

Cost of Primary Health Care in the Republic of Serbia for the Period 2006–2008

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SUMMARY

Introduction Primary health care in the Republic of Serbia is predominantly funded by the Republic Health Insurance Fund (RHIF). From the total income of health centers and institutes at the primary level, with no pharmacy and pharmacies (Kosovo excluded), 84% in 2008 was paid by RHIF. Frequency of participation ranged from 63-95% and it was stable in all observed years. The aim of this study was to determine the expenditures for primary health care for each insured person in statistically defined districts in the Republic of Serbia, with an emphasis on prevention participation.

Material and Methods Retrospective and comparative analysis of health statistics from the database of the Institute of Public Health of Serbia (IPHS) and financial data from the RHIF for the period 2006-2008 was done.

Results Observed by the districts in 2008, in Vojvodina, the lowest expenditure for primary health care had North Backa District (5,207 RSD) and greatest was in West Backa District (6,632 RSD) per capita. In the central Serbia territorial difference was much greater, ranging from 3,574 RSD in the District Morava to 6,701 RSD per capita in the District Toplica and Nisava. Expenditures for direct health care of RHIF per capita in the reporting period continuously have grown.

Conclusion The results showed that the largest cost for primary care for the insured person in the districts of Serbia was registered in the Nisava and Toplica (6,701 RSD) and lowest in the district of Morava (3,574 RSD) per capita.

Keywords: primary health care; health care costs; The Republic of Serbia

INTRODUCTION

Health care in Serbia in the public sector is provided through a wide network of public health facilities owned by and under the supervision of the Ministry of Health. Health care system is organized into 3 functional levels (primary, secondary and tertiary) and the plan is to keep such organizational structure in the future [1].

Primary health care is provided in 157 health centers throughout the country [2]. Primary health care in Serbia is relatively decentralized, where in addition to general practitioners, to children and women, health care is provided by pediatricians and gynecologists. Health centers also differ in provided services. They can have a pharmacy and even hospital beds, and can provide public health services for physical medicine and rehabilitation as well as occupational medicine services.

Primary health care in the Republic of Serbia is predominantly funded by the Republic Health Insurance Fund (RHIF). From the total income of health centers and institutes at the primary level, without pharmacy, and pharmacies (excluding Kosovo), 84% in 2008 was paid by RHIF (frequency of participation ranges from 63-95%) [3]. The situation was almost identical in all observed years.

The aim of this study was to determine the expenditures for primary health care for each insured person in

statistically defined districts in the Republic of Serbia, with an emphasis on prevention participation.

MATERIAL AND METHODS

Retrospective and comparative analysis of health statistics from the database of the Institute of Public Health of Serbia (IPHS) and financial data from the Republic Health Insurance Fund for the period 2006-2008 was done. Expenditures in primary health care services where the doctor was selected are given in the following sections: for general medical services, women's health care services, health care services for preschool children and health care services for the children of the school age. In this period, in dentistry there was not doctor selected, therefore estimates of expenditures for dental health care for each insured person in statistically defined districts in the Republic of Serbia could not be compared with other services.

For 2006, expenditures were calculated on the basis of detailed service statements in planning and reporting tables of individual health care institutions, obtained on an annual basis (source: Institute of Public Health of Serbia (IPHS)). For the calculations, the official price list of RHIF for 2006 year was used. Total expenditures for primary health care by individual health care institutions

were obtained on the basis of reports from the Association of health facilities in 2006.

For 2007 and 2008, due to changes in the content of planning and reporting tables for primary health care and changed methodology for their preparation, expenditures of selected services were expressed at the level of assessment. These estimated values were obtained by following the total increase or decrease the level of service reported by medical review services. Financial situation for the preventive work was estimated based on the participation of preventive medical examinations in the entire examinations. Expenditures on primary health care did not include costs for pharmacy and pharmaceutical facilities. The analysis was done for the territory of Vojvodina and central Serbia, the territory of Kosovo was not included.

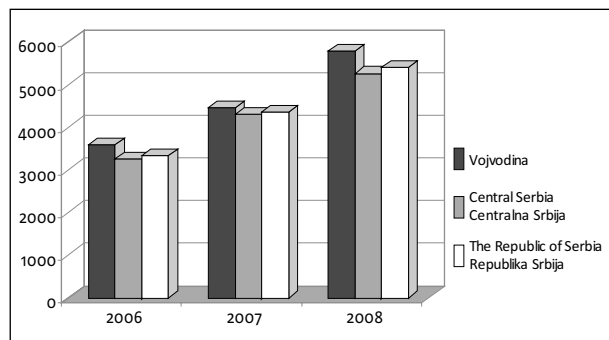
RESULTS

By analyzing the data it was noted that expenditures for direct health care of the Republic Health Insurance Fund per capita continuously have grown in the reporting period (Table 1) [3, 4]. Compared by territory, expenditures in Vojvodina were slightly above the average of the Republic of Serbia in all observed years (Graph 1). Compared by districts, in 2008, in Vojvodina, the lowest expenditures for primary health care had North Backa District (5,207 RSD) and greatest was in West Backa District (6,632 RSD) per capita. In central Serbia, territorial differences were much greater, ranging from 3,574 RSD in the district Morava to 6,701 RSD per capita in the district Toplica and Nisava (Table 2).

Table 1. The Republic Health Insurance Fund (RHIF) expenditures for direct health care per resident (RSD).

Tabela 1. Rashodi Republičkog zavoda za zdravstveno osiguranje (RZZO) za neposrednu zdravstvenu zaštitu po stanovniku (u dinarima).

Expenditures Rashodi	2006	2007	2008
Total Ukupni	14.609	18.318	21.493
For primary health care facilities (excluding pharmacy and without Kosovo) Za ustanove primarne zdravstvene zaštite (bez apoteka i bez Kosova i Metohije)	3.337	4.345	5.401



Graph 1. Expenditures of the Republic Health Insurance Fund for primary health care per capita from 2006–2008 (RSD).

Grafikon 1. Rashodi Republičkog zavoda za zdravstveno osiguranje za primarnu zdravstvenu zaštitu po stanovniku u periodu 2006–2008. godina (u dinarima).

Table 2. Expenditures RHIF for primary health care facilities (without pharmacies) per capita, per districts, 2008 (RSD).

Tabela 2. Rashodi RZZO za ustanove primarne zdravstvene zaštite (bez apoteka) po stanovniku i okruzima 2008. godine (u dinarima).

District Okrug	Expenditures Rashodi
Nišavski i Toplički	6.701
Zapadnobački	6.632
Južnobački	6.084
Severnobanatski	6.040
Belgrade / Beograd	6.015
Pomoravski	5.864
VOJVODINA	5.783
Sremski	5.622
Pirotski	5.573
Srednjobanatski	5.488
Jablanički	5.449
Borski	5.440
REPUBLIC OF SERBIA / REPUBLIKA SRBIJA	5.401
Šumadijski	5.286
CENTRAL SERBIA / CENTRALNA SRBIJA	5.260
Južnobanatski	5.229
Severnobački	5.207
Pčinjski	5.023
Rasinski	4.868
Raški	4.763
Braničevski	4.670
Zaječarski	4.349
Kolubarski	4.201
Podunavski	4.180
Zlatiborski	3.969
Mačvanski	3.833
Moravički	3.574

Financial assessment of given health services, provided in public health facilities in primary health care, showed the following results.

General medical services

General medical services in 2008 had 18% of the total expenditures for primary health care (PHC), both, at the republic level as well as in Vojvodina and central Serbia (Table 3). The analysis showed that total expenditures for general medical services related to prevention were only 4%, both at the republic level, in Vojvodina and central Serbia. Participation of preventive services in general medical expenditures in 2008 was the highest in Srem (8%) and Zlatibor District (7%), and the lowest in Macva and Krusevac District (1%) (Table 3).

Total expenditures of general medical services per an adult resident (19 years and over) at the level of republic in 2008 was 1,196 RSD, in Vojvodina it was above the national average – 1,315 RSD per capita, while in Central Serbia, below average – 1,152 RSD (Table 4). Compared by territory, the lowest amount of total expenditures on general medical services per one adult resident in Vojvodina were in the South Backa District (1,100 RSD), while the most distinguished was in the South Banat District (1,827 RSD per capita). Srem District was also above the average of the Republic. Expenditures on preventive health care for adult citizen in 2008 were 43 RSD at the level of Republic (50 RSD in Vojvodina and 41 RSD in central Serbia).

Table 3. Participation of general medical services in total expenditures of primary health care (%).**Tabela 3.** Učešće službe opšte medicine u ukupnim rashodima primarne zdravstvene zaštite (%).

Territorial unit (seat) Okrug (sedište)	2008		2007		2006	
	Participation in total expenditures Učešće u ukupnim rashodima PZZ	Participation of preventive work in expenditures Učešće preventive u rashodima službe	Participation in total expenditures Učešće u ukupnim rashodima PZZ	Participation of preventive work in expenditures Učešće preventive u rashodima službe	Participation in total expenditures Učešće u ukupnim rashodima PZZ	Participation of preventive work in expenditures Učešće preventive u rashodima službe
SERBIA / SRBIJA	18	4	18	4	23	4
VOJVODINA	18	4	19	4	24	7
Severnobački (Subotica)	18	3	19	1	21	5
Srednjobanatski (Zrenjanin)	17	2	19	1	25	1
Severnobanatski (Kikinda)	17	2	17	6	20	4
Južnobanatski (Pančevo)	28	5	27	3	32	12
Zapadnobački (Sombor)	14	2	13	3	22	3
Južnobački (Novi Sad)	14	2	15	8	23	10
Sremski (S. Mitrovica)	22	8	23	5	22	5
CENTRAL SERBIA CENTRALNA SRBIJA	18	4	18	3	23	3
Belgrade / Beograd	12	5	13	7	16	7
Mačvanski (Šabac)	21	1	25	2	28	1
Kolubarski (Valjevo)	20	3	19	2	22	1
Podunavski (Požarevac)	20	2	19	0	22	1
Braničevski (Požarevac)	21	2	20	1	25	1
Šumadijski (Kragujevac)	17	1	16	0	23	1
Pomoravski (Čuprija)	26	3	21	1	26	2
Borski (Zaječar)	42	3	37	3	49	2
Zaječarski (Zaječar)	40	5	38	1	40	2
Zlatiborski (Užice)	22	7	19	2	24	1
Moravički (Čačak)	24	4	24	5	32	7
Raški (Kraljevo)	17	4	17	1	23	1
Rasinski (Kruševac)	25	1	23	1	30	1
Nišavski i Toplički (Niš)	13	3	15	3	21	3
Pirotski (Pirot)	26	2	26	5	36	3
Jablanički (Leskovac)	15	2	16	2	29	1
Pčinjski (Vranje)	15	2	15	3	26	2

Table 4. Total expenditure of General medical services per an adult resident at the level of republic for the period 2006-2008 (RSD).**Tabela 4.** Ukupni rashodi službe opšte medicine po odraslom stanovniku na nivou Republike u periodu 2006-2008. godine (u dinarima).

Territorial unit (seat) Okrug (sedište)	2008		2007		2006	
	Total expenditures per an adult person Ukupni rashodi po odraslom stanovniku	Total expenditures for preventive work per an adult person Rashodi za preventivu po odraslom stanovniku	Total expenditures per an adult person Ukupni rashodi po odraslom stanovniku	Total expenditures for preventive work per an adult person Rashodi za preventivu po odraslom stanovniku	Total expenditures per an adult person Ukupni rashodi po odraslom stanovniku	Total expenditures for preventive work per an adult person Rashodi za preventivu po odraslom stanovniku
SERBIA / SRBIJA	1.196	43	980	35	970	43
VOJVODINA	1.315	50	1.072	48	1.076	79
Severnobački (Subotica)	1.139	36	989	14	921	48
Srednjobanatski (Zrenjanin)	1.184	21	946	11	955	11
Severnobanatski (Kikinda)	1.314	24	1.005	56	940	40
Južnobanatski (Pančevo)	1.827	87	1.447	44	1.376	169
Zapadnobački (Sombor)	1.120	27	825	22	1.159	31
Južnobački (Novi Sad)	1.100	24	943	74	1.077	112
Sremski (S. Mitrovica)	1.544	117	1.268	61	978	44
CENTRAL SERBIA CENTRALNA SRBIJA	1.152	41	946	30	930	30
Belgrade / Beograd	910	48	792	53	767	51
Mačvanski (Šabac)	1.018	11	970	18	890	11
Kolubarski (Valjevo)	1.027	29	839	14	739	10
Podunavski (Požarevac)	1.048	18	836	4	793	5
Braničevski (Požarevac)	1.231	20	934	7	944	9
Šumadijski (Kragujevac)	1.090	13	797	3	862	6
Pomoravski (Čuprija)	1.864	60	1.253	17	1.130	23
Borski (Zaječar)	2.828	85	1.818	48	1.924	30
Zaječarski (Zaječar)	2.107	111	1.524	15	1.529	37
Zlatiborski (Užice)	1.110	80	822	15	765	9
Moravički (Čačak)	1.058	44	900	45	906	67
Raški (Kraljevo)	1.076	44	874	4	887	11
Rasinski (Kruševac)	1.478	16	1.117	15	998	8
Nišavski i Toplički (Niš)	1.039	35	1.091	37	1.146	38
Pirotski (Pirot)	1.736	41	1.423	68	1.362	39
Jablanički (Leskovac)	1.026	23	800	19	1.025	11
Pčinjski (Vranje)	1.043	22	859	23	867	19

Table 5. Participation of women health care services in total expenditures of primary health care (%).**Tabela 5.** Učešće službe za zdravstvenu zaštitu žena u ukupnim rashodima primarne zdravstvene zaštite (%).

Territorial unit (seat) Okrug (sedište)	2008		2007		2006	
	Participation in total expenditures Učešće u ukupnim rashodima PZZ	Participation of preventive work in expenditures Učešće preventive u rashodima službe	Participation in total expenditures Učešće u ukupnim rashodima PZZ	Participation of preventive work in expenditures Učešće preventive u rashodima službe	Participation in total expenditures Učešće u ukupnim rashodima PZZ	Participation of preventive work in expenditures Učešće preventive u rashodima službe
SERBIA / SRBIJA	3	53	3	49	3	50
VOJVODINA	3	50	3	46	3	51
Severnobački (Subotica)	2	65	1	58	2	42
Srednjobanatski (Zrenjanin)	1	53	1	54	1	34
Severnbanatski (Kikinda)	2	52	2	43	2	46
Južnobanatski (Pančevo)	3	46	3	53	3	54
Zapadnobački (Sombor)	2	58	1	45	2	54
Južnobački (Novi Sad)	4	47	4	43	4	60
Sremski (S. Mitrovica)	4	50	4	45	3	38
CENTRAL SERBIA CENTRALNA SRBIJA	3	54	3	51	3	49
Belgrade / Beograd	3	58	2	60	4	54
Mačvanski (Šabac)	2	37	2	36	2	35
Kolubarski (Valjevo)	2	48	2	39	2	34
Podunavski (Požarevac)	5	54	4	42	5	57
Braničevski (Požarevac)	2	62	2	50	1	42
Šumadijski (Kragujevac)	3	46	3	42	4	39
Pomoravski (Čuprija)	3	51	2	44	3	40
Borski (Zaječar)	4	54	3	37	4	48
Zaječarski (Zaječar)	3	47	3	42	3	41
Zlatiborski (Užice)	3	52	2	45	3	40
Moravički (Čačak)	5	50	4	48	5	55
Raški (Kraljevo)	2	51	2	49	2	54
Rasinski (Kruševac)	3	53	3	47	3	38
Nišavski i Toplički (Niš)	3	51	3	53	3	48
Pirotski (Pilot)	3	64	3	63	3	56
Jablanički (Leskovac)	3	46	3	50	3	49
Pčinski (Vranje)	3	57	3	45	5	46

Table 6. Total expenditure of woman health care services per woman older than 15 years at the level of Republic for the period 2006-2008 (RSD).**Tabela 6.** Ukupni rashodi službe za zdravstvenu zaštitu žena po stanovnici starijoj od 15 godina na nivou Republike u periodu 2006-2008. godine (u dinarima).

Territorial unit (seat) Okrug (sedište)	2008		2007		2006	
	Total expenditures per woman Ukupni rashodi po ženi	Total expenditures for preventive work per woman Ukupni rashodi za preventivnu po ženi	Total expenditures per woman Ukupni rashodi po ženi	Total expenditures for preventive work per woman Ukupni rashodi za preventivnu po ženi	Total expenditures per woman Ukupni rashodi po ženi	Total expenditures for preventive work per woman Ukupni rashodi za preventivnu po ženi
SERBIA / SRBIJA	356	187	256	126	237	118
VOJVODINA	375	189	283	131	222	114
Severnobački (Subotica)	241	157	132	77	160	68
Srednjobanatski (Zrenjanin)	164	86	125	67	102	35
Severnbanatski (Kikinda)	262	137	245	104	192	88
Južnobanatski (Pančevo)	312	144	249	133	233	127
Zapadnobački (Sombor)	229	132	160	72	145	78
Južnobački (Novi Sad)	492	233	393	171	302	181
Sremski (S. Mitrovica)	567	286	404	180	235	89
CENTRAL SERBIA CENTRALNA SRBIJA	349	187	246	125	243	119
Belgrade / Beograd	390	227	258	155	297	161
Mačvanski (Šabac)	181	67	140	50	136	47
Kolubarski (Valjevo)	215	103	194	75	148	50
Podunavski (Požarevac)	493	267	308	131	308	176
Braničevski (Požarevac)	219	136	187	94	84	35
Šumadijski (Kragujevac)	329	152	241	101	260	102
Pomoravski (Čuprija)	337	171	231	102	209	84
Borski (Zaječar)	470	252	243	91	269	130
Zaječarski (Zaječar)	283	133	223	95	203	82
Zlatiborski (Užice)	278	144	186	83	183	73
Moravički (Čačak)	377	187	291	139	248	137
Raški (Kraljevo)	262	133	202	98	170	91
Rasinski (Kruševac)	308	163	229	107	199	75
Nišavski i Toplički (Niš)	419	214	330	174	309	149
Pirotski (Pilot)	412	265	307	192	249	140
Jablanički (Leskovac)	343	158	237	119	206	101
Pčinski (Vranje)	411	235	322	146	273	126

Table 7. Participation of health care services in preschool children in total expenditures of primary health care (%).**Tabela 7.** Učešće službe za zdravstvenu zaštitu dece predškolskog uzrasta u ukupnim rashodima primarne zdravstvene zaštite (%).

Territorial unit (seat) Okrug (sedište)	2008		2007		2006	
	Participation in total expenditures Učešće u ukupnim rashodima PZZ	Participation of preventive work in expenditures Učešće preventive u rashodima službe	Participation in total expenditures Učešće u ukupnim rashodima PZZ	Participation of preventive work in expenditures Učešće preventive u rashodima službe	Participation in total expenditures Učešće u ukupnim rashodima PZZ	Participation of preventive work in expenditures Učešće preventive u rashodima službe
SERBIA / SRBIJA	5	20	5	22	6	29
VOJVODINA	4	21	4	23	5	33
Severnobački (Subotica)	6	20	4	29	5	36
Srednjobanatski (Zrenjanin)	3	25	4	24	5	35
Severnbanatski (Kikinda)	3	24	4	28	5	39
Južnbanatski (Pančevo)	4	21	5	26	5	33
Zapadnobački (Sombor)	2	21	3	21	4	36
Južnobački (Novi Sad)	4	17	4	18	5	30
Sremski (S. Mitrovica)	4	23	5	24	4	30
CENTRAL SERBIA CENTRALNA SRBIJA	5	20	5	22	7	28
Belgrade / Beograd	4	19	4	24	6	33
Mačvanski (Šabac)	5	19	6	25	7	28
Kolubarski (Valjevo)	4	23	4	24	5	34
Podunavski (Požarevac)	6	20	6	23	8	44
Braničevski (Požarevac)	4	18	5	23	6	33
Šumadijski (Kragujevac)	4	15	5	16	7	23
Pomoravski (Čuprija)	4	19	4	19	5	29
Borski (Zaječar)	7	21	7	20	10	26
Zaječarski (Zaječar)	6	15	8	21	8	24
Zlatiborski (Užice)	5	20	5	20	7	31
Moravički (Čačak)	6	22	7	22	9	30
Raški (Kraljevo)	6	23	6	21	9	26
Rasinski (Kruševac)	4	18	4	23	6	28
Nišavski i Toplički (Niš)	6	25	7	20	7	16
Pirotski (Pirot)	6	16	6	19	8	29
Jablanički (Leskovac)	5	22	6	19	11	26
Pčinjski (Vranje)	5	19	6	25	15	25

Table 8. Total expenditure of health care services for preschool children per child at the level of Republic for the period 2006-2008 (RSD).**Tabela 8.** Ukupni rashodi službe za zdravstvenu zaštitu dece predškolskog uzrasta na nivou Republike u periodu 2006-2008. godine (u dinarima).

Territorial unit (seat) Okrug (sedište)	2008		2007		2006	
	Total expenditures per child Ukupni rashodi po detetu	Total expenditures for preventive work per child Ukupni rashodi za preventivu po detetu	Total expenditures per child Ukupni rashodi po detetu	Total expenditures for preventive work per child Ukupni rashodi za preventivu po detetu	Total expenditures per child Ukupni rashodi po detetu	Total expenditures for preventive work per child Ukupni rashodi za preventivu po detetu
SERBIA / SRBIJA	3.458	702	3.277	731	2.986	878
VOJVODINA	3.115	643	2.643	608	2.400	790
Severnobački (Subotica)	4.705	947	2.292	657	2.408	865
Srednjobanatski (Zrenjanin)	2.858	702	2.324	558	2.582	915
Severnbanatski (Kikinda)	3.077	746	2.597	719	2.630	1.016
Južnbanatski (Pančevo)	2.859	589	2.822	727	2.512	830
Zapadnobački (Sombor)	2.661	552	1.932	406	2.468	900
Južnobački (Novi Sad)	2.850	496	2.766	506	2.432	731
Sremski (S. Mitrovica)	3.405	792	3.140	751	1.986	587
CENTRAL SERBIA CENTRALNA SRBIJA	3.582	724	3.518	777	3.198	910
Belgrade / Beograd	3.458	664	3.611	879	3.255	1.081
Mačvanski (Šabac)	2.599	482	2.984	744	2.498	705
Kolubarski (Valjevo)	2.568	603	2.176	515	2.260	767
Podunavski (Požarevac)	3.631	719	3.417	783	3.243	1.415
Braničevski (Požarevac)	2.875	525	2.953	672	2.570	842
Šumadijski (Kragujevac)	3.371	511	3.067	500	2.893	679
Pomoravski (Čuprija)	3.085	597	2.809	538	2.449	716
Borski (Zaječar)	6.400	1.364	5.412	1.093	4.576	1.173
Zaječarski (Zaječar)	5.116	749	4.905	1.041	4.003	974
Zlatiborski (Užice)	2.992	612	2.417	492	2.512	786
Moravički (Čačak)	3.317	720	3.129	693	3.033	923
Raški (Kraljevo)	2.904	660	2.831	597	2.473	640
Rasinski (Kruševac)	3.160	557	2.713	627	2.427	675
Nišavski i Toplički (Niš)	5.974	1.495	6.392	1.308	4.598	752
Pirotski (Pirot)	5.793	913	4.237	797	4.587	1.353
Jablanički (Leskovac)	3.933	870	3.727	716	4.168	1.064
Pčinjski (Vranje)	2.815	546	2.894	723	3.670	917

Table 9. Participation of health care services in school children in total expenditures of primary health care (%).**Tabela 9.** Učešće službe za zdravstvenu zaštitu dece školskog uzrasta u ukupnim rashodima primarne zdravstvene zaštite (%).

Territorial unit (seat) Okrug (sedište)	2008		2007		2006	
	Participation in total expenditures Učešće u ukupnim rashodima PZZ	Participation of preventive work in expenditures Učešće preventive u rashodima službe	Participation in total expenditures Učešće u ukupnim rashodima PZZ	Participation of preventive work in expenditures Učešće preventive u rashodima službe	Participation in total expenditures Učešće u ukupnim rashodima PZZ	Participation of preventive work in expenditures Učešće preventive u rashodima službe
SERBIA / SRBIJA	3	15	4	15	5	21
VOJVODINA	3	17	3	17	4	21
Severnobački (Subotica)	3	24	4	34	4	29
Srednjobanatski (Zrenjanin)	3	18	4	15	5	22
Severnobanatski (Kikinda)	3	18	3	24	4	24
Južnobanatski (Pančevo)	4	14	4	14	5	24
Zapadnobački (Sombor)	2	17	2	16	3	22
Južnobački (Novi Sad)	3	13	3	13	4	16
Sremski (S. Mitrovica)	4	20	4	15	3	19
CENTRAL SERBIA CENTRALNA SRBIJA	4	14	4	14	5	21
Belgrade / Beograd	3	17	4	18	5	26
Mačvanski (Šabac)	3	11	4	13	5	17
Kolubarski (Valjevo)	4	19	3	19	5	29
Podunavski (Požarevac)	4	16	4	14	6	20
Braničevski (Požarevac)	4	12	4	11	5	21
Šumadijski (Kragujevac)	4	11	4	11	5	22
Pomoravski (Čuprija)	4	10	3	11	4	18
Borski (Zaječar)	6	15	7	12	9	18
Zaječarski (Zaječar)	7	13	7	9	7	17
Zlatiborski (Užice)	5	11	5	12	6	18
Moravički (Čačak)	4	11	4	14	7	21
Raški (Kraljevo)	3	20	3	18	5	27
Rasinski (Kruševac)	3	13	3	13	5	24
Nišavski i Toplički (Niš)	4	11	4	12	6	11
Pirotski (Pilot)	5	15	5	10	7	21
Jablanički (Leskovac)	3	13	4	11	6	20
Pčinjski (Vranje)	4	15	4	16	6	16

Table 10. Total expenditure of health care services for school children per child at the level of Republic for the period 2006-2008 (RSD)**Tabela 10.** Ukupni rashodi službe za zdravstvenu zaštitu dece školskog uzrasta na nivou Republike u periodu 2006-2008. godine (u dinarima)

Territorial unit (seat) Okrug (sedište)	2008		2007		2006	
	Total expenditures per child Ukupni rashodi po detetu	Total expenditures for preventive work per child Ukupni rashodi za preventivu po detetu	Total expenditures per child Ukupni rashodi po detetu	Total expenditures for preventive work per child Ukupni rashodi za preventivu po detetu	Total expenditures per child Ukupni rashodi po detetu	Total expenditures for preventive work per child Ukupni rashodi za preventivu po detetu
SERBIA / SRBIJA	1.303	193	1.186	177	1.119	235
VOJVODINA	1.197	199	1.065	180	926	193
Severnobački (Subotica)	1.147	278	1.002	340	986	287
Srednjobanatski (Zrenjanin)	1.074	198	1.022	156	980	216
Severnobanatski (Kikinda)	1.096	196	953	233	907	219
Južnobanatski (Pančevo)	1.262	174	1.168	163	1.055	252
Zapadnobački (Sombor)	1.057	179	728	113	826	179
Južnobački (Novi Sad)	1.209	159	1.158	155	1.017	165
Sremski (S. Mitrovica)	1.329	260	1.142	177	667	124
CENTRAL SERBIA CENTRALNA SRBIJA	1.343	191	1.234	176	1.193	251
Belgrade / Beograd	1.435	246	1.398	252	1.407	369
Mačvanski (Šabac)	851	92	889	112	814	139
Kolubarski (Valjevo)	1.060	200	911	176	913	263
Podunavski (Požarevac)	1.132	175	1.172	169	1.055	207
Braničevski (Požarevac)	1.223	145	1.198	129	1.075	228
Šumadijski (Kragujevac)	1.390	151	1.176	129	1.135	247
Pomoravski (Čuprija)	1.658	170	1.100	126	1.041	190
Borski (Zaječar)	2.155	321	2.639	304	1.941	341
Zaječarski (Zaječar)	2.331	313	1.913	175	1.612	276
Zlatiborski (Užice)	1.247	142	1.061	123	982	178
Moravički (Čačak)	1.130	126	953	130	1.083	230
Raški (Kraljevo)	914	184	725	130	742	199
Rasinski (Kruševac)	1.191	151	927	118	921	218
Nišavski i Toplički (Niš)	1.811	193	1.615	192	1.813	205
Pirotski (Pilot)	2.065	303	1.744	180	1.580	336
Jablanički (Leskovac)	1.090	140	1.195	131	1.008	199
Pčinjski (Vranje)	1.027	157	886	138	765	126

Health services for woman

Health services for woman in 2008 had a share of 3% of the total expenditures for primary health care at the level of the Republic, Vojvodina and central Serbia. The same share was held in all observed years (Table 5). Territorial deviations were in the interval of 1% (Middle Banat District) to 4% of the total expenditures for primary health care in Vojvodina (South Backa and Srem District). Of the total expenditures for women's health care services, the greatest part was related to the preventive work (53% in the Republic, 50% in Vojvodina and 54% in central Serbia).

Total healthcare expenditures per woman aged 15 and over at the Republic in 2008 were 356 RSD. In Vojvodina, it was slightly above the national average, 375 RSD, with a continuous annual growth. Expenditures in Central Serbia were slightly below average, amounting 349 RSD per woman (Table 6).

Health care services for preschool children

Health care services for preschool children had 5% of the total expenditures for primary health care in 2008 at the level of the Republic and central Serbia and 4% at the level of Vojvodina (Table 7). Territorially, the lowest participation in the Vojvodina was from West Backa District (2%) and the greatest was from North Backa District (6%). All the other districts of Vojvodina were below the national average. From the total expenditures of health care services for preschool children, 20% was from preventive work at the republic level and central Serbia and 21% in Vojvodina, respectively.

The total expenditures of health care services for preschool children aged 0-6 years in 2008 was 3,458 RSD per child in the Republic, 3,115 RSD in Vojvodina and 3,582 RSD in central Serbia (Table 8). Expenditures on preventive health care in 2008 for preschool age (per child) were 702 RSD in the Republic, 643 RSD in Vojvodina and 724 RSD in central Serbia.

Health care services of school children

Health care services of school children in 2008 had participation of 3% in the total expenditures for primary health care at the level of Republic and Vojvodina and 4% for central Serbia. In the period 2006-2008, the decline was recorded in each year for one percent (Table 9). In central Serbia, the lowest part of preventive work in the total expenditures of the Service had Pomoravlje District while below the national average were six more districts: Macva, Sumadija, Zlatibor, Morava and Nisava and Toplica with 11% participation and Branicevo (12%). The greatest part of preventive work was recorded for Kolubara (19%) and Raska District (20%).

Total healthcare expenditures for school children in 2008 were 1,303 RSD in the Republic, Vojvodina was below average with 1,197 RSD and central Serbia was above with 1,343 RSD per child. Significant growth was

recorded only in the last year of observed period (Table 10). Expenditures on preventive health care for schoolchildren were 193 RSD at the level of Republic (199 RSD in Vojvodina and 191 in central Serbia) in 2008. Territorial differences were noticeable.

Dental services

The average number of Dental services in 2008, provided by a dentist was 1 432 and it was an expense of the Republic Health Insurance Fund of 401,983 millions RSD [1] or 2.53% of the total RHIF expenditures for health care. These amounts were 84.63% of the planned expenses. Of total 3,432,251 provided dental services, 848,490 were preventive services (Table 11).

DISCUSSION

As a part of research of the costs in health care systems in transition [5], cost analysis in primary health care [6, 7, 8] and in particular the analysis by the selected doctor [9, 10, 11] are imposed necessary in order to control costs in the health system. Unfortunately, for the determination of primary health care expenditures for each insured person [12, 13] often different methodologies are used and it is impossible to compare our results with the results of neighboring countries.

Table 11. Dental care in Republic of Serbia in 2008.

Tabela 11. Stomatološka zdravstvena zaštita u Republici Srbiji u 2008.

Territorial unit (seat) Okrug (sedište)	Total number of given services Ukupno svih pruženih usluga	Total number of given preventive services Ukupno pruženih preventivnih usluga
SERBIA / SRBIJA	3.432.251	848.490
VOJVODINA	957.415	253.720
Severnobački (Subotica)	81.134	23.277
Srednjobanatski (Zrenjanin)	102.276	26.860
Severnobanatski (Kikinda)	68.037	18.234
Južnobanatski (Pančevo)	168.912	46.454
Zapadnobački (Sombor)	74.994	19.227
Južnobački (Novi Sad)	288.094	79.305
Sremski (S. Mitrovica)	173.968	40.363
CENTRAL SERBIA CENTRALNA SRBIJA	2.474.836	594.770
Belgrade / Beograd	784.246	194.528
Mačvanski (Šabac)	144.639	31.893
Kolubarski (Valjevo)	105.249	20.619
Podunavski (Požarevac)	87.047	21.777
Braničevski (Požarevac)	91.021	19.633
Šumadijski (Kragujevac)	138.273	30.329
Pomoravski (Čuprija)	45.876	20.714
Borski (Zaječar)	47.405	14.426
Zaječarski (Zaječar)	41.578	9.926
Zlatiborski (Užice)	43.695	25.298
Moravički (Čačak)	110.501	26.433
Raški (Kraljevo)	161.111	34.308
Rasinski (Kruševac)	117.071	26.647
Nišavski i Toplički (Niš)	232.826	33.512
Pirotski (Piroć)	61.474	14.930
Jablanički (Leskovac)	100.861	14.156
Pčinjski (Vranje)	95.473	27.959

Comparing the results, territorial variations in 2008 for general medical services were quite. So, the general medical services participated with 14% of the total expenditures for primary health care in West and South Backa District, while its participation was 28% in the South Banat District. There was also a trend of increasing territorial differences. In central Serbia, the lowest share of general medical services in total expenditures for primary health care (PHC) was in Belgrade – 12% only, while the largest share was in the Bor District (42%). Significantly below the average of the Republic were Nisava and Toplica District, while quite above the average were five districts in central Serbia: Pomoravlje, Zajecar, Morava, Rasina and Pirot District. The great territorial differences were present in all observed years. In 2008, the share of general medical services remained the same as in 2007 but with some decrease compared to 2006. Here is, however, necessary to note one methodological inconsistency that was the most likely the cause of that difference. Namely, the analysis in 2006, as the most precise, included the treatment in occupational health services (Table 3).

When we compare the value of share in expenditures for preventive work with the total expenditures for general medical services, it is evident that the deviations are between 2% and 8% (Srem District) in Vojvodina and 1% and 7% (Zlatibor District) in central Serbia. Observed in the time schedule, there is a marked tendency to mitigate the territorial disproportion in the amount of preventive work in the observed years. In the total expenditures of general medical services per an adult resident at the level of the Republic of Serbia in the time period 2006 to 2008, in central Serbia territorial differences were more pronounced and ranged from 910 RSD per capita in Belgrade, to 2,828 RSD per capita in Bor District. The republic average was significantly exceeded by Rasina, Pomoravlje and Zajecar District. Expenditures on preventive health care showed fluctuations in the reporting period. There were large territorial differences, starting with 11-117 RSD per resident in 2008 up to 169 RSD in 2006.

In 2008, territorial dispersion of the participation of women's health care services in the total expenditures PHS in central Serbia was between 2% (Macva, Kolubara, Branicevo and Raska District) and 5% (Podunavlje and Morava District). Above the national average (3%) beside mentioned was Bor District. Territorial dispersion trend according to the age was not clearly defined. Participation of preventive women's health care services of in comparison to the total expenditures of the service, in central Serbia only, a steady growth was recorded in the reporting period. Participation in the total volume of preventive services expenditures deviated from 46% (South Banat District) to 65% (North Backa District) in Vojvodina and from 37% (Macva District) to 64% (Pirot District) in central Serbia. When compared total expenditures for women's health care services per woman in the period from 2006 to 2008, the lowest amount of total expenditures for women's health care services was in Vojvodina in Middle Banat District and the highest in Srem District. Quite above the national average in Vojvodina was the South Backa District. However, three districts were quite

below this average: North Backa, North Banat and West Backa District. In central Serbia, these differences range from the smallest in Macva District to the highest in Podunavlje District. Above the republic average is Bor District while below the average were Kolubara, Branicevo and Raska District. Expenditures on preventive health care per person aged 15 and over showed a continuous increase in the observed years, but also significant territorial differences.

Health care services for preschool children in 2008 with participation of 5% of the total expenditures for primary health care, retained share from 2007, but decreased it compared to 2006 for one percent at the national level and in Vojvodina and two percent in central Serbia. Districts in central Serbia showed a fairly consistent values of share for the health care services of preschool children in the total expenditures of PHC (between 4 and 6%), with one extreme value of 7% in Bor District. In the reporting period in central Serbia, this indicator has become similar for different territories. In the period from 2006 to 2008 the downward trend of preventive work share in the overall activities of the PHS was present, from 29% in 2006 to 22% in 2007. This tendency was present in central Serbia and in particular, expressed in Vojvodina. In the reporting period, total expenditures for health care services of preschool children at the level of republic increased, primarily due to achieved growth in Vojvodina. Deviations from the national averages were large only in central Serbia, extreme were, beside these, in Macva, Nisava and Toplica, Pirot and Zajecar District.

Expenditures on preventive health care for children of preschool age in the observed period were in constant decline, except at the level of Vojvodina, where they oscillated, but also with a tendency to fall. Health services for school children in 2008, from the entire territory of the republic, only in West Backa District with value below the average in the total expenditures for primary health care. Two districts in Vojvodina had above-average participation (South Banat and Srem District) in total expenditures. In the observed three-year period, in 2007, decrease of expenditure share for preventive work in the total expenditures was marked and then the stagnation in the achieved level.

There was also a tendency to mitigate differences in the territorial scope of preventive work in the observed years. When total expenditures for health care services in school children are compared, it can be noticed that all other districts in Vojvodina except Srem District recorded below average expenditure per child.

Dental health care in the Republic of Serbia was observed in 2008 only, because in the period from 2006 to 2008 the methodology for collecting and processing data has changed in a way that does not allow inter-comparison.

CONCLUSION

The results showed that the highest expenditures for primary health care per insured person in the districts in the Republic of Serbia, was in Nisava and Toplica and

lowest in Morava District. The analysis of expenses in the primary health care of adults, women, preschool, school children and especially dental care, raise the issue of further processing the dispersed values from the district level, compared with an average in central Serbia, Vojvodina and the Republic. Value of the territorial differences and unsatisfactory preventive care is presented by itself. However, only the analysis of individual health care institutions could provide valid evidence for practical action - correction and further planning in the health care system, especially in dentistry.

As a main recommendation, however, there is a need to shift the level of assessment with the level of evidence for expenditures in primary health care. It actually means to rely on the reports received on the basis of so-called invoiced realization and the data obtained from electronic invoicing.

REFERENCES

1. Gajić-Stevanović M. National health accounts in the transformation of health management in Serbia [PhD thesis]. Kragujevac: Medicinski fakultet Univerziteta u Kragujevcu; 2009.
2. Website of the Institute of Public Health of Serbia Milan Jovanovic Batut <http://www.batut.org.rs/statistika.html>.
3. Institute for Health Insurance in Serbia. Available from URL: <http://www.rzzo.sr.gov.rs/>
4. Republic Statistical Office of Serbia. Available from URL: <http://www.stat.gov.rs/>
5. Albrecht T, Cesen M, Hindle D, Jakubowski E, Kramberger B, Petric VK, et al. Health Care Systems in Transition. Slovenia: European Observatory on Health Care Systems; 2002.
6. Gervas J. Identifying the critical steps undergone by European countries to set up the foundations of a primary health care system in conditions of resource constraint: The case of the Mediterranean countries in 2004 Oxford Policy Management.
7. National Primary Health Care Awareness Strategy. Fact Sheet: Primary Health Care, Canada. Accessed at www.primaryhealthcare.ca.
8. Poorter J. Primary Health Care in the Netherlands. The Hague, 2005. International, Publication Series Health, Welfare and Sport, no. 20.
9. Tepper J. The evolving role of Canada's family physicians 1992-2001. CIHI.
10. WONCA. The European definition of general practice/family medicine; 2005.
11. CIHI. Health Care in Canada; 2003. www.cihi.ca. Mar. 2008.
12. Cebalo Lj, Jovanović A, Grujić-Cukon O, Zlatanović D. Reform of primary health care. Professional postgraduate studies in Management in Health School of Public Health "Andrija Štampar".
13. Rudan S, Milas J. Some indicators of health care developments in Croatia from 2000 to 2007. The Public Health Institute of Osijek-Baranja District.

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Troškovi u primarnoj zdravstvenoj zaštiti u Republici Srbiji u periodu 2006–2008. godine

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KRATAK SADRŽAJ

Uvod Primarna zdravstvena zaštita u Republici Srbiji se dominantno finansira od Republičkog zavoda za zdravstveno osiguranje (RZZO). U ukupnim prihodima domova zdravlja i zavoda na primarnom nivou, bez apoteka i apotekarskih ustanova (isključujući Kosovo i Metohiju), RZZO je u 2008. godini učestvovao s prosečno 84%. Interval učešća je bio 63-95% i gotovo je istovetan u svim posmatranim godinama. Cilj rada je bio da se utvrde rashodi za primarnu zdravstvenu zaštitu po svakom osiguranom licu u statistički definisanim okruzima u Republici Srbiji, s osvrtnom na preventivu.

Materijal i metode rada Izvršena je retrospektivna i komparativna analiza zdravstvenih statističkih podataka iz baze Instituta za javno zdravlje Srbije „Dr Milan Jovanović Batut“ i finansijskih podataka iz RZZO u periodu 2006-2008. godine.

Rezultati Posmatrano po okruzima u 2008. godini, u Vojvodini je najniže rashode za primarnu zdravstvenu zaštitu po stanovniku imao Severnobački okrug (5.207 dinara), a najviše Zapadnobački (6.632 dinara). U centralnoj Srbiji teritorijalne disperzije su znatno veće: od 3.574 dinara po stanovniku u Moravičkom okrugu do 6.701 dinar po stanovniku u Nišavskom i Topličkom okrugu. Rashodi za neposrednu zdravstvenu zaštitu RZZO po stanovniku su se u posmatranom periodu kontinuirano povećavali.

Zaključak Rezultati istraživanja su pokazali da je za primarnu zdravstvenu zaštitu po osiguranom licu u Republici Srbiji najviše potrošeno u Nišavskom i Topličkom okrugu, a najmanje u Moravičkom.

Ključne reči: primarna zdravstvena zaštita; zdravstvena potrošnja; Republika Srbija

UVOD

Zdravstvena zaštita u Srbiji u javnom sektoru se pruža kroz široku mrežu javnih zdravstvenih ustanova u vlasništvu i pod nadzorom Ministarstva zdravlja Republike Srbije. Sistem zdravstvene zaštite je organizovan na tri funkcionalna nivoa (primarnom, sekundarnom i tercijarnom) i ubuduće se planira zadržavanje takve organizacione strukture [1].

Primarna zdravstvena zaštita (PZZ) se pruža u 157 domova zdravlja širom zemlje [2]. Pružanje PZZ stanovništvu u Srbiji je relativno decentralizovano, gde pored lekara opšte medicinske usluge deci i ženama pružaju pedijatri i ginekolozi. Domovi zdravlja se takođe razlikuju s obzirom na usluge koje pružaju. Oni mogu da imaju apoteku, pa čak i bolničke krevete, a mogu da odgovaraju i za obezbeđivanje javnih zdravstvenih usluga za fizikalnu medicinu i rehabilitaciju i usluge medicine rada.

PZZ u Republici Srbiji dominantno finansira Republički zavod za zdravstveno osiguranje (RZZO). U ukupnim prihodima domova zdravlja i zavoda na primarnom nivou, bez apoteka i apotekarskih ustanova (isključujući Kosovo i Metohiju), RZZO je u 2008. godini učestvovao s prosečno 84% (63-95%) [3]. Situacija je gotovo istovetna u svim posmatranim godinama.

Cilj rada je bio da se utvrde rashodi za PZZ po svakom osiguranom licu u statistički definisanim okruzima u Republici Srbiji, s osvrtnom na učešće preventive.

MATERIJAL I METODE RADA

Izvršena je retrospektivna i komparativna analiza zdravstvenih statističkih podataka iz baze Instituta za javno zdravlje Srbije „Dr Milan Jovanović Batut“ (Institut „Batut“) i finansijskih podataka iz RZZO u periodu 2006-2008. godine. Rashodi su iskazani za službe PZZ gde postoji izabrani lekar, i to: za službu

opšte medicine, službu zdravstvene zaštite žena, službu zdravstvene zaštite dece predškolskog uzrasta i službu zdravstvene zaštite dece školskog uzrasta. Služba stomatologije u ovom periodu nije imala izabranog lekara, pa procena rashoda za stomatološku zdravstvenu zaštitu po svakom osiguranom licu u statistički definisanim okruzima u Republici Srbiji nije mogla da se poredi s ostalim službama.

Za 2006. godinu rashodi su izračunati na osnovu detaljno iskazanih usluga u plansko-izveštajnim tabelama pojedinačnih zdravstvenih ustanova dobijenih na godišnjem nivou (izvor: Institut „Batut“). U obračunu su korišćene cene iz zvaničnog cenovnika RZZO koje su važile u 2006. godini. Ukupni rashodi za PZZ po pojedinačnim zdravstvenim ustanovama dobijeni su na osnovu izveštaja Komore zdravstvenih ustanova za 2006. godinu.

Za 2007. i 2008. godinu, usled promene u sadržaju plansko-izveštajnih tabela za PZZ, kao i promenjene metodologije njihove obrade, rashodi izabranih službi su iskazani na nivou procedure. Do ovih vrednosti došlo se posmatranjem ukupnog porasta, odnosno smanjenja nivoa iskazanih usluga lekarskih pregleda po službama. Finansijski izraz preventivnog rada procenjen je na osnovu učešća preventivnih lekarskih pregleda u ukupnim pregledima. Rashodi za PZZ nisu obuhvatili izdatke za apoteke i apotekarske ustanove. Analiza je rađena za teritoriju Vojvodine i centralne Srbije (nije obuhvaćena teritorija Kosova i Metohije).

REZULTATI

Analizom podataka uočeno je da se rashodi za neposrednu zdravstvenu zaštitu RZZO kontinuirano povećavaju po stanovniku u posmatranom periodu (Tabela 1) [3, 4]. Teritorijalno posmatrano, rashodi u Vojvodini su nešto iznad proseka Republike Srbije u svim posmatranim godinama (Grafikon 1). Posmatrano

po okruzima u 2008. godini, u Vojvodini je najniže rashode za PZZ po stanovniku imao Severnobački okrug (5.207 dinara), a najviše Zapadnobački (6.632 dinara). U centralnoj Srbiji teritorijalne disperzije su znatno veće: od 3.574 dinara u Moravičkom okrugu do 6.701 dinar po stanovniku u Nišavskom i Topličkom okrugu, posmatranim zajedno (Tabela 2).

Rezultati procene finansijskih vrednosti izvršenja zdravstvenih usluga posmatrano po službama i u državnim zdravstvenim ustanovama u PZZ slede.

Služba opšte medicine

Ova služba je 2008. godine imala učešće od 18% u ukupnim rashodima za PZZ, kako na nivou Republike, tako i u Vojvodini i centralnoj Srbiji (Tabela 3). Analiza je pokazala da se od ukupnih rashoda službe opšte medicine na preventivu odnosi svega 4%, kako na nivou Republike, tako i u Vojvodini i centralnoj Srbiji. Učešće preventive u rashodima službe opšte medicine u 2008. godini (Tabela 3) je bilo najveće u Sremskom (8%) i Zlatiborskom okrugu (7%), a najmanje u Mačvanskom i Kruševačkom (1%).

Ukupni rashodi ove službe po odraslom stanovniku na nivou Republike u 2008. godini bili su 1.196 dinara. U Vojvodini je to iznad republičkog proseka – 1.315 dinara po stanovniku, dok je u centralnoj Srbiji ispod proseka – 1.152 dinara (Tabela 4). Teritorijalno posmatrano, najniži iznos ukupnih rashoda službe opšte medicine po odraslom stanovniku u Vojvodini beleži Južnobački okrug (1.100 dinara), dok se najviše izdvaja u Južnobanatskom okrugu (1.827 dinara). Sremski okrug se takođe nalazi znatno iznad proseka Republike. Rashodi za preventivnu zdravstvenu zaštitu po odraslom stanovniku u 2008. godini bili su 43 dinara na nivou Republike (50 dinara u Vojvodini i 41 dinar u centralnoj Srbiji).

Služba zdravstvene zaštite žena

Ova služba je u 2008. godini imala učešće od 3% u ukupnim rashodima za PZZ na nivou Republike, Vojvodine i centralne Srbije. Isto učešće održava se u svim posmatranim godinama (Tabela 5). Teritorijalna odstupanja su u intervalu od 1% (Srednjobanatski okrug) do 4% učešća u ukupnim rashodima za PZZ u Vojvodini (Južnobački i Sremski okrug). Od ukupnih rashoda službe zdravstvene zaštite žena nešto veći deo odnosi se na preventivni rad (53% u Republici, 50% u Vojvodini i 54% u centralnoj Srbiji).

Ukupni rashodi ove službe po osobi starosti 15 i više godina na nivou Republike u 2008. godini bili su 356 dinara. U Vojvodini su bili neznatno iznad republičkog proseka – 375 dinara – uz kontinuirani godišnji rast. Rashodi u centralnoj Srbiji su bili nešto ispod proseka – 349 dinara po ženi (Tabela 6).

Služba zdravstvene zaštite dece predškolskog uzrasta

Ova služba je učestvovala sa 5% u ukupnim rashodima za PZZ u 2008. godini na nivou Republike i centralne Srbije, odnosno 4% na nivou Vojvodine (Tabela 7). Teritorijalno, najniže učešće u Vojvodini ostvario je Zapadnobački okrug (2%), a najviše

Severnobački (6%). Svi ostali vojvođanski okruzi su bili ispod republičkog proseka. Od ukupnih rashoda službe zdravstvene zaštite dece predškolskog uzrasta na preventivni rad odnosi se 20% na nivou Republike i centralne Srbije, odnosno 21% u Vojvodini.

Ukupni rashodi ove službe po detetu uzrasta do šest godina u 2008. godini bili su 3.458 dinara u Republici, 3.115 dinara u Vojvodini i 3.582 dinara u centralnoj Srbiji (Tabela 8). Rashodi za preventivnu zdravstvenu zaštitu u 2008. godini po detetu predškolskog uzrasta bili su 702 dinara u Republici, 643 dinara u Vojvodini i 724 dinara u centralnoj Srbiji.

Služba zdravstvene zaštite dece školskog uzrasta

Ova služba je u 2008. godini imala učešće od 3% u ukupnim rashodima za PZZ na nivou Republike i Vojvodine, a 4% na nivou centralne Srbije. U periodu 2006-2008. godine zabeleženo je smanjenje ovog učešća svake godine za po jedan procentni poen (Tabela 9). U centralnoj Srbiji najniže učešće za preventivni rad u ukupnim rashodima ove službe ima Pomoravski okrug, a ispod republičkog proseka su Mačvanski, Šumadijski, Zlatiborski, Moravički i Nišavski i Toplički okrug sa po 11% učešća, odnosno Braničevski sa 12%. Najviše učešće preventivnog rada beleže Kolubarski (19%) i Raški okrug (20%).

Ukupni rashodi ove službe u 2008. godini po detetu odgovarajućeg uzrasta bili su 1.303 dinara u Republici, 1.197 dinara u Vojvodini i 1.343 dinara u centralnoj Srbiji. Značajnije povećanje zabeleženo je tek u poslednjoj godini posmatranog perioda (Tabela 10). Rashodi za preventivnu zdravstvenu zaštitu po detetu školskog uzrasta u 2008. godini bili su 193 dinara na nivou Republike (199 dinara u Vojvodini i 191 dinar u centralnoj Srbiji). Uočljive su teritorijalne razlike.

Služba stomatologije

Ova služba je u 2008. godini u proseku pružila 1.432 stomatološke usluge po doktoru stomatologije, što je predstavljalo rashod RZZO od 401.983 miliona dinara, ili 2,53% rashoda RZZO za zdravstvenu zaštitu. Ti troškovi su iznosili 84,63% u odnosu na plan. Ukupno je pružena 3.432.251 stomatološka usluga, od čega je bilo 848.490 preventivnih usluga (Tabela 11).

DISKUSIJA

U okviru istraživanja troškova u sistemima zdravstvene zaštite u tranziciji [5], analiza troškova u PZZ [6, 7, 8], a posebno analiza po izabranom lekaru [9, 10, 11], nameću se kao neophodne radi kontrolisanja troškova u zdravstvenom sistemu. Nažalost, za utvrđivanje rashoda za PZZ po svakom osiguranom licu [12, 13] koriste se različite metodologije, pa je nemoguće uporediti rezultate dobijene kod nas s rezultatima zemalja u okruženju.

Uočava se da su u 2008. godini teritorijalna odstupanja u službi opšte medicine dosta izražena. Tako služba opšte medicine učestvuje sa svega 14% u ukupnim rashodima za PZZ Zapadnobačkog i Južnobačkog okruga, dok je to učešće čak 28% u Južnobanatskom okrugu. Postoji i trend povećanja teritorijalnih razlika. U centralnoj Srbiji najniže učešće službe opšte

medicinu u ukupnim rashodima za PZZ ima Beograd (svega 12%), dok je najveće učešće u Borskom okrugu (42%). Znatno ispod proseka Republike nalaze se i Nišavski i Toplički okrug, dok su znatno iznad ovog proseka pet okruga centralne Srbije: Pomoravski, Zaječarski, Moravički, Rasinski i Pirotski. Ovako velike teritorijalne razlike postoje u svim posmatranim godinama. U 2008. godini učešće službe opšte medicine je zadržano iz 2007. godine, ali uz izvesno smanjenje u odnosu na 2006. godinu. Ovde se, međutim, primećuje jedna metodološka neusklađenost koja je najverovatnije razlog ove promene. Naime, analiza iz 2006. godine, kao najpreciznija, obuhvatila je i lečenje u službi medicine rada (Tabela 3).

Kada se posmatra učešće rashoda za preventivni rad u odnosu na ukupne rashode službe opšte medicine, uočava se da je interval odstupanja između 2% i 8% (Sremski okrug) u Vojvodini i 1% i 7% (Zlatiborski okrug) u centralnoj Srbiji. Posmatrano u vremenskoj dinamici, postoji izražena tendencija ublažavanja teritorijalnih disproporcija u obimu preventivnog rada u posmatranim godinama. U ukupnim rashodima službe opšte medicine po odraslom stanovniku na nivou Republike Srbije u periodu 2006-2008. godine u centralnoj Srbiji teritorijalne razlike su izraženije i kreću se od 910 dinara po stanovniku u Beogradu, do 2.828 dinara po stanovniku u Borskom okrugu. Republički prosek znatno premašuju i Rasinski, Pomoravski i Zaječarski okrug. Rashodi za preventivnu zdravstvenu zaštitu pokazuju kolebanja u posmatranom periodu. Izuzetno su velike teritorijalne razlike, počev od 11-117 dinara po stanovniku u 2008. godini, pa čak do 169 dinara u 2006. godini.

U 2008. godini teritorijalna disperzija učešća službe za zdravstvenu zaštitu žena u ukupnim rashodima PZZ u centralnoj Srbiji bila je između 2% (Mačvanski, Kolubarski, Braničevski i Raški okrug) i 5% (Podunavski i Moravički okrug). Iznad republičkog proseka (3%) nalazi se, pored pomenutih, još samo Borski okrug. Trend u teritorijalnoj disperziji po godinama nije jasno izražen. Kada se posmatra učešće preventivnog rada službe zdravstvene zaštite žena u odnosu na ukupne rashode službe, primećuje se da samo centralna Srbija beleži u posmatranom periodu stabilan rast učešća preventivnog rada. Učešća obima preventive u ukupnim rashodima službe imaju interval odstupanja od 46% (Južnobanatski okrug) do 65% (Severnobački okrug) u Vojvodini i od 37% (Mačvanski okrug) do 64% (Pirotski okrug) u centralnoj Srbiji. Kada se posmatraju ukupni rashodi službe za zdravstvenu zaštitu žena po stanovnici na nivou Republike u periodu 2006-2008. godine, uočava se da najniži iznos ukupnih rashoda ove službe u Vojvodini ima Srednjobanatski okrug, a najviši Sremski okrug. Znatno iznad republičkog proseka u Vojvodini je i Južnobanatski okrug. Međutim, čak tri okruga su znatno ispod ovog proseka: Severnobački, Severnobačanski i Zapadnobački. U centralnoj Srbiji ove razlike su najmanje u Mačvanskom, a najviše u Podunavskom okrugu. Znatno iznad proseka Republike je još jedino Borski okrug, a znatno ispod proseka su Kolubarski, Braničevski i Raški okrug. Rashodi za preventivnu zdravstvenu zaštitu po osobi starosti 15 i više godina pokazuju kontinuirani rast u posmatranim godinama, ali i znatne teritorijalne razlike.

Služba zdravstvene zaštite dece predškolskog uzrasta u 2008. godini je sa učešćem od 5% u ukupnim rashodima za PZZ zadržala učešće iz 2007, ali ga smanjila u odnosu na 2006. godinu za jedan procentni poen na republičkom nivou i u Vojvodini, odnosno dva procentna poena u centralnoj Srbiji. Okruzi

centralne Srbije pokazuju prilično ujednačene vrednosti učešća službe zdravstvene zaštite dece predškolskog uzrasta u ukupnim rashodima PZZ (4-6%), s jednom ekstremnom vrednošću od 7% u Borskom okrugu. U posmatranom periodu u centralnoj Srbiji je došlo do ujednačavanja u teritorijalnim vrednostima ovoga pokazatelja. Od 2006. do 2008. godine beleži se tendencija smanjenja učešća preventivnog rada u ukupnoj aktivnosti službe: od 29% u 2006. godini i 22% u 2007. godini. Ovakva tendencija je uočena i u centralnoj Srbiji, a naročito je izražena u Vojvodini. U posmatranom periodu ukupni rashodi službe za zdravstvenu zaštitu dece predškolskog uzrasta na nivou Republike su se uvećali, mahom zahvaljujući postignutom rastu u Vojvodini. Odstupanja od republičkog proseka velika su samo na teritoriji centralne Srbije, tako da se kao ekstremna, osim pomenutih, pojavljuju kod Mačvanskog, Nišavskog i Topličkog, Pirotskog i Zaječarskog okruga. Rashodi za preventivnu zdravstvenu zaštitu po detetu predškolskog uzrasta u posmatranom periodu se konstantno smanjuju, sem na nivou Vojvodine, gde je uočeno njihovo kolebanje, ali takođe sa tendencijom smanjenja.

Služba zdravstvene zaštite dece školskog uzrasta u 2008. godini na čitavoj teritoriji Republike je samo u Zapadnobačkom okrugu ispod proseka u ukupnim rashodima za PZZ. Samo Južnobanatski i Sremski okrug imaju natprosečno učešće u ukupnim rashodima. U posmatranom trogodišnjem periodu u 2007. godini se beleži smanjenje učešća rashoda za preventivni rad u ukupnim rashodima službe, nakon čega dolazi do stagnacije na postignutom nivou. Uočava se takođe tendencija ublažavanja teritorijalnih razlika u obimu preventivnog rada u posmatranim godinama. Kada se posmatraju ukupni rashodi službe za zdravstvenu zaštitu dece školskog uzrasta, uočava se da su svi vojvođanski okruzi osim Sremskog zabeležili rashode po detetu ispod proseka.

Stomatološka zdravstvena zaštita u Republici Srbiji je posmatrana samo u 2008. godini, jer se u periodu 2006-2008. godine metodološka obrada prikupljanja i obrade podataka menjala na način koji ne dozvoljava međusobno poređenje.

ZAKLJUČAK

Rezultati istraživanja su pokazali da je najveći rashod za PZZ po osiguranom licu u okruzima u Republici Srbiji u Nišavskom i Topličkom, a najniži u Moravičkom okrugu. Analiza rashoda učinjenih u PZZ odraslog stanovništva, žena, dece predškolskog i školskog uzrasta, a posebno stomatologije, otvara pitanja dalje obrade disperzija vrednosti s nivou okruga u poređenju s prosekom na nivou centralne Srbije, Vojvodine i Republike. Vrednosni sud o izraženim teritorijalnim razlikama i nezadovoljavajućem obimu preventivnog rada nameće se sam po sebi. Međutim, tek bi analiza na nivou pojedinačnih zdravstvenih ustanova mogla da pruži validne dokaze za praktično delovanje – korekcije i dalje planiranje u sistemu zdravstvene zaštite, pogotovo kada je stomatologija u pitanju.

Kao osnovna preporuka, međutim, nameće se neophodnost prelaženja s nivou procene na nivo evidencije rashoda u PZZ. To, u stvari, znači oslanjanje na izveštaje dobijene na osnovu tzv. fakturisane realizacije, odnosno na osnovu podataka dobijenih iz elektronskih faktura.