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# Mapping the governance of human resources for health in Serbia

Milena Santric Milicevic[a,b,*], Milena Vasic[c], Matt Edwards[d]

[a] Institute of Social Medicine, Faculty of Medicine University of Belgrade, Dr Subotica 15, 11000 Belgrade, Serbia
[b] Centre – School of Public Health and Health Management, Faculty of Medicine University of Belgrade, Pasterova 2, 11000 Belgrade, Serbia
[c] Institute of Public Health of Serbia, Department for International Cooperation and Project Management, Dr Subotica 5, 11000 Belgrade, Serbia
[d] Centre for Workforce Intelligence, 209-215 Blackfriars Road, London SE1 8NL, UK

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ABSTRACT

This article maps the current governance of human resources for health (HRH) in relation to universal health coverage in Serbia since the health sector reforms in 2003.

The study adapts the Global Health Workforce Alliance/World Health Organization four-dimensional framework of HRH in the context of governance for universal health coverage. A set of proxies was established for the availability, accessibility, acceptability and quality of HRH. Analysis of official HRH documentation from relevant institutions and reports were used to construct a governance profile of HRH for Serbia from the introduction of the reform in 2003 up to 2013. The results show that all Serbian districts (except Sremski) surpass the availability threshold of 59.4 skilled midwives, nurses and physicians per 10,000 inhabitants. District accessibility of health workforce greatly differed from the national average with variances from +26% to −34%. Analysis of national averages and patient load of general practitioners showed variances among districts by ±21%, whilst hospital discharges per 100 inhabitants deviated between +52% and −45%. Pre-service and in-service education of health workforce is regulated and accredited. However, through its efforts to respond to population health needs Serbia lacks a single coordinating entity to take overall responsibility for effective and coordinated HRH planning, management and development within the broader landscape of health strategy development.



## 1. Introduction

Human resources for health (HRH) has changed from a minor priority issue on the global policy agenda to one with a recognition that it is a multifaceted problem for almost all countries in the world [1]. A health workforce "fit for purpose and fit to practice" is an essential component of every health system which aims to achieve or sustain universal health coverage and health improvement [2, p. 11]. Mounting evidences regarding HRH challenges in many countries has seen a wide range of experts call for the development and implementation of good governance of HRH [3–6].

HRH governance entails multi-sector efforts, complex mechanisms and procedures to exercise and mediate the participation of different groups' rights and interests [7,8]. Broadly defined, governance shapes the roles, power and interactions among government, providers and

* Corresponding author at: Institute of Social Medicine, Faculty of Medicine, University of Belgrade, Dr Subotica 15, 11000 Belgrade, Serbia. Tel.: +381 11 2643 830; fax: +381 11 2659 533.
*E-mail addresses:* msantric@med.bg.ac.rs, msantric@yahoo.com (M. Santric Milicevic).

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beneficiaries [9]. In practice, HRH governance officials mainly concentrate on vision formulation, accountability, health workforce planning, implementation, and monitoring [4], while researchers largely focus on health workforce recruitment, retention, distribution and performance [5,10].

Many countries, including Serbia, have had some success in the adaptation of their HRH governance to notable contextual changes such as an ageing population, poverty, the spread of preventable diseases, climate disasters and financial crisis. Policy guidelines for HRH interventions are commonly based on traditional policy levers such as HRH production, employment and/or management strategies. Often these are not congruent, or do not clearly reflect contemporary health plans for the populations they serve [11]. To achieve universal health coverage in a constantly changing context, development of "available, accessible, acceptable and quality health workforce" requires strategic thinking and sustainable multi-sector efforts [2, p. 11] as well as "consistent policies and long-term predictable funding, fully aligned with national needs, strategies and accountability mechanisms" [6, p. 860].

This study's objective was to map a governance profile of HRH underpinning universal health coverage in Serbia from the introduction of the reforms in 2003 up to 2013.

This article starts with a presentation of the Serbian country profile and identifies gaps in availability, accessibility, acceptability, and quality of the health workforce. In what follows we explore some major governance efforts required to obtain and sustain a health workforce that is "fit for purpose and fit for practice".

## 2. Background

The Republic of Serbia is middle-income country in transition and a European Union (EU) "candidate country". The health system in Serbia is based on principles of solidarity and equity within a compulsory contribution for health insurance (94.2% of public expenditure on health). Liability for provision of healthcare is shared between the local and national levels. Some of the challenges within the Serbian health system are a lack of fair business practices, transparency [12], and high unemployment of qualified nurses and physicians [13–15].

After political, economic and social instability during the break-up of Yugoslavia in the 1990s, the national political approach changed towards strategic thinking. The beginning of the health sector reform in 2003 marked the introduction of a new health policy vision for the health system as well as development of new strategy and an action plan of health system reform [16]. The main goals of the reform were to protect and improve the health status of the population and to ensure access to health services of adequate quality and remove financial barriers for the entire population [16]. These changes were ideologically close to the concept of universal health coverage, which has been stated as the "ultimate expression of fairness" [2, p.10]. "Fairness" in the distribution of services, contributions to health system, and cost-effective policies should allow people to obtain the health services they need and to maximise the benefits from financial risk protection [17].

## 3. Methods

We used the HRH conceptual framework introduced by the Global Health Workforce Alliance (GHWA) and World Health Organization (WHO) [2] to examine HRH governance in Serbia. The GHWA/WHO developed a structured search protocol to collect socio-demographic data on availability, accessibility, acceptability, and quality of the health workforce as well as information on the policy and institutional environment [2].

This study provides a country profile based on set of 17 socio-demographic and health status indicators of Serbia's population. It also presents the availability, accessibility and acceptability of physicians, nurses, midwives, dentists and pharmacists across 25 Serbian districts with a description of quality (accreditation, regulation and licensing) and HRH governance (leadership and partnership, policy and management, strategy and finance).

The proxy measures used for health workforce availability were the rate of skilled health workers per 10,000 district inhabitants and the threshold of 59.4 skilled midwives, nurses and physicians per 10,000 district inhabitants. The former proxy highlights the variation in the health workforce availability and the latter shows the workforce availability needed for the reduction of maternal deaths to 50 per 100,000 live births by 2035 [2]. Workforce accessibility variations across districts were indicated by the ratio of the highest and the lowest district densities of health workforce compared to the national average and health service utilisation per districts (visits of adult population per general practitioner and hospital discharges per 100 inhabitants). The ratio of nurses to physicians was used as a proxy of health workforce acceptability ("a health workforce meets users' expectations in terms of its skills mix" [2, p. viii]), while to describe the quality of the health workforce in Serbia we used evidence regarding accreditation of training institutions, regulation of health professions, and licensing mechanisms of health professionals [2]. All proxy measures were calculated from annual statistical data which were extracted from official sources.

In addition, we have analysed official and experts' reports from relevant institutions (the Government, the Ministry of Health – MoH and other ministries) to map HRH governance and universal health coverage for the period of 2003–2013.

## 4. Results

### 4.1. Socio-demographic and health profile of the population of Serbia

The population in Serbia is ageing (Table 1) as a result of a number of different trends and events. From 2003 to 2013, the proportion of the population aged less than 15 years decreased by 1.4%, whilst the population aged over 60 years increased by 1.7% [18]. Life expectancy at birth has also increased between 2003 and 2013. Indicators such as the early neonatal mortality rate, infant mortality rate, and