Towards the Modernization of Health Systems in the Balkans in the Late 19th and Early 20th Centuries: The Outpatient Medical Care

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Abstract: The article is devoted to the establishment and functioning of outpatient medical care – an important element of the Balkan national health systems in the late 19th and early 20th centuries. A special focus is put on the case of Bulgaria. The establishment of a network of outpatient clinics and their activities is examined and an attempt is made to define their place and importance in the national health system.

Keywords: Outpatient Medical Care, Health Systems, Balkans, Bulgaria **Ключови думи:** извънболнична помощ, здравни системи, Балкани, България



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In the late 19th and early 20th centuries, as part of the process of general modernization of Balkan societies, the establishment and functioning of national health systems accelerated. During this period, the countries of the region experienced a significant development of medical care. Following the example of the West, new hospitals were built, pharmacies opened, and local medical specialists were trained. While numerous studies have been devoted to these elements, much less attention has been paid to outpatient care in the academic literature. And its illumination would provide a serious occasion for reflection and evaluation of the degree of development of medical care provided to the population in the Balkan countries.

This article is an attempt to present some of the issues related to the development of outpatient care in the region and an analysis of its state at the beginning of the twentieth century. It uses examples primarily from the history of the nation states Bulgaria, Greece, Romania, and Serbia. Of course, future comparative studies should not overlook the development of health care in the Balkan provinces of the two then Ottoman (European Turkey) and Habsburg

(Croatia – Slavonia, Bosnia and Herzegovina, etc.) empires, as well as in Montenegro.

The establishment and functioning of national health systems in the four Balkan countries mentioned above during the last two decades of the 19th and early 20th centuries proceeded differently in each of them, due to the different level from which they "entered" this period. At the same time, there were a number of common features, such as the use of Western models, the dominance of the public sector, etc. It should not be forgotten that during the period under review, all countries in the region were facing the same important task to address the serious challenges of high mortality due to low health literacy, poor hygiene, and sanitation,

spread of communicable and parasitic diseases, etc. To overcome the health problems, their governments were making significant efforts, including backed by increased financial resources, which were mainly directed towards building hospitals and increasing their beds, providing medical personnel mainly through training local professionals.

A recapitulation immediately before the First World War shows the positive results of the modernization of health systems in the region. Data from that time show, for example, significant progress in Bulgaria and Serbia¹. In this regard, the increased number of hospitals and medical staff in these two countries can be noted (see **Tables 1 and 2**).

Table 1. Hospitals and medical staff in Serbia in the late 19th and early 20th centuries **Таблица 1.** Болници и медицински персонал в Сърбия в кр. XIX – нач. XX в.

	1880	1900	1908		
Physicians *	105 (22)	198 (31)	287 (78)		
Midwives	30	86	131		
Hospitals	?	24	23		
Beds	?	1595	1747		

Note: *) The total number of physicians in the state (civil and military) and municipal service and in private practice (in brackets)

Source: Sundhaussen 1989.

Table 2. Hospitals and medical staff in Bulgaria in the late 19th and early 20th centuries **Таблица 2.** Болници и медицински персонал в България в кр. XIX – нач. XX в.

	1893	1908	1911
Physicians *	300	632 (183)	658 (180)
Midwives	268	126	219
Paramedics	405	542	459
Hospitals	?	63 (4) **	67 (5) **

Notes: *) The Total number of physicians in the state (civil and military) and municipal service and in private practice (in brackets); **) Number of private ones in brackets.

Source: see *Kostov* 2023: 100-110.

¹ See more details in *Kostov* 2023.

The evidence of the progress made in this area is the positive change in one key indicator, namely the ratio of the number of physicians in a country to its population. In Serbia, for example, at the beginning of the 1880s, there were nearly 18 thousand inhabitants to every one physician, and in 1908 this ratio had almost doubled – there were now 9800 inhabitants to every one physician. In Bulgaria, where the health system began to be built almost from scratch in the late 1870s, this increase was much more impressive – there were 28 thousand inhabitants to one physician in 1879, and in 1911 – already only 6592 inhabitants.

For the other countries the figures quoted for this indicator are incomplete and sometimes need refinement.² In the case of Greece, for example, it is noted that in 1903 there was one physician for every 1422 inhabitants³. If this statement is correct, this country should rank among the first in Europe.

In spite of the different and often contradictory statistics, it can be seen that, despite the successful development of health systems in the four Balkan countries, there was an unequal distribution of medical personnel. The vast majority of physicians (and other medical professionals) were concentrated in cities and especially in capital cities. However, it should be borne in mind that the vast majority of the population in these countries lived in rural areas. In Greece the share of the rural population was 75 %, in Bulgaria 81 %, in Romania 85 %, and in Serbia 86 % (as of 1910). Yet it was this group that was most threatened by the rampant diseases of the time.

An example of the weaknesses in this respect can be given with Romania. With a rural population of about 5.2 million at the beginning of 1903, there were only 129 physicians caring for them. This was equivalent to an average ratio of 1 physician to 38,890 people, and in some counties, the situation was even worse, 1 physician to 40,000-50,000 inhabitants. In order to tackle this serious problem, the Romanian authorities took a number of measures during

the period under review. Rural infirmaries, rural hospitals, and hospices for patients with pellagra and tuberculosis, etc. were established. In 1910, a law was passed extending, among other things, outpatient care in rural areas: the construction of so-called 'rural health homes' to carry out necessary health activities in the villages; the rural health district was set at 15 000 inhabitants, with a dispensary, isolation ward, premises for physicians and midwives; mobile pharmacies are being established⁴.

In connection with the topic under study, it is important to follow up on the measures taken in other countries of the region with regard to the development of outpatient care and its place in national health systems, and also to show the results of these measures. Before that, however, it is necessary to say a few words about the nature of outpatient care as well. It is most often associated with the activities of a certain type of health facility, called outpatient clinics – ambulances or dispensaries, which are primarily engaged in outpatient treatment and primary care of the local population, as opposed to hospitals, which provided more specialized treatment and admit patients for stays. These units underwent an interesting historical development, and by the late twentieth and early twentieth centuries could be divided into several types:

- 1. Dispensaries attached to hospitals
- 2. Stand-alone dispensaries
- 3. Departmental: railway and quarantine dispensaries
- 4. Clinics and other medical centers without in-patient facilities

For want of sufficient space, we will not dwell on the different types in detail. As a rule, stand-alone dispensaries were established outside cities where there were hospitals – mainly in small towns and villages. Dental surgeries also belonged to outpatient care. Outpatient clinics were opened both in countries with state-owned railways (Romania from 1881, Bulgaria – after 1885/1888, Serbia – from 1889) and in Greece, where the railway companies were private.

² On the development of health systems in the Balkans see *Turda* 2012: 3-6.

³ Bournova 2008: 7.

⁴ On the development of health system in Romania see Şuta, Tămaş, Ciupală, Bărbulescu, Popovici 2009.

As already noted, the question of outpatient care in the Balkan countries up to the First World War has generally not been sufficiently studied. There are relatively few publications in the scientific literature specifically devoted to it and referring to some individual cases. Such an example can be given with the first outpatient clinic in Serbia founded in Belgrade in March 1880, called Opsta ambulatorija (General ambulance/ dispensary). It aimed at expanding the possibilities of providing medical assistance to the citizens of the capital, especially the poorest⁵. Undoubtedly, a future comparative study of outpatient care in the Balkans should highlight the common and specific features in the individual countries and in the region as a whole. In this article, we will focus in more detail on its development in Bulgaria, where it has undergone interesting transformations in the course of the decompression period.

THE CASE OF BULGARIA

In view of the above, we will look in some detail at the development of outpatient health care in Bulgaria. A number of circumstances should be borne in mind here. During the last decade of the nineteenth century, the overall structure of outpatient medical care in the country was formed, which included units divided into three types according to ownership and management – state, district, and municipal, and into two types according to level -physicians' and paramedics' dispensaries. In general, they were built as a result of legislative changes at the time aimed at modernizing the health care system in Bulgaria.

Changes in this respect continued into the early twentieth century.

In spite of the relative successes in the development of the health system in Bulgaria at the turn of the century, the poor state of medical care for large population groups is still evident⁶. Even at the beginning of the twentieth century, there was a shortage of physicians to attend to the health needs of the rural population. For example, in 1903, there were 559 physicians in the country, who were distributed in 74 of all 79 towns and in only 22 of 3849 villages. In 1907 there were 564 physicians in the cities and only 23 in the villages, where the great mass of the population was concentrated. Of course, part of the activity of some of the 'city physicians' was connected with giving medical aid to the people in the smaller settlements. In the year 1907, their number was 92. These were the so-called district physicians, who had the duty of going around their districts periodically and examining the sick. But even to add these make a total of 115 senior medical specialists for a total rural population of nearly 4 million. The caveat to be made here is that a, albeit small, proportion of this population also benefits from hospital care in the cities, both as in-patients (in-patients) and as out-patients.

The available statistical data, although incomplete, make it possible to trace trends in the development of outpatient care in Bulgaria at the end of the nineteenth and beginning of the twentieth centuries. **Table 3**, for example, shows not only the increase in the number of outpatients examined in hospitals but also the increase in the ratio of outpatients to inpatients.

Table 3. Bulgaria – number of inpatients and outpatients treated in hospitals **Таблица 3.** България – брой на хоспитализираните и стационарни пациенти в болниците

YEAR	OUTPATIENTS	INPATIENTS	RATIO
1879	371	3930	9,44
1889	52962	18070	29,30
1897	105962	28375	37,34

Source: Meditsinski sbornik 1898: 586.

⁵ In 1907 the Municipal Ambulance in Belgrade was transformed into the Central City Ambulance and moved to a new building. See Čubrilović 1974: 798-799.

⁶ On the development of the health system in Bulgaria during the period under review see. *Nazarska* 1994, *Davidova* 2018, *Konstantinov* 2022.

It should be borne in mind here that a large number of poor people are examined without payment in first-level hospitals, while in second— and third-level hospitals they pay for their examinations, but in practice, this is not strictly observed.

More systematic data on the number of patients treated and examined on an outpatient basis can be presented only by the largest hospital in the country, the Alexandrovska Hospital in the capital Sofia. These are available for the period from 1891 to the First World War. In fact, the first data on outpatients examined there are for 1890, but their number then was only 25 people. During the following period, there was an almost constant increase, reaching a peak in 1907 and surpassing 100,000 in the same year and the following year, 1908 (see **Table 4**). The sharp decline after 1910 can be explained by the reorganization of the hospital.

Table 4. Bulgaria – number of inpatients and outpatients treated at the Alexandrovska Hospital **Таблица 4.** България - брой на хоспитализираните и стационарни пациенти в Александровска болница

YEAR	OUTPATIENTS	INPATIENTS	RATIO		
1891	1104	2877	38,37		
1900	34357	3755	91,54		
1902	54320	4600	118,09		
1907	106327	6050	175,75		
1909	83124	6051	138,36		
1910	19314	2644	73,05		
1911	19568	2808	69,69		

Source: Belinov 1937: 52-53.

Partial data on treated and outpatients, as well as the ratio between them, can be found in some reports of district governors. So for example, in 1894 – 1895, according to the two hospitals in the Danube towns of Svishtov and Nikopol, a total of 949 people were treated and 3669 people were examined as outpatients⁷.

It is also interesting to see the data on the outpatients examined outside the towns with hospitals, mainly from the villages. These are not contained for the Alexandrovska Hospital mentioned but can be found in some of the reports mentioned. For example, according to reports for 1897 – 1898, in the three hospitals in the border district of Trn – the hospitals in Trn (secondary) and Breznik and Tsaribrod (tertiary) – a total of

3862 outpatients were examined, of whom 1422 were noted as 'citizens' and 2440 as 'villagers'⁸.

Before to continue with the presentation, it is important to draw attention to an important figure regarding outpatient clinics in Bulgaria. This is the so-called *feldsher* (paramedic or assistant physician), which was introduced into the country under the influence of Russia after 1878. These went beyond their usual duties of a purely medical nature, such as providing free first aid, vaccinating, and revaccinating children, dispensing free medicines, etc. So-called feldsher districts were established in the country, covering several villages, in the center of which there was an open dispensary and a pharmacy. The feldshers were supervised by the district physician

⁷ Svishtovskoto okrazhie 1895: 61.

⁸ Transkoto okrazhie 1898: 34.

and, among other things, were responsible for monitoring hygiene in the villages, etc.⁹

In general, for the period up to 1908, there is no systematic data in the available sources on outpatient care in Bulgaria provided in standalone dispensaries. According to data from 1898, there were 19 outpatient clinics for the admittedly sick in the district centers, which were attended by 19 district physicians and the same number of feldshers. At about the same time, according to data for the Sofia district 1897 – 1898 (excluding the capital city), with a population of 202 thousand inhabitants, all 8659 persons in the district were examined as outpatients by physicians and 6049 patients by district feldshers¹⁰.

Gradually, during the first decade and the beginning of the second decade of the twentieth century, the establishment of dispensaries of all types in the country increased at an accelerated rate. A 1903 jubilee edition on health care in Bulgaria refers to the existence of a total of 28 feldsher dispensaries¹¹.

Mention should also be made of the existence of the other two types of departmental dispensaries in Bulgaria – quarantine and railway dispensaries. The first of these was opened at the end of the 19th century in the two

main Black Sea ports of Burgas and Varna. They were used to inspect incoming ships to prevent the 'import' of contagious diseases - plague, cholera, etc. Later, quarantine dispensaries were opened in Ruse (on the Danube) and in Hebibchevo (now Lyubimets) in the Stara Zagora district. As already mentioned, after the establishment of the Bulgarian State Railways in 1888, the first dispensaries were opened to cater not only for staff but also for passengers. Initially, they were on the railway lines Tsaribrod-Vakarel (1889), Varna-Ruse (1890), and the newly built section Yambol-Burgas (1891)¹². Thus, on the eve of the Balkan Wars of 1912 - 1913, there were 8 railway and 4 quarantine dispensaries in the country.

Official statistics show the number and distribution of all dispensaries in Bulgaria from 1908 to 1912 (see **Table 5**). The data shows that this period in particular has a high growth rate in this respect. It should be noted here that out of the total number of independent state, district, and municipal dispensaries – a total of 606 in 1911 – the overwhelming proportion of these – 475 or 78.38% – were maintained in the villages. This high number is due primarily to the paramedic units, which at that time reached 413.

Table 5. Dispensaries in Bulgaria (1908 – 1912) **Таблица 5.** Диспансери в България (1908 – 1912)

	1908			1910		1911			1912			
	A	В	С	A	В	С	A	В	С	A	В	С
State	90	177	267	78	313	391	80	335	415	86	280	366
County	84	17	101	71	31	103	73	42	115	76	42	118
Feldsher	-	160	160	-	280	280	-	292	292	-	236	236
Quarantine	3	1	4	3	1	4	3	1	4	3	1	4
Railway	6	-	6	7	1	8	7	1	8	7	1	8
District	-	92	92	-	98	98	-	140	140	-	122	122
County	-	19	19	-	8	8	-	19	19	-	11	11
Feldsher	-	73	73	-	90	90	-	121	121	-	111	111
Municipal	52	-	52	48	-	48	51	-	51	56	-	56
Total	142	269	411	129	412	541	131	475	606	142	402	644

Note: A – in towns, B – in villages, C – total

⁹ On the feldshers activities in Bulgaria before 1914 see *Vracheva* 2020: 49-67.

¹⁰ Sofiiskoto okrazhie 1898: 46.

Source: *Statisticheski godishnik* 1910 – 1915.

The figures show the positive results of the efforts of the Bulgarian government to develop this important element of the national health system. A more complete picture and an adequate assessment of its state at the beginning of the twentieth century can be given only after further research.

CONCLUSION

The analysis of the data for Bulgaria, as well as the partially presented information for the other Balkan countries, shows an undoubted tendency towards a positive development of outpatient medical care. No doubt, the ruling elites recognize its importance in improving health care and the condition of the population, taking into account the huge number of rural inhabitants. However, it is imperative, as a follow-up to this study, to examine this aspect in more depth. It is necessary to go beyond the statistics, which represent only the quantitative side of the issue. It is necessary to examine the conditions offered by outpatient care facilities and the quality of care provided. Only then can a comprehensive and comparative assessment of the problem at hand be made on a pan-Balkan basis.

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Към модернизацията на здравните системи на Балканите в края на XIX и началото на XX век: извънболничната медицинска помощ

Александър Костов

Статията е посветена на създаването и функционирането на извънболничната медицинска помощ – важен елемент от националните здравни системи на Балканите в края на XIX и началото на XX век. Специално внимание е отделено на случая с България. Разгледано е създаването на мрежа от амбулатории и тяхната дейност, като е направен опит да се определи мястото и значението им в националната здравна система.

