lasted 3 years and was recently changed to a 4 year Bachelor degree program at the High Health School, University of Sarajevo. High-level physiotherapists then work as a rehabilitation team members, and provide patients with physiotherapy treatment. In most of the facilities their role is still solely considered as performing the physiatrists’ prescription.

There is currently no occupational therapy education in BiH.

**Defectologists**

The defectology was created during the 1930’s, based on the work of L.S. Vygotsky, a Russian developmental psychologist. The profession latterly developed in most of the eastern communist countries. Defectology defines itself as “a unified approach to the study and treatment of people with disabilities. Within this approach children with disabilities are viewed as bio-psychosocial beings governed by the same laws of development as other children but with complications resulting from an impairment. Defectology is a multi disciplinary approach that brings together psychology, medicine, philosophy, sociology and political theory in order to diagnose, educate and rehabilitate people with mental and physical handicaps.”

Defectology comprises of 5 specialities:

- Oligophrenology deals with persons with intellectual impairment;
- Somatopedy deals with persons with physical impairment;
- Tiphology deals with persons with visual impairment;
- Surdology deals with persons with hearing impairment;
- Logopedy deals with persons with speech impairment.

Defectologists work mainly with children with disabilities, often in special schools or in centres for social work (where they expertise the developmental skills of the disabled children, monitor their development and provide occasional treatment), but they can also be employed in rehabilitation centres, special hospitals or social residential institutions.

There is one Defectology Faculty in BiH, in Tuzla, which was established on 1993. It comprises 5 branches (for each speciality). Studies last for 4 years.

**Ortho-prosthetic technicians**

There is no specific education program for ortho-prosthetic technicians in BiH. There is no official recognition of the ortho-prosthetist profession. Most of the existing professionals have an educational background that ranges from medical secondary school to various handicraft professional experiences. They have often received some short-term ortho-prosthetic training, provided by some international organisations and lasting from 1 to 10 months. Recently, Otto Bock (which is the leading ortho-prosthetic components producer in Europe) took the lead in such short-term education, offering 1-4 week courses for staff of workshops purchasing Otto Bock equipment and components, at its regional centre Otto Bock Adria located in Samobor in Croatia. Nevertheless according to ISPO (International Society of Prosthetics and Orthotics) standards, the education program for high-level ortho-prosthetic technicians requires a minimum of 3 years.

A US based NGO, the Centre for International Rehabilitation (CIR) has established an upgrading educational program in BiH. The curriculum is designed in a modular way, and based on international standards. The theoretical part is made by distance learning, through the CIR website. The practical part and examinations are held in Tuzla. 23 students from 12 different workshops in BiH are enrolled. The program should soon be expanded to other parts of the region, like Albania and Serbia.

**Number of PMR professionals**

The table 4 shows the number of physiotherapy workers and physiatrists. Even though these figures are likely to underestimate the actual number of rehabilitation professionals to some extent (those working solely privately have not been registered), the figures collected for the present survey show a shortfall of rehabilitation professionals. According to WHO standards, an average of 1 physiotherapy worker for 2,000 inhabitants is required to answer the needs of a population. Adding here high-level physiotherapists and physiotherapy technicians, it gives a figure of 1 physiotherapy worker for 5,443 inhabitants, which is less than half what would be needed.

**Ortho-prosthetic technicians**

In the 11 ortho-prosthetic workshops that we interviewed or visited, we numbered 35 ortho-prosthetic technicians. We estimate that the total
Table 4 - Number of physiotherapy workers and physiatrists in BiH (a comparative table showing the number of professionals for each country of the report is shown in annex 3).

<table>
<thead>
<tr>
<th></th>
<th>FBIH* Number</th>
<th>RS** Number</th>
<th>Brcko Number</th>
<th>Bosnia and Herzegovina Number</th>
<th>Ratio professionals/inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>High level physiotherapists (PT)</td>
<td>90</td>
<td>102</td>
<td>3</td>
<td>195</td>
<td>1/21,159</td>
</tr>
<tr>
<td>Physiotherapy technicians (PTT)</td>
<td>305</td>
<td>250</td>
<td>4</td>
<td>559</td>
<td>1/7,381</td>
</tr>
<tr>
<td>PT+PTT</td>
<td>395</td>
<td>352</td>
<td>7</td>
<td>754</td>
<td>1/5,472</td>
</tr>
<tr>
<td>Physiatrists</td>
<td>125</td>
<td>83</td>
<td>1</td>
<td>209</td>
<td>1/19,742</td>
</tr>
<tr>
<td>Nurses in rehabilitation</td>
<td>212</td>
<td>220</td>
<td>7</td>
<td>439</td>
<td>1/9,399</td>
</tr>
</tbody>
</table>

* The Public Health Institute provided figures for the FBiH;  
** Figures for RS were calculated adding those collected from each facility;

The number of ortho-prosthetic technicians is likely to be between 60 and 70. Two of them have a high-level ortho-prosthetic technician (engineer) diploma (one completed his degree in Belgrade, the other recently graduated in Ljubljana). If one refers to WHO and ISPO, the number of persons needing ortho-prosthetic appliances is estimated to be between 0.5 and 0.8 % of the total population. The optimal number of qualified professionals to meet those needs should be one professional per 500 to 1000 persons needing ortho-prosthetic devices. According to these recommendations, BiH would need between 22 and 71 ortho-prosthetic technicians. Thus the quantity of professionals is theoretically sufficient, but the main problem is their educational level and the absence of recognition of the profession.
4.1. Health Care System

Historical Background

The health care system of the Former Yugoslav Republic of Macedonia (FYROM) shares the same legacy with the other republics from the former Yugoslavia, with the same characteristics: compulsory health insurance ensuring universal access to health services; decentralised system of health care financing and service provision with weak central planning, leading to an uncontrolled growth of health institutions with duplication of services; and unclear distinction between primary and secondary level, with specialised care occupying a predominant position at the expense of insufficiently developed family medicine and prevention.

During the first years following the independence of the FYROM, the joint effects of the United Nations trade sanctions against the Federal Republic of Yugoslavia (one of the FYROM’s main trading partners) and of the trade blockade by Greece in 1994-1995, in September 2001, had a major impact on the country’s economy, with a situation of hyperinflation and decreasing of the GDP. A dramatic fall in health public budget followed, with a decrease by 40% during the period 1991-1995. To decrease health expenditures and create additional health financing sources, the government set up a system of co-payment for all health services in 1992. Whilst it had limited effect on health finances, it brought about inequity in access to health services. Meanwhile, low investments and low salaries in the health sector had a negative impact on the quality of health services.

Health care delivery system

The FYROM health care system is quite well developed, but shows a geographical inequality with a lack of facilities and of professionals in rural areas. The development of private practices accentuates this misbalance, most of the professionals choosing the urban areas to set up their private practices.

Primary Health Care

Medical units provide primary health care (PHC) throughout the country (1,284 in total, 294 of which are set in rural areas). Each of them is staffed by at least 1 physician (often part-time in rural areas) and one nurse. Then at district level, there are 18 Health Centres, set in small cities, which provide PHC as well as some specialised ambulatory services. In bigger cities, the Medical Centres (16 in total) are secondary level ambulatory polyclinics that provide PHC as well.

The role of PHC is to provide early detection, health education and prevention, maternal care, childcare and basic medical treatment and follow-up. Patronage nurses perform home visits for target groups. PHC should be the first contact of the patient with the health care system. Nevertheless, with the existing unclear differentiation between the two levels, PHC is reportedly under-utilised. To strengthen its gatekeeping role, the "selected primary physician" scheme was introduced in 1997. This selected physician is responsible for general medical services at the PHC level, and for referral at secondary and tertiary levels. The Health Insurance Fund (HIF) would fund medical services only if prescribed by this selected physician. Up to now the system has been only partly implemented.

In addition to public facilities, there are over 200 registered private PHC practices.

Secondary Health Care

Hospital health care is provided in 16 General Hospitals that offer a range of medical and surgical specialised services, whilst ambulatory polyclinics in the 16 Medical Centres provide specialised outpatient diagnosis, medical treatment and rehabilitation. There are in addition 13 Specialised Hospitals, including 7 Rehabilitation Centres.

Tertiary Health care

The Clinical Centre and the Institutes are all located in Skopje. They are providing tertiary care referral services for the whole country, plus secondary care services for the local population.

26 Ibid, p 16.
Health care financing

Sources of financing
In 2001, total health expenditures accounted for 6.8% of Macedonia’s GDP, with 84.9% being financed from public budget (including 74.3% from Health Insurance Fund), and 15.1% from household out-of-pocket payments. Per capita total expenditure on health was US$ 115 per person in 2001 (at average exchange rate)\(^\text{28}\). A comparative table with figures from all the countries included in this report is shown in annex 4.

Financing mechanisms
The HIF used to be under the Ministry of Health, but it is now a public independent institution directly accountable to the Parliament, through a management board of 13 members that includes 6 representatives of users. It collects contributions from citizens’ incomes (employees, self-employed and pensioners). Certain uninsured citizens, like social care recipients or children and mothers, are subsidized by the State budget.

The HIF contracts health care providers, both public and private, and reimburses them for the services they provide, according to health care benefits set by the Health Insurance Law. There are in total 1500 registered private health care organisations, of which more than 300 (mainly medical practices) are contracted by the HIF\(^\text{29}\).

Health care benefits
Compulsory health insurance covers all employees from public or private sectors, the retired, the students, persons with disabilities, the social care recipients, and their dependants. All those insured have access to a basic care package, as defined in article 9 of the Health Insurance Law. This package notably includes primary health care, a specialist ambulatory and inpatient care including rehabilitation (except for chronic and degenerative diseases), pharmaceutical drugs, prosthetics, braces, and salary replacement during sick leave.

All patients, children included, must contribute to the costs of health care services, through a system of co-payments. The only exceptions are persons in social need, persons accommodated in psychiatric hospitals, medical check-ups when provided by the selected primary health care physician, and emergency treatment for insured persons. Levels of co-payment are for instance 120 denars (2 EUR) per inpatient day care in hospital, 70 denars (1.1 EUR) for one ampoule of injected drugs, 2000 denars (32 EUR) for magnetic resonance imaging, and 20% of the total price of health services + accommodation + drugs for inpatients in hospitals\(^\text{30}\).

Additional cash payments exist for uninsured persons, or in private health care organisations to cover the difference between the price paid by the HIF and the actual cost of the services. Furthermore, informal cash payments such as under the table payment seem to be frequent. Such practices tend to prevent the poorest part of the population from equal access to health services, especially for specialised care.

Reforms in Health care system
Since 1991, the main trend was towards development of central coordination and planning for health financing and health care provision, in order to ensure efficient services that correspond to the needs of the population, with the resources available. The Health Insurance Law in 2000 has redefined the basic care package. One of the aims is to redirect resources to primary health care (PHC) and prevention. Strengthening Primary Health Care remains a priority, which requires a better geographical coverage in rural areas, an improvement of family medicine under-graduate and continuing education, and a functional separation between primary and secondary health care levels in order to enable PHC to play a real gate-keeping role\(^\text{31}\).

Population’s health
Some selected demographic and health indicators about the FYROM for the year 2002 are presented in Table 5\(^\text{32}\).

4.2. PMR STRUCTURES
The FYROM has a number of PMR facilities at secondary and tertiary level. The main limit, as explained in the next paragraph, is the lack of qualified physiotherapists, which notably hinders the access to rehabilitation services at community level. Co-payments exist for rehabilitation services as for the rest of health care services.

PMR services within Primary Health Care
Usually outpatients’ rehabilitation services are available in Health Centres and in Medical Centres. However due to the lack of qualified physiotherapists, some of those facilities do not provide rehabilitation services, and in many places only physiotherapy technicians are working. Duration of treatment cannot exceed 21 days, and must be prescribed by a physician to be

\(^{28}\) Figures from WHO Core Health Indicators: http://www3.who.int/whosis/country/indicators.cfm
\(^{29}\) Ibid, p11.
\(^{30}\) Ibid, p 16.
\(^{31}\) Ibid, p 52-53.
\(^{32}\) All statistics are from WHO Core Health Indicators: http://www3.who.int/whosis/country/indicators.cfm
PHYSICAL REHABILITATION SERVICES IN SOUTH EAST EUROPE

Macedonia

Table 5 - Selected demographic and health indicators for FYROM (2002)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>2,046,000 habitants</td>
</tr>
<tr>
<td>Percentage of population aged 60+ years</td>
<td>14.7</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>69 (males)/ 74.1 (females)</td>
</tr>
<tr>
<td>Child mortality (probability of dying under age 5 per 1,000)</td>
<td>17 (males)/ 15 (females)</td>
</tr>
</tbody>
</table>

*A comparative table with all the countries from the analysis is available in annex 2.

covered by the HIF (except co-payment). There are also some private rehabilitation practices, some of which are accredited by the HIF.

There are also two Developmental Counselling Centres in Skopje and Bitola. Set within PHC facilities, they provide comprehensive multidisciplinary services such as early detection, diagnosis, ambulatory rehabilitation treatment and follow-up for children with disabilities 0-6 years old and advice or counselling to their parents.

Rehabilitation centres

In FYROM there are 7 Rehabilitation Centres, which include 3 rehabilitation institutes (Medical Rehabilitation Institute for Orthopaedic Diseases in Skopje, and two Institutes for Speech and Hearing Disabilities in Skopje and Bitola) and 4 spas (Katlanovo, Debar, Bansko and Negorci). Additionally there are 4 special hospitals for rehabilitation of persons with mental disabilities (Ohrid, Demir Kapija, Demir Hisar and Bardovci).

Hospitals

Secondary level ambulatory rehabilitation treatment is provided in specialised ambulatory polyclinics (Medical Centres). Hospitals and the Clinical Centre provide integrated rehabilitation services, which are often part of orthopaedic departments.

Ortho-prosthetic centres

The main facility in the FYROM is the Slavej ortho-prosthetic centre. It was created in 1949 and was initially a public facility, but was privatised in 1990. It has 50 employees, and produces a wide range of orthotic devices, lower limb and upper limb prostheses, orthopaedic shoes, as well as crutches and wheelchairs. Appliances produced are partly covered by the Health Insurance Fund, which launches an annual tender to select orthopaedic services suppliers and determine their prices. For each type of appliance there is one contractor selected (but in the close future their might be a system of accreditation for several suppliers). For manufactured orthotic and prosthetic devices Slavej is till date, the sole supplier contracted by the HIF.

There are several smaller companies (such as "Partner", "Ilinden 96"...) that import orthopaedic material and sell small orthotic appliances.

The co-payments for orthopaedic and ortho-prosthetic devices are the following: children below 15 get all appliances free of charge, whilst adults must participate with 40% of the cost for orthopaedic shoes and 10% of the cost for orthoses. Prosthesis are always provided free of charge, as well as wheelchairs for a defined list of medical conditions.

4.3. PMR PROFESSIONALS

Within the former Socialist Federal Republic of Yugoslavia (SFRY), Macedonia did not have any post-secondary education facility for physiotherapists. This situation did not change, and since the breakdown of the SFRY physiotherapy technicians do not any longer have the opportunity to study in Belgrade, Sarajevo or Zagreb. As a result, most of the physiotherapists' positions are currently filled by physiotherapy technicians.

Education of PMR professionals

Physiatrists

A 3 year physiatry specialisation is available at the Medical Faculty in Skopje. Most of the specialisation takes place in the Medical Rehabilitation Institute in Skopje.

Physiotherapists and physiotherapy technicians

There are 3 Medical secondary schools in Skopje, Tetovo and Stip, which provide 4 year physiotherapy education program, among other health technicians' studies. There is no post-secondary education available in FYROM for physiotherapists. Therefore most of the physiotherapists employed in health care institutions only have a secondary level degree. The few existing high-level physiotherapists were trained in other republics of former Yugoslavia.

33 The co-payment rate for orthoses for adults was recently brought down from 40% to 10% following a lobbying campaign from associations of persons with disabilities.
Defectologists

The Defectology Institute is part of Skopje Faculty of Philosophy. It graduates 20 to 50 general defectologists per year. It was created in 1993. The 4-year curriculum is a general one, with focus on education of children with different types of disabilities. This general education of defectologists differs from the division into 5 branches that exists in Belgrade or in Tuzla. However in Skopje the students have the possibility after they graduate as general defectologists to specialise one year in one of the following four fields: intellectual impairment, surdology, tiphilology (visual impairment) or somatopedy (physical impairment). There is also postgraduate education available at the master and doctorate levels. Over the past few years, the Institute has put the emphasis on the development of inclusive education.

Defectologists are employed in special schools, in centres for social work (where they expertise the developmental skills of the disabled children, monitor their development and provide occasional treatment), and also in all health institutions and social institutions dealing with diagnosis and rehabilitation of children with disabilities (for general information about defectology, please refer to the section on BiH, page 24).

Ortho-prosthetic technicians

No educational program is available in the FYROM for ortho-prosthetic technicians. The Slavej Centre has sent one of its employees for training at the high-level ortho-prosthetic technician program of the Health College in Ljubljana, thanks to ITF funding.

Number of PMR professionals

The table below shows the number of PMR professionals employed in the FYROM's health institutions. Figures are from the Republic Institute for Health Protection (under Ministry of Health) and from the Republic Employment Office for the number of unemployed professionals.

### Table 7 - Number of PMR professionals in the FYRoMacedonia.

<table>
<thead>
<tr>
<th></th>
<th>Total number</th>
<th>Ratio professionals /inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>High level physiotherapists (PT)</td>
<td>72</td>
<td>1/28,417</td>
</tr>
<tr>
<td>Physiotherapy technicans (PTT)</td>
<td>274</td>
<td>1/7,467</td>
</tr>
<tr>
<td>PT+PTT</td>
<td>246</td>
<td>1/8,317</td>
</tr>
<tr>
<td>Occupational therapists</td>
<td>15</td>
<td>1/136,400</td>
</tr>
<tr>
<td>Physiatrists</td>
<td>125</td>
<td>1/24,368</td>
</tr>
<tr>
<td>Defectologists</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Nurses in rehabilitation</td>
<td>/</td>
<td>/</td>
</tr>
</tbody>
</table>

*A comparative table with all the countries from the analysis is available in annex 3.*
5.1. HEALTH CARE SYSTEM

Historical Background

As in the former Socialist Federal Republic of Yugoslavia (SFRY), in Serbia and Montenegro the Health Care System was developed based on the principle of universal coverage for the entire population, financed by compulsory public health insurance. The principles of "self-management" were introduced into the health care system during the 1960s, and resulted in a decentralised organisation of the provision of health services. Particularly, a high responsibility was given to local communities (at municipality level) for planning, prioritising and financing primary health care. The health system was financed locally through institutions called "self-managed communities of interest", which provided health service insurance, social security and disability insurance to employees and their families.

Both Serbia and Montenegro inherited from that period a network of over 300 well-developed health institutions, organised into 3 levels of health care services. The Primary Health Care System was organised to play a gate-keeping role to the entire system. Universal and free access to health system allowed remarkable improvements in population health indicators, until the late 1980s.

Nevertheless, the lack of proper development planning resulted in an uncontrolled growth in the secondary and tertiary health care systems, which did not follow epidemiological trends and the population's needs. Meanwhile, within PHC the emphasis was put on curative and specialised treatment rather than on prevention and comprehensive family medicine\(^{34}\), as there was no clear distinction between PHC and ambulatory secondary health care (consultation of medical specialists).

Then during the 1990s, under Milosevic, the health care system was centralised similarly to the re-centralisation occurring in other segments of the society, decreasing the local communities' autonomy and reinforcing the central power control. Meanwhile, because of the socio-economic crisis the financial resources of the public Health Insurance Fund dramatically decreased. This situation led to deterioration of buildings and equipment, low salaries, lack of medicines, and thus to a drastic fall in the quality of medical services\(^{35}\) and a decrease in their accessibility.

Health care delivery system

The organisational infrastructure remains the same as in the former SFRY, with a provision of health care services systematised in three levels\(^{36}\).

Primary Health care

"Dom zdravlja" provides family medicine, maternal and childcare, and some specialist ambulatory care. "Dom zdravlja" usually covers a territory of 30,000 inhabitants, which corresponds to the administrative level of a municipality. Most of the time there is a First Aid and Emergency Care Centre ("hitna pomoc") connected to it. Each "dom zdravlja" has a home-care service (a patronage nurse does home visits on health education and prevention, focusing on target groups such as pregnant women, newborn, elderly people, persons with disability or chronic disease).

Under these centers, there is a network of ambulanta, which provides basic ambulatory PHC. They are sited in each small village. As previously mentioned, PHC does not really play its gate-keeping and preventive role, due to a rather curative approach and to bypassing.

Secondary Health care

General Hospitals (at District level) and some City Hospitals provide a range of medical and surgical services, normally following referral from primary health care level. There is also at that level a number of Special Hospitals that provide health care to people with specific types of diseases. The structure of hospital beds appears to be poorly adjusted to the needs, with an under utilisation of beds in many wards (mainly infectious diseases, paediatrics, obstetrics...)\(^{37}\), while there are insufficient

\(^{34}\) Common country assessment for Serbia and Montenegro - United Nations, Belgrade, October 2003, p32.
\(^{35}\) Ibid, p 32.
\(^{37}\) Ibid - p135.
capacities for treating the increasing number of patients with neurological, endocrine, cardiovascular or malign conditions.

**Tertiary Health care**

Clinical Centres, are situated in major cities (in Nis, Novi Sad, Kragujevac, Podgorica, and 4 in Belgrade), and are associated with Medical Faculties. They provide all types of advanced medical diagnosis and treatment. Most of these tertiary level facilities are overburdened and have long waiting lists, especially for services that use expensive imported materials\(^{38}\).

The overall organisation of health care system is the same in both Serbia and Montenegro, and follows the same trends. Nevertheless, significant discrepancies exist. In Montenegro the number of health workers and their level of education tends to be lower than in Serbia, and specialised health care services are also less developed there. There is also a lesser degree of development regarding outreach services in remote areas\(^{39}\) of Montenegro.

**Health care financing**

**Sources of financing**

In 2001, the total health expenditures accounted for 8.2% of Serbia and Montenegro's GDP, with 79.2% of total health care expenditure being financed from public source (including 70.8% from public health insurance funds), and 20.8% from household out-of-pocket payments. Per capita total expenditure on health was 103 USD per person in 2001 (at average exchange rate)\(^{40}\). A comparative table with figures from all the countries included in this report is shown in annex 4.

**Financing mechanisms**

Health care services are mostly financed by government-owned compulsory health care insurance, known as the Health Insurance Fund (HIF). The Montenegro HIF is organised similarly to the Republic HIF in Serbia. All persons working in the public sector are automatically given health insurance; those working in private institutions have to pay their contribution; health expenditures for unemployed persons under state programs are paid from the republican budget.

The private sector is developing, without appropriate regulations, and without being included in the health insurance schemes.

**Health care benefits**

All persons covered by the health insurance fund are entitled to health care assistance. Children, pregnant women, elderly (over 65 years), those with infectious diseases (including HIV), diabetes mellitus or cancer and blood donors are treated "free of charge" regardless of whether or not they have regular health insurance. Other insured persons have to contribute 20 dinars (0.3 EUR) to each medical exam and any other type of medical service.

Over the past few years, the lack of funds has led to huge discrepancies between the formal entitlements for beneficiaries and the resources available to actually provide those services. This situation contributes to a large deficit in the HIF. For the population, the result is a sharp increase of out-of-pocket payments for medicines, medical material, laboratory examinations, and informal payments. This has brought about inequity in access to health care services, affecting more particularly the poorest.

**Reforms in Health care system**

The PRSP for Serbia proposes a number of measures aiming at improving the quality and financial accessibility of health care services for vulnerable groups\(^{41}\). Among these measures that are recommended are: the definition of a sustainable basic package of health services, the reorganisation of health care institutions for better distribution of resources with an emphasis on prevention, the development of primary health care (and thus the development of adequate post-graduate education for general practitioners and nurses, whose roles should be strengthened), and the development of accreditation systems for health care institutions.

**Population's health**

Some selected demographic and health indicators about Serbia and Montenegro (not including Kosovo) for the year 2002 are presented in Table 8.

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\(^{38}\) Ibid.


\(^{40}\) Figures from WHO Core Health Indicators: http://www3.who.int/whosis/country/indicators.cfm

\(^{41}\) PRSP for Serbia.
5.2. PMR STRUCTURES

Serbia and Montenegro have inherited a number of highly specialised and well-equipped PMR institutions from the Yugoslav health care system. Those PMR institutions suffered to various degrees from the overall deterioration of the health care system due to low salaries and lack of investments, but some of them do offer quality rehabilitation services, despite the limited resources and low salaries.

Rehabilitation services at PHC level

Theoretically each “dom zdravlja” should have a PMR department and provide primary level rehabilitation. However, in practice many of them do not have any physiotherapist, especially in small municipalities or in rural areas. If it is the case, the outpatient department of the closest General Hospital is responsible for provision of primary level rehabilitation. In some cases, a rehabilitation centre can also fulfil this role. The most frequent diseases treated include acute and chronic orthopaedic diseases, paediatric cases, and some neurological diseases. Upon medical prescription, treatment is provided free of charge.

In Montenegro for instance, only 5 “dom zdravlja” out of 21 provide rehabilitation services. In addition to these PHC structures, many rehabilitation centres also provide ambulatory services for outpatients, and there are 2 registered private ambulatory physiatric facilities in Podgorica and Igalo.

These ambulatory services are oriented mostly towards orthopaedic or traumatic diseases, and light neurological impairments. Physical therapies (such as electro-therapy, para-fango therapy, or magnet-therapy) represent a significant part of the treatment. However, in Belgrade and in other major cities, some “Developmental Counselling Centres” have been established providing services for families with newborn children with developmental problems in terms of early diagnostic and prevention from further complications, as well as early rehabilitation treatment and referral to relevant specialised institutions. These centres, located within “dom zdravlja”, also provide services to the parents of these children such as advice and counselling. There are 37 such centres, out of which 10 are located in Belgrade, and 27 in other towns. Each of them is usually staffed with a multidisciplinary team comprised of a physician, a nurse, a defectologist, a social worker and a psychologist, but staffing significantly varies from one place to another. The rural population most often lacks access to such support services.

Rehabilitation centres

Many rehabilitation centres were developed in the former SFRY, mainly during the 1970s. Two types of rehabilitation facilities were developed: specialised hospitals for rehabilitation, dedicated to long-term and specialised rehabilitation (for instance for cerebral palsy, or for paraplegia...); and climatic centres or spas. The latter category, providing water therapy or climatic rehabilitation, was primarily aimed at rehabilitation of workers (treatment of work-related injuries and prevention of disabilities). Over time some of the spas developed specialised services and offered medical rehabilitation as well. Thus the distinction between the two categories is not so obvious nowadays:

On the one hand, there are a number of facilities, called spas (“banja”), which turned out to become recreational centres offering some kinds of physical therapies. They are placed under Ministry of Tourism, and are not part of the health care system, properly speaking. They provide services for self-paying clients only.

On the other hand, rehabilitation centres are under the authority of the Ministry of Health. This category includes Special Hospitals for Rehabilitation (“specijalna bolnica za rehabilitaciju”), Institutes for Rehabilitation

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Table 9 - Number of rehabilitation centres and spas in Serbia and Montenegro.

<table>
<thead>
<tr>
<th>Rehabilitation centres</th>
<th>Serbia</th>
<th>Montenegro</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Rehabilitation Hospitals</td>
<td>7</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Institutes/Institutions for Rehabilitation</td>
<td>15</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Rehabilitation Clinics</td>
<td>1</td>
<td>/</td>
<td>1</td>
</tr>
<tr>
<td>Military/Police Rehabilitation Centres</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Spas/Banja</td>
<td>8</td>
<td>/</td>
<td>8</td>
</tr>
</tbody>
</table>

44 For instance, a child with Cerebral Palsy is entitled to 4 sessions of inpatient rehabilitation treatment, free of charge, including 3 before the age of 3, the fourth being before he/she is 7 years old.

lun, metabolic and endocrine diseases, or for orthopaedic and neurosurgical diseases. Some psychiatric hospitals also have rehabilitation professionals.

**Ortho-prosthetic centres**

Serbia has 5 main public (or semi-public) ortho-prosthetic centres. The **Prosthetic Centre in Belgrade** (Zavod za Protetiku) is a multidisciplinary rehabilitation institution, with 211 rehabilitation beds and an integrated ortho-prosthetic workshop. Four others are solely ortho-prosthetic manufacturing workshops such as: **Rudo-Belgrade, Rudo-Nis, Ortho-pedia** in Kragujevac and **Dunav** in Novi Sad. Besides these, there are several private ortho-prosthetic workshops, which are often at the same time medical material importers (like for instance Orthoaid, Ortopedija-lek, Ortopedija-Nov Zivot, Ortopedija Holding & co, Una Ortopedija....) that have several branch offices throughout Serbia.

Ortho-prosthetic devices, orthopaedic shoes, wheelchairs and walking aids are paid by the HIF, without participation, depending on the medical diagnosis. Manufacturers and providers are selected through annual tender. HIF selects the providers for each type of device and signs contracts according to the tender prices. To get a device, a patient needs a medical prescription, which has to be validated by a medical commission. Then the HIF refunds the provider for the price of the device. The prices paid from the HIF usually cover very basic quality devices. If the person wants better quality or additional parts, then he / she will need to pay for the difference.

In Montenegro there is one public **Ortho-Prosthetic Centre “Rudo” in Podgorica**, providing orthotic and prosthetic devices, orthopaedic shoes, wheelchairs and crutches. All of these devices are provided free of charge for all insured patients, after the prescription made by a physiatrist or an orthopaedist (neurologists as well for wheelchairs, crutches or orthoses) has been checked by the HIF commission.

The device can be renewed only after a period of 2 years for prosthesis, 12 months for orthoses, 15 months for shoes (12 months for children) and 5 years for a wheelchair.

### 5.3. PMR PROFESSIONALS

**Education of PMR professionals**

**Physiatrists**

Physiatrists are medical doctors who completed 6 year studies at a medical faculty, and then specialised for 3 years in physical medicine and rehabilitation. Medical faculties exist in Nis, Novi Sad, Kragujevac, Podgorica, and Belgrade.

**Physiotherapists and physiotherapy technicians**

**Medical secondary schools** located in the main municipalities provide a 4-year education program for various health technicians (such as physiotherapy technicians, nurse technicians, lab technicians, pharmacy technicians...etc). Students are enrolled after finishing primary school, usually at age 14. After completing medical secondary school making a specialisation in physiotherapy in the last year, graduates are entitled to work as physiotherapy technicians.

Physiotherapy technicians can also continue with post-secondary education. In Belgrade the Medical High-School provides post-secondary education for various para-medical professions.

**Post-secondary physiotherapy educational program** lasts for 3 years. It includes a branch for occupational therapists. However, the role of physiotherapists and occupational therapists remains limited often times to executing the prescription of physicians, in an overspecialised and fragmented approach rather than a real interdisciplinary work. Occupational therapists are insufficiently present in PMR structures, and their role is often limited to the domain of psychiatry.

In Montenegro there is also one physiotherapy college in **Igalo**, enrolling 35 students a year. It used to be a 2-year education programme, and from 2004 it became a 3-year programme.

**Defectologists**

The Defectology Faculty, in Belgrade, is comprised of 5 branches corresponding to each of the 5 sub-disciplines (oligophrenology, somatopedy, tiphilology, sirdology and logoped). Studies last for 4 years (for general information on defectology, please refer to the BiH section, page 26).

Defectologists are working mainly with children with disabilities. Most of them are employed in special schools or in centres for social work (where they work to build the developmental skills of the disabled children, prepare the documentation for the Commission for Categorisation, monitor their development and provide occasional treatment). They can also work in rehabilitation centres, special hospitals or social residential institutions.

**Ortho-prosthetic technicians**

There is no specific educational program for ortho-prosthetic technicians in Serbia and Montenegro. Few public ortho-prosthetic companies like Rudo used to be accredited to provide professional on-the-job training to their workers. The staff working as ortho-prosthetic
Technicians usually have either a mechanic technician or a health technician background.

The Medical High-School in Belgrade opened a post-secondary educational program for OP technicians in 1974, supported by the United Nations, but the program functioned only until 1977.

**Number of PMR professionals**

The table below shows the number of PMR professionals in Serbia and Montenegro. Figures are calculated from the field assessment done by Handicap International consultants who contacted each health institution and crosschecked with data from professional associations. For Montenegro, all the institutions replied and the figures are reliable. For Serbia, answers were obtained only from 2/3 of the health institutions (figures calculated from the data provided by these institutions' data are shown in brackets). However, matching those figures with those from professional associations enabled us to estimate the global figures that are indicated in the table, which should thus be interpreted cautiously. Regarding defectologists in Serbia, only those working in PMR facilities were counted in our assessment, and not those working in special schools or centres for social work.

Our assessment identified only 24 ortho-prosthetic technicians, but this figure is likely to be sharply under-estimated, as small private workshops could not be contacted.

**Table 10 - Number of PMR professionals in Serbia and Montenegro.**

<table>
<thead>
<tr>
<th></th>
<th>Serbia</th>
<th>Montenegro</th>
<th>Serbia and Montenegro</th>
<th>Ratio professionals /inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>High level physiotherapists (PT)</td>
<td>1,200 (813)</td>
<td>194</td>
<td>1,394</td>
<td>1/5,862</td>
</tr>
<tr>
<td>Physiotherapy technicians (PTT)</td>
<td>750 (507)</td>
<td>127</td>
<td>877</td>
<td>1/9,350</td>
</tr>
<tr>
<td>PT+PTT</td>
<td>1,950 (1,320)</td>
<td>321</td>
<td>2,271</td>
<td>1/3,610</td>
</tr>
<tr>
<td>Occupational therapists</td>
<td>170 (118)</td>
<td>/</td>
<td>170</td>
<td>1/48,235</td>
</tr>
<tr>
<td>Physiatrists</td>
<td>600 (418)</td>
<td>58</td>
<td>658</td>
<td>1/12,462</td>
</tr>
<tr>
<td>Defectologists</td>
<td>(48)</td>
<td>121</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Nurses in rehabilitation</td>
<td>(901)</td>
<td>214</td>
<td>/</td>
<td>/</td>
</tr>
</tbody>
</table>

*A comparative table with all the countries from the analysis is available in annex 3.*
6.1. HEALTH CARE SYSTEM

Historical Background

The Health Care System in the UN Administered Province of Kosovo followed the same organisational model as in the rest of the former SFRY (refer to the paragraph in Serbia and Montenegro). Kosovo has always been considered as the poorest and the least developed part of the former SFRY, and the population’s health status reflected this as it was extremely low, with almost all health indicators being among the worst in Europe. The situation got even worse during the 90s due to the deterioration of the province’s economic situation and to the impact of the political situation. The decreased funding in the health sector over the decade resulted in a deterioration of the health sector’s infrastructure46. Additionally, the majority of the Albanian population did not have access to health services, and likewise many Albanian health workers were excluded from working within the public health care institutions. This situation led to the development of parallel systems of service provision and health care worker trainings.

The legacy of this decade remains, with a lack of properly trained health professionals and poorly developed health infrastructures, despite of investments made by foreign organisations. The health management capacities are extremely low. Another worrying issue is the restricted access for the Serbian ethnic minority to health care services (especially secondary and tertiary levels). In the northern part of Kosovo the Mitrovica Hospital provides such services, but in other “minority areas” there is often a lack of health care facilities.

Health care delivery system

Primary Health care

In each of the 31 municipalities there is one Main Primary Medicine Centre, coordinating the delivery of primary health care (PHC) level services in the municipality. It is also the first referral level, as it offers a range of laboratory examinations and some specialised ambulatory medical care. Under each Main Primary Medicine Centre, there is a number of Family Medicine Centres, usually staffed with one general practitioner and some nurses, providing family medicine and mother-child care.

Significant efforts were made over the last 5 years to renovate and equip these PHC facilities, and to improve the geographic distribution of these services.

Secondary Health care

There are 6 Regional Hospitals providing a range of specialised medical and surgical treatments (in Prishtinë/Pristina, Mitrovica/-ë, Peja/Pec, Gjakovë/Djakovica, Gjilan/Gnjilane and Prizren).

Tertiary Health care

Pristina Clinical Centre is the referral health institution for the province. Despite many investments, it remains overloaded and lacks sufficient and properly trained professionals. The management is very weak, and there is a lack of proper health information systems.

Health care financing

There is still no health insurance system re-established. Figures on health care financing sources and health expenditures are not available. The Kosovo Health budget directly covers the expenditures of Pristina Hospital, regional hospitals, and the salaries of health professionals working within PHC. Services that are provided by institutions at three levels are free of charge. A participation fee of 0.5 EUR per consultation and 4 EUR/night in case of hospital stay was established in 2000, from which social welfare recipients are exonerated. Patients have to pay for their drugs, medical material, orthopaedic and assisting devices. Furthermore, anecdotal evidence points out that patients or relatives are often asked to pay for missing medical consumables even in health care facilities, and that under-the table payments are widespread. Humanitarian aid used to provide such supplies, but it is now decreasing. Informal private sector is developing, without any regulation, most of the medical professionals employed in public institutions having their own private practice.

Health Care Financing is one of the biggest challenges faced by Kosovo health care system. The

health budget remains insufficient to cover the population’s needs\textsuperscript{47}. The delay in the establishment of the future health insurance system (initially scheduled for 2002) is one of the main obstacles to an equal access to health services.

**Reforms in Health care system**

Many reforms were initiated under the UNMIK Department of Health to improve the health service delivery on all three levels. However, due to the legacy of the deep disorganisation of the whole health care system and to the lack of skilled health professionals, this reform process is particularly slow. Significant efforts have been made to strengthen primary health care delivery including: training programs for family doctors and nurses, decentralisation of primary health care management, and improving the geographic coverage of the network for family medicine centres.

Another major area for reform is the development of a proper health information system, which should provide reliable epidemiological data on the health status of the population, and allow better planning for health care provision. A health care financing system is yet to be established. It should ensure access of all citizens to primary health care with a strong emphasis on public health and prevention, and to a basic package of appropriate quality secondary and tertiary healthcare. The aim is also to establish a system of financing of health institutions based on contracting for the service they provide. Sustainable funding sources for health care will have to be ensured as the province is still affected by an unemployment rate higher than 60%.

**Population’s health**

Even though there is a lack of recent reliable demographic and epidemiologic data about Kosovo, the population’s health status probably remains among the worst in Europe. The population is around 2,000,000 inhabitants, with 8% of the population being aged 60 and over\textsuperscript{48}. Kosovo is estimated to have the highest infant mortality rate in Europe: 51.2 deaths per 1000 live births in 1989, with a more recent estimate of 35/1000 in 2000\textsuperscript{49}.

6.2. PMR STRUCTURES

PMR is poorly developed in Kosovo, and in general absent at the PHC level, which is mainly caused by a deep shortage in rehabilitation professionals. Existing structures are overloaded and the quality of services is low, the exception being the ortho-prosthetic centre in Pristina.

**Rehabilitation at Primary Health Care level**

There is no PMR service available within the primary health care system. Some non-governmental organisations, like Handikos, the association of persons with disabilities, are filling the gap providing Community Based Rehabilitation (CBR) services. Handikos has a network of 10 CBR centres throughout Kosovo, providing basic rehabilitation treatment and psychosocial activities to children with disabilities, and advice to their parents. The structure, which was up to now entirely funded by foreign donors, is struggling to ensure its financial sustainability. Negotiations were initiated to integrate those services within PHC (on the model of the 7 Community Mental Health Centres that were developed), but did not succeed so far.

Patients needing ambulatory physiotherapy treatments usually refer to hospitals or to the few additional facilities that provide such ambulatory physiotherapy treatments (there are 5 such facilities, in Pristina, Obilic, Peja/Pec, Gracanica and Strpce, but only the first two have a physiotherapist). Participation fee is 0.5 EUR per session, except in Gracanica and Strpce where patients are treated free of charge. These facilities are not connected with PHC. Additionally, there are 9 private ambulatory physiotherapy facilities (most of these physiotherapists being also employed in hospitals) where patients are charged 5 to 10 EUR per session.

**Rehabilitation centres**

**There is no proper rehabilitation centre** in Kosovo. Only 2 spas exist, Banja Peja and Banja Kllokott. Both provide recreational water treatment, as well as some physical therapies. They are poorly equipped and lack qualified rehabilitation professionals (Banja Peja has 6 high-level physiotherapists for a capacity of 200 beds, and Banja Kllokott 1 high-level physiotherapist for 210 beds). The medical environment is not sufficient to ensure safe medical accommodation for patients with severe impairments at the post-acute phase. The quality of services provided is poor. Clients have to pay the full price for their accommodation (18 EUR/day), whatever their medical or social status is.

**Hospitals**

**Pristina Clinical Centre** has a PMR department, with 10 beds, and a large ambulatory department. Premises are dramatically small and under-equipped; the staff is insufficient and permanently overloaded, without the basic conditions to provide quality treatment. Regional Hospitals in Mitrovica, Peja/Pec, Gjakova, Prizren and

\textsuperscript{47} The health budget for the year 2000 of UNMIK was about US$ 40 million, compared to an annual budget of $89 million in 1989 for the public health sector in Kosovo (Ibid, p 50).

\textsuperscript{48} Interim Health Policy Guidelines for Kosovo, WHO, Pristina, August 2000.

\textsuperscript{49} Kosovo Common Assessment - United Nations Development Group, January 2001, p 50.
Gjilan also have PMR departments, but only Mitrovica has some beds, and the last 3 do not have any physiotherapist (only technicians or nurses and one physiatrist).

This lack of specialised rehabilitation care capacities at both secondary and tertiary level is a major problem, as there is no appropriate service available for persons with severe impairments such as spinal cord injury, brain injury, stroke, polytrauma or cerebral palsy. Consequently, there is a high mortality rate among some of these groups, and they have a very poor and slow functional recovery. Pristina Clinical Centre is about to establish a multi-disciplinary spinal cord unit, with support from some French experts, Caritas Austria, as well as Handicap International.

Ortho-prosthetic centres
There is one ortho-prosthetic centre in Pristina, which is part of the Pristina Clinical Centre. Handicap International has supported the development of the centre from 1999 to 2004, providing training, management support, equipment and components. Orthopaedic shoes, prosthetic and orthotic devices were up to now provided free of charge to the patients, but the limited health budget might not be able to cover the supply of ortho-prosthetic components in the future. A cost recovery system should be set up, but the entire health care financing system must be established before this can happen. Humanitarian organisations no longer provide wheelchairs and crutches, and these devices are not affordable for most of the persons who would need such items.

6.3. PMR PROFESSIONALS

Education of PMR professionals

Physiatrists
Physiatry specialisation is available at Pristina Medical Faculty.

Physiotherapists and physiotherapy technicians
Health technicians (including physiotherapy technicians) at one time graduated from the medical secondary schools as in all other parts of the former SFRY. Due to the absence of a medical high school in Kosovo, few of these health technicians had the opportunity to pursue a higher education in Belgrade, Zagreb or Sarajevo. Therefore, technicians fill most of the nurse or physiotherapy positions within health institutions, without having adequate qualification. Furthermore, many of the young Albanian health technicians had to study in the parallel educational system, without proper conditions. The Ministry of Education decided in 2002 to close these medical secondary schools. The higher level education developed for nurses, midwives and physiotherapists will replace this system. The last generation was enrolled in September 2002.

A 3-year university bachelor level physiotherapy educational program was established within the Medical Faculty in October 2001. The program was supported by the French Red Cross, the International Centre for Advanced Research in Community Based Rehabilitation from Queen’s University in Canada, and Handicap International. A first generation of 19 students graduated in July 2004.

There is no training available for occupational therapists, speech therapists, defectologists or psychologists.

Ortho-Prosthetic technicians
There is no training available in Kosovo for such professionals. Handicap International has implemented an 18 month educational program in Pristina for 6 ortho-prosthetic assistants, and has financed the studies abroad for 3 high-level ortho-prosthetic technicians.

Number of PMR professionals
Kosovo faces a deep shortage of physiotherapists. The few high level physiotherapists who exist graduated in Zagreb, Belgrade or Sarajevo. Most of the other physiotherapy workers are physiotherapy technicians or nurse technicians. The ratio of professionals per inhabitants, even while counting the technicians, is severely insufficient for answering the needs of the population comparing with the objective of 1 physiotherapist for 2000 inhabitants. The ratio physiatrists / physiotherapists is 1.125, which also shows the lack of paramedical rehabilitation professionals.
Table 11 - Number of PMR professionals in the UN Administered Province of Kosovo.

<table>
<thead>
<tr>
<th>Profession</th>
<th>Number</th>
<th>Ratio professionals/inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>High level physiotherapists (PT)</td>
<td>24</td>
<td>1/83,333</td>
</tr>
<tr>
<td>Physiotherapy technicians (PTT)</td>
<td>70</td>
<td>1/28,571</td>
</tr>
<tr>
<td>PT+PTT</td>
<td>94</td>
<td>1/21,277</td>
</tr>
<tr>
<td>Occupational therapists</td>
<td>2</td>
<td>1/1,000,000</td>
</tr>
<tr>
<td>Physiatrists</td>
<td>27</td>
<td>1/74,074</td>
</tr>
<tr>
<td>Defectologists</td>
<td>1</td>
<td>1/2,000,000</td>
</tr>
<tr>
<td>Nurses in rehabilitation</td>
<td>41</td>
<td>1/48,780</td>
</tr>
</tbody>
</table>

*A comparative table with all the countries from the analysis is available in annex 3.*
CONCLUSION

A COMMON PROBLEM:
THE LACK OF SERVICES
TO FACILITATE
SOCIAL PARTICIPATION

The analysis of PMR services in Albania, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, Serbia and Montenegro and the UN Administered Province of Kosovo shows in most of the countries that a network of PMR facilities exists and there is a significant number of PMR professionals that constitute important assets for the provision of rehabilitation services to persons with disabilities. Still large discrepancies exist, such as Albania which is far behind due to the virtual absence of PMR professionals, and Kosovo which lacks PMR facilities and properly trained professionals. However some common weaknesses can be observed:

- There is a lack of PMR services at the community level, such services being often poorly developed within primary health care (except in some big cities).

- In all countries the quality of PMR services tended to decrease over the last 15 years due to war and conflicts, lack of financial resources and of professional upgrading.

- The absence of quality standards in the field of ortho-prosthetics and the absence of a clear definition of services provided in some rehabilitation centres lead to significant discrepancies in the quality of services actually delivered.

- The organisation of service delivery is very hierarchical, overspecialised and fragmented, with the physician often being the sole professional responsible for assessment and treatment planning. The other PMR professionals each perform their unique part of the planned treatment without having a comprehensive view over the person. This organisation often results in stereotyped treatments that do not take into account environmental factors and individual expectations.

- There is a lack of recognition of PMR professions such as physiotherapy, occupational therapy or ortho-prosthetics. Even though physiotherapy education was upgraded to the university level in some places like in Pristina or in Sarajevo, in most of the countries the diploma remains at the post-secondary level without any perspective for professional development. Occupational therapy exists only in Serbia, and there is no under-graduate study available in any country for ortho-prosthetic technicians.

- Significant inequalities in access to PMR services appeared, affecting mainly the poorest parts of the population who cannot afford the co-payments required. This is particularly true for ortho-prosthetics and other assisting devices, for which the part to be paid by users can be prohibitive in some countries.

Nevertheless, in each country some professionals, often in collaboration with associations of persons with disabilities and supported by foreign organisations, have developed alternative services with the aim of filling the existing gaps, based on holistic and individualised approaches, gathering professionals from various fields in interdisciplinary teams. Such successful initiatives demonstrate the feasibility of services set up at the community level and facilitating the full participation of persons with disabilities\(^{50}\). There is still a need to sustain and to replicate such services, which have proved in many other countries to facilitate social participation and to be more cost-effective.

TOWARDS MAINSTREAMED SERVICES FOR PERSONS WITH DISABILITIES

An improved access to rehabilitation\(^{51}\) in the local community for an equalisation of opportunities can be achieved only if disability is mainstreamed within the existing services available in the local community. This implies a

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\(^{50}\) Refer to the Handicap International forthcoming report: "Disability Monitor Initiative for South East Europe, Volume I: Beyond De-institutionalisation: The Unsteady Transition towards an Enabling System in South East Europe"

\(^{51}\) Rehabilitation being understood in its broad definition of "a process aimed at enabling persons with disabilities to reach and maintain their optimal physical, sensory, intellectual, psychiatric and/or social functional levels, thus providing them with the tools to change their lives towards a higher level of independence. Rehabilitation includes a wide range of measures and activities from more basic and general rehabilitation to goal-oriented activities such as vocational rehabilitation". Standard Rules on the Equalisation of Opportunities for Persons with Disabilities.
radical shift of the disability paradigm. Under the former care system for persons with disabilities, disability used to be considered as an individual pathology to be dealt with solely by disability specialists (such as defectologists or medical specialists) with the aim of protecting persons with disabilities. A mainstreamed system would consider disability as the result of a dynamic interaction between personal and environmental factors, and would aim at facilitating social participation. The second system would not consider the provision of specialised services for persons with disabilities solely, but would strive to ensure that all services that concern persons with disabilities are accessible to them. Any type of general professionals (educators, health professionals, social workers... etc) should therefore be given the information needed to be able to provide services to persons with disabilities taking into consideration their individual needs, and to refer them to specialists whenever needed. These principles are emphasised in the UN Standard Rules on the Equalisation of Opportunities for Persons with Disabilities\textsuperscript{52}.

To operate such a shift in paradigm, sensitisation of both PMR and general professionals is crucial, within their educational training programmes. Referring to a holistic explanatory model of disability such as the Disability Creation Process\textsuperscript{53} (DCP) model, offers interesting sensitisation perspectives, and provides as well reliable tools for interdisciplinary and individualised rehabilitation planning and evaluation (the DCP model is presented in annex 1).

UN Standard Rules on the Equalisation of Opportunities for Persons with Disabilities

\textit{Rule 19. Personnel training}

- States are responsible for ensuring the adequate training of personnel, at all levels, involved in the planning and provision of programmes and services concerning persons with disabilities.
- States should ensure that all authorities providing services in the disability field give adequate training to their personnel.
- In the training of professionals in the disability field, as well as in the provision of information on disability in general training programmes, the principle of full participation and equality should be appropriately reflected.

\textsuperscript{52} Standard Rules on the Equalisation of Opportunities for Persons with Disabilities, proclaimed by the UN General Assembly resolution 48/96 of 20 December 1993.

\textsuperscript{53} Canadian society on the International Classification of Impairments, Disability and Handicap, 1996
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Health Care in BiH in the Context of the Return of Refugees and Displaced Persons, July 2001, Geneva UNHCR

Health Care Systems in Transition: Bosnia and Herzegovina - Cain J. and Jakubowski E., Copenhagen, European Observatory on Health Care Systems, 2002; 4(7)


ANNEXES

- ANNEX 1 - Disability Creation Process Model

- ANNEX 2 - Selected Demographic and Health Indicators for the Year 2002 by Country

- ANNEX 3 - Number of PMR Professionals by Country

- ANNEX 4 - Health Care Expenditures by Country
ANNEX 1

The Disability Creation Process\textsuperscript{54} was developed by a team of Canadian researchers under the coordination of Patrick Fougeyrollas. It defines the disability (handicap situation) as a disturbance in a person’s life habits as a result of a dynamic interaction between personal factors (impairment or disability) and environmental factors (obstacles). Disability is therefore not a fixed state, but a dynamic process that varies according to the context and to the environment. According to this model, several types of actions can be undertaken to modify these interactions and achieve social participation: reducing impairment (medical care), developing capabilities (rehabilitation), as well as adapting the environment (elimination of physical obstacles, anti-discrimination and accessibility policies). Interesting tools for provision of interdisciplinary and individualised services for persons with disabilities were developed from the DCP, respecting the principle of choice and decision by individuals, such as the “individualised intervention plan”.

\begin{center}
\includegraphics[width=\textwidth]{disability_creation_process_diagram.png}
\end{center}

Disability Creation Process, Canadian Society on ICIDH, 1996

### Selected demographic and health indicators for the year 2002 by country

<table>
<thead>
<tr>
<th></th>
<th>Albania</th>
<th>BiH</th>
<th>FYRo Macedonia</th>
<th>Serbia and Montenegro</th>
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</thead>
<tbody>
<tr>
<td>Total population</td>
<td>3,141,000</td>
<td>4,126,000</td>
<td>2,046,000</td>
<td>8,200,000</td>
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<td>Percentage of population aged 60+ years</td>
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<td>15.3</td>
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<tr>
<td>Life expectancy at birth (years)</td>
<td>67.3 (male)/ 74.1 (female)</td>
<td>69.3 (male)/ 76.4 (female)</td>
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<td>Infant mortality rate (per 1,000 live births)</td>
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<td>10</td>
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<tr>
<td>Child mortality (probability of dying under age 5 per 1,000)</td>
<td>27 (male)/ 23 (female)</td>
<td>20 (male)/ 15 (female)</td>
<td>17 (male)/ 15 (female)</td>
<td>17 (male)/ 13 (female)</td>
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## Annex 3

<table>
<thead>
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<th>Country</th>
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<th>Ratio</th>
<th>Total number</th>
<th>Ratio</th>
<th>Total number</th>
<th>Ratio</th>
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<td>High level physiotherapists (PT)</td>
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56 UN Administered Province of Kosovo
### Health care expenditures by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Per capita total expenditure on health at average exchange rate (USD)</th>
<th>Total expenditure on health as % of GDP</th>
<th>Government expenditure on health as % of total expenditure on health</th>
<th>Social security expenditure on health as % of general government expenditure on health</th>
<th>Private expenditure on health as % of the total expenditure on health</th>
<th>Out-of-pocket expenditure on health as % of private expenditure on health</th>
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<td>19.3</td>
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<td>36.8</td>
<td>/</td>
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<td>91.8</td>
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<td>United States of America</td>
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