CONSEQUENCES OF EPIDEMICS IN RURAL AREAS OF WESTERN SERBIA DURING THE SECOND DECADE OF THE TWENTIETH CENTURY

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DOI:10.5937/BatutPHCO24013K

Summary
The appearance of different, local, or broader epidemics was frequent in Serbia during peacetime, especially during the war years. For decades, historical science and the history of medicine paid great attention to the outbreak of three combined types of typhus: spotted, relapsing, and typhoid from the first half of 1915, and only recently to the consequences of the Spanish fever pandemic, specifically its second wave from the end of 1918, while other epidemics have been neglected. This work aims to indicate the occurrence and consequences of those other epidemics, with noticeable mortal consequences, which were observed in Serbia during the years of the First World War, but also their occurrence in the previous, pre-war years.

The research is a case study based on a random sample selected according to the availability of primary historical sources, namely church death registers.

The situation was analyzed in a part of the territory of western Serbia, in five church parishes of the Valjevo and Užice districts, with 26 rural settlements in which 16,039 inhabitants were registered in 1910. It was there during the eight-year period 1911-1918. a total of 4,522 inhabitants died, of which more than half – 2,620 – were caused by various epidemic diseases. The largest number of victims - 826 - was claimed by the aforementioned large epidemic of three combined typhus types from the first half of 1915. The second wave of the Spanish fever pandemic, from the very end of 1918, claimed 530 lives. The rest were victims of other local epidemics of diphtheria (244), scarlet fever (205), whooping cough (188), as well as smallpox, dysentery and typhoid fever, which occurred with similar mortality in pre-war (1911-1913) and wartime (1914-1918) periods.

Keywords: Serbia, epidemics, mortality, First World War, pre-war period

Introduction: Various local and other territorially wider epidemics were a common phenomenon in Serbia before the First World War. They were fueled by unfavorable hygienic living conditions and a lack of health culture, which is particularly noticeable in rural areas where life in family cooperatives was common, with a large number of household members and a kind of semi-collective housing, eating from the same dishes, etc. as well as ignorance and non-application of basic prevention measures, as well as self-treatment, since medical help was difficult to access for many. The way of life in the countryside is indicated by M. Lukić when describing the conditions in the wider surroundings of Bajina Bašta: "The house was an ordinary shed, with a completely open roof. Into the bedroom, wetness from shoes and suits was brought in all day, and at night all the shoes were dried and the wetsuit remained, with the children sleeping in the room. In such circumstances, it's no wonder that the death rate was high, especially among children." Lukić cites bad nutrition as another reason for the illness, which was additionally of poor quality and insufficient during the "famine years". [1, 2]

Even urban settlements, where life was significantly different from life in the countryside, were not spared from local epidemics. It is recorded that during the autumn of 1896, the future famous

infectious disease expert Dr Aleksa Savić, although from a wealthy bourgeois family, got over typhoid fever in his home town Užice. It is assumed that the cause of the relatively frequent illnesses of citizens of Užice from this disease was the poor quality of the water supply network to the public fountains; due to the porosity of the pipes, and drinking water mixed with the contents of the non-potable water. [3] A partly similar reason - flooding and overflowing of septic tanks, caused the appearance of the same disease in 1905. in city of Valjevo, among members of the 17th regiment, when nine patients died (5.96% of the total number of patients). In 1909, an epidemic of dysentery was registered in Valjevo on the shore of river Kolubara. [4, 5, 6]

With the declaration of a state of war and the initiation of mobilization, hygienic conditions become markedly worse, and thus the possibility of the appearance and spread of infectious diseases significantly increases. In the first place, the concentration of people in the limited barracks space is increasing significantly, namely recruits arriving from different regions where various infectious diseases exist endemically. With the development of the war situation, there is the movement of the army outside the garrison and their stay in temporary, unsanitary, trench habitats, mass displacement of the civilian population from areas threatened by the fighting, as well as the concentration of prisoners. All this is accompanied by general deprivation, and as a result, disturbed nutrition, which leads to a drop in immunity. In such circumstances, a situation is created that favors the development of various infectious diseases that take significantly more lives than the consequences of armed warfare.

The most famous example of an epidemic threat of enormous proportions that developed in the mentioned way is the great typhus epidemic from the very end of 1914. and the first half of 1915. It was a combined epidemic of three types of typhus, three completely different diseases, with similar basic symptoms. Typhus epidemics in Serbia were not rare even in earlier years. Mostly, in the form of smaller, distinctly local epidemics, typhoid fever occurred, however, from the beginning of the fall of 1914, the appearance of a significantly more deadly relapsing one, and then spotted typhus, began to be observed among Serbian soldiers. After simmering as a silent threat for a few months, the epidemic flared up in December, after the Battle of Kolubara. The epicenter of the epidemic attack was the territory of western Serbia, primarily Valjevo, in the vicinity of which the Serbian armed forces, the wounded, the sick, refugees, and captured Austro-Hungarian soldiers were concentrated, among whom typhoid diseases had also already been observed. The transfer of prisoners to camps and hospitals throughout Serbia, the visits of relatives to Serbian soldiers, as well as their referral to leave and home treatment, contributed to the rapid escalation of the epidemic. The beginning of the mass dying of the population can be observed from the last days of 1914.

In most cases, the death books as the main historical sources indicating the mortality during this epidemic, did not define the specific type of typhus. In cities and in hospitals, where the sick were under medical supervision, it was possible to write down the exact cause of death, but in an extremely rural society, where the absolute majority of the sick died at their homes, without seeing a doctor, this was not possible. The epidemic lasted until the end of the spring of 1915, after which deaths from typhus became sporadic. There are different estimates of the number of victims of this epidemic in Serbia, but the latest research indicates the sustainability of the estimate of 120,000 to 130,000 deceased. [2]

Due to the relatively large attention paid to this plague, both by historical science and the history of medicine, as well as by the general public, many other epidemics, including the appearance of the Spanish fever, were placed in the background for decades, even behind the veils of oblivion. Its development on the territory of Serbia, as well as its consequences, have only been seen in part during the past few years. Unlike the typhus epidemic, which was a direct "product" of wartime circumstances in Serbia, the appearance of Spanish fever was a pandemic. It developed and spread independently of wartime conditions, like many other influenza pandemics both before and after,

with the war environment being an additional developmental generator. All four pandemic waves were observed in Serbia, among which the deadliest was the second, which appears at the beginning of autumn, and reaches its peak at the end of October and November, and at the end of November the deaths become sporadic. New research has shown that the number of deaths from that one disease during a few months at the end of 1918 is similar to the stated approximate number of deaths from three outbreaks of typhus in the six months period of 1915. when Serbia had more inhabitants than three years later. [2, 7, 8, 9, 10]

Recent research has also pointed to the appearance of a "mysterious" heartache epidemic at the end of the summer of 1918, which preceded the onset of the second wave of Spanish fever. Dysentery, like typhoid fever, appeared regularly in Serbia, in the form of smaller, isolated local epidemics, with higher or lower mortality, depending on the specific causative agent, but at the end of the summer of 1918, it was simultaneously observed in different, mutually unrelated parts of Serbia, with extremely high mortality. For example, in the parish church in Seča Reka near Kosjerić, dysentery claimed the lives of 83 people in a few months, the most in the village of Makovište, 38 (2.92% of the population) and Godečevo, 16 (3.12%). [11]

This paper aims to indicate the occurrence of not only the mentioned, but also other epidemics with noticeable mortal consequences that were observed in part of the territory of western Serbia during the years of the Great War while comparing the situation with the previous, pre-war years, and following the available historical sources.

Method: In a situation where the largest number of victims of epidemics die at their homes, without medical supervision, which causes a lack of other historical sources, such as various medical documents, the primary source for studying the mortal consequences of epidemics are death registers. Records of deaths, as well as births and marriages, were under the authority of parish priests, and the causes of death, based on the report of relatives, were to be determined by the district or municipal doctor and to issue written consent for burial. [12] However, since there were not enough doctors, and the majority of the population lived in villages, often far from district and municipal centers, it is questionable to what extent these legal provisions were applied in peacetime, especially in irregular wartime circumstances. Therefore, church death records cannot be a relevant source, but in the absence of other sources, their detailed analysis provides very valuable information.

When analyzing death books as a source of knowledge about epidemics, it must be borne in mind that the entries help to register only those epidemics that have left behind larger, observable mortal consequences. Certain mass occurrences of infectious diseases do not have to have fatal outcomes, so they remain completely unregistered, or entries in church books may incorrectly indicate sporadic mortality, concealing the epidemic proportions of the disease. A particular problem for research can be the lack of up-to-dateness as well as the inaccuracy of keeping church books. The first is connected with several different extraordinary circumstances, and the second with the lack of training of certain priests, which is a frequent case mainly in monastery parishes where the church registers are kept by hieromonks, often without formal education for priestly duties, which included the work of a registrar. An additional difficulty faced by the researchers is the non-preservation of the registers, which "disappeared" in various turbulent historical circumstances, and then the difficult accessibility, even the unavailability of the preserved ones, which depends on the place of accommodation, and more recently, the degree of digitization. All this has the effect of narrowing down the research samples. [13]

Analyzing church registers of the dead, aiming to establish epidemic trends, should be a long-term, systemic, institutionally organized work - a project for at least one larger interdisciplinary team of experts. Until such conditions are created, pilot projects conducted on a random sample conditioned

by the preservation and availability of church death records are possible and desirable, as represented by the research presented here.

For the purposes of this work, the available death records digitized in the archives in Valjevo and Užice were analyzed, which continuously cover the war years: 1914-1918, as well as several pre-war years. The chronological scope of available up-to-date books forced the analysis of a three-year non-war period: 1911-1913. It is true that during the autumn of 1912 and part of 1913, the Balkan wars continued. Still, they were fought far from the territories of western Serbia, so that the war could not affect the epidemic situation of the population, except in one isolated case (the appearance of cholera), which was at the level of statistical error, which will be discussed further.

Following the stated circumstances, the research focus was directed towards the analysis of church register books of deaths from the territory of five church parishes, with 26 distinctly hilly and mountainous villages in the Valjevo and Užice regions, relatively far from the district centers, in which, according to the 1910. census, 16,039 inhabitants lived there. These are books from the following churches:

– Church in Kosjerić, with a parish of 3 villages and 2,900 inhabitants according to the 1910 census; the book is for the period 1909-1931;[1]

– Church in Sevojno, with 6 villages and 3,526 inhabitants; the book is for the period 1907-1918;[2]

– Church in Ražana, with 4 villages and 2,743 inhabitants; the book is for the period 1903-1929;[3]

– Church in Dračić, with 8 villages and 2,860 inhabitants; book for the period 1907-1925;[4]

– The church of the Pustinja monastery, with 5 villages and 4,010 inhabitants, book for the period: beginning of March 1911-1924 (one gets the impression that it is not satisfactorily kept up-to-date).[5]

Research results: A detailed analysis of the aforementioned church protocols indicated that in the researched eight-year period in all villages of five parishes, 4,522 parishioners died of all possible causes, which represented 28.19% of the population enumerated in 1910. In the first, three-year, conditional peacetime period 1911-1913. 1,155 people passed away - an average of 385 per year, and during the next five-year war period 1914-1918, 3,367 people died, an average of 673 per year. The highest mortality was in the "typhoid" year of 1915, and then in 1918, when Spanish fever appeared.

The analysis indicates that parishioners regularly died from a very wide range of different causes. Not counting epidemic diseases, tuberculosis (peptic ulcer, dysentery), and pneumonia predominate, followed by old age (natural death, senile exhaustion). People also died from catarrh, heart failure, bronchitis, dropsy, bone pain, scrofula, cancer, and various inflammations (brain, intestines)... Death

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[1] Historical archive of Užice, digitized material (HAU-dm), Book of the church of Kosjerićka, Church of the Nativity of the Holy Virgin, for the registration of the deceased, for the period 1909–1931. Number of inhabitants from the 1910 census according to: Ljubodrag Popović, "Contributions to the history of the Užice region in World War I: population losses from 1912-1918. year", Užice collection, no. 14, (1985), 137–158.

[2] HAU-dm, Book of the church of Sevojnička, the temple of Saint Archangel Gabriel, for the registration of the deceased, for the period 1907–1918. Number of inhabitants according to: Ibid.

[3] HAU-dm, Book of the Church of Ražana, Temple of the Repose of the Holy Virgin, for the registration of the deceased, for the period 1903–1929. Number of inhabitants according to: Ibid.

[4] Historical archive of Valjevo, digitized material (HAV-dm), Book of the Church of Dračićka, Church of the Holy Apostles for the registration of the deceased, for 1907–1925. a year. Number of inhabitants according to: Ljubodrag Popović, "Census of the population of the Valjevo district in the First World War", Gazette of the Historical Archive of Valjevo, no. 34, (2000), 159-170.

[5] HAV-dm, Book of the desert church (Poćuta), the temple of Saint Vavedeni, for the registration of the deceased, for 1911–1924. a year. Number of inhabitants according to: Ibid.

in childbirth is also cited as the cause of death, as the mother (died in childbirth) as well as the newborn (during childbirth, prematurity), as well as the later death of babies (weak birth due to lack of mother's care, due to poor care, due to mother's illness, febrile convulsions). Various violent deaths are also common: killed by accident, killed, killed with a rifle, killed with an axe, slaughtered in a tavern, killed by bandits, by villains (sometimes with the names of the killers). Deaths resulting from suicide are not rare, as well as from various unfortunate events: he was killed by lightning, drowned (while crossing a river, while bathing), fell from a tree, a tree fell on him (from a beech tree), from burns, from hot water, got off the road, froze, got drunk on brandy, from a snake bite. Entries are also found: of madness, or epilepsy, found dead, but also: died of hunger, i.e. due to lack of food. [2, 13]

The war years resulted in the frequent occurrence of deaths as a result of combat actions (killed, from a bullet, from a shell, died in the hospital after being wounded...), but during the war, as well as before it, the most common cause of death was various infectious diseases, which spread in the form of epidemics, both widespread territorially and locally, which affected several parishes, only one, or only one part of it - one village.

An analysis of the available death books indicates that among the epidemic diseases from which mass deaths occurred, the following were represented: scarlet fever, whooping cough, strep throat (diphtheria), heart disease (dysentery), as well as various typhus, mostly unspecified, although, when it comes to the pre-war years, it is realistic to assume that in most cases it is a matter of local typhoid epidemics. It's similar when it comes to smallpox, or "scabs", although occasionally you can come across a concretization of "big scabs". In addition, in the book from the Pustinja monastery, a large number of those who died regularly died of an "unknown disease". We can assume that it is one of the previously mentioned epidemic diseases that, in most cases, the monk from the Pustinja monastery did not bother to identify. Along with the mentioned diseases, during the last quarter of 1918, as expected, Spanish fever was also found as a cause of mass death.

It is necessary to emphasize that deaths due to cholera were also recorded in 1913, but this is not about the epidemic that spread through western Serbia, but about soldiers infected on the Bulgarian front in the Second Balkan War. In the observed territory of five parishes, only three deaths were registered, two of which were registered retroactively, following 1914, however, previous analyses of death books from parishes of other churches indicate higher mortality. For example, in the territory of the Valjevska Gračanica church parish, the village of Tubravić, cholera claimed five lives, and in the parish of the Ćelije monastery, the village of Lelić, six. Most of them died in field hospitals on the front, but some were transported from the front to the hospital in Valjevo, as well as those who died of cholera at home, in the early fall of 1913, after the end of the war and demobilization. [14, 2]

Detailed analysis indicates that the aforementioned epidemic diseases claimed significantly more than half of the lives of all those who died in the eight-year period: 2,620.

TABLE 1: The number of deaths in 26 villages of Uzičko and Valjevko districts during the period 1911-1918

Period	Total number of deaths	Percentage of deaths in relation to the number of inhabitants, according to the 1910 census (16.039)	Number of deaths from epidemic diseases	The percentage of deaths from epidemic diseases in relation to the total number of deaths
1911-1913	1.155	7,20%	451	39,05%
1914-1918	3.367	20,99%	2.169	64,42%
TOTAL	4.522	28,19%	2.620	57,94%

During the three relatively peacetime years, epidemic diseases were the cause of 39% of deaths, and more than 64% during the five-year war period, with the absolute majority then being the victims of the two mentioned great plagues: the combined epidemics of three typhus from 1915 - 826 victims and Spanish fever from the end of 1918 – 530 deceased. Those two epidemics together claimed 1,356 lives, which represents: 8.45% of the population enumerated in 1910, 29.99% of all those who died during the observed eight-year period, or 40.27% of those who died during the five-year war period. The same figure represents 51.76% of the victims of all epidemics during eight years, that is, 62.52% of the victims of epidemics from the five-year war period.

The remaining victims of epidemics died from other diseases, and they make up a conditional 37.48% of victims of epidemics from the war period. Conditional, not absolute, since behind the victims of "unknown disease", recorded as the cause of death in the book of the dead of the temple of the Pustinja monastery (village of Vujinovaca), there are most likely victims of the current and previously disturbed diseases, which leads to the fact that the real number of those who died from the mentioned epidemic plagues was higher than previously presented. Among other things, the number of victims of the great typhus epidemic would be higher by about sixty people, as many as were recorded as having died of an unknown disease in 1915, which would change the previously presented statistical representation.

Leaving aside the great typhus epidemic and the Spanish fever pandemic, all other epidemics with observed fatal consequences were distinctly local. They occurred periodically, but frequently and in places, and without particularly noticeable differences between the pre-war and wartime periods. Thus, unrelated to the 1915. epidemic, typhus, probably typhoid, appears as a cause of death almost every year, but without major fatal consequences. True, in 1913, typhus claimed 13 lives in the observed territory, five of which were in the parish of Dračić. In the parish church in Sevojno, typhus claimed nine lives in 1913. However, when it comes to 1913, in most cases it is about soldiers who died at the front. In previous years, this disease claimed the lives of approximately one to three people in each parish, and not infrequently none. [2] Throughout the year 1914, typhus was the cause of the loss of 41 lives in all observed parishes, but even more victims died at the end of the year, at the very beginning of the great epidemic.

A disease conditionally related to typhoid, only with a much wider range of causes, is dysentery - heartache. In the pre-war years, it had significantly more deaths than typhus. In the period: 1911-1913. in the territory of the observed five parishes, 77 parishioners died from it, of which 14 (seven per year) in 1911. and 1912. in the villages of the parish church of the Pustinja monastery, and in 1912. alone, dysentery claimed 20 lives in the parish church in Dračić. As for other parishes, outside the scope of the research here, in 1911. alone, 23 people died of heartburn in the villages of the church parish in Sevojno. [2]

It is indicative that during the five years of the war in the observed territory, the observed deaths caused by dysentery were significantly fewer than during the previous three-year pre-war period: 77 compared to 54 deceased. This indicates that specific parishes were largely bypassed by the mentioned "mysterious" epidemic of dysentery from the end of the summer of 1918. In the villages of the Dračići parish, it did not take a single life, nor in the villages of the Kosjerić parish, even though, as previously emphasized, a real plague was arranged in the neighboring Sečorec parish. In the neighboring parish of the church in Ražana, two people died of dysentery in 1918, but 19 parishioners died in the villages of the parish of the church in Sevojno. [11]

In the observed territory, the appearance of smallpox is also sporadically observed, but when it comes to a greater number of deaths, it is realistic to assume that it is "large scabies". In the observed eight-year period, they claimed 160 lives, of which more than half, 86 in 1913, and 62 only in the territory of the Kosjerić parish, while in the typhus year of 1915. in the parish of the Pustinja monastery, 29

parishioners perished from them. There, this disease had greater consequences, with 14 deaths, in the previous year as well.

As far as other diseases are concerned, diphtheria took the most victims during the eight-year period, 244. The number of victims represents 1.52% of the population, 5.40% of all deceased, 9.31% of those who died as a result of all epidemics, but also 18.30% of victims of epidemics, if the typhus of 1915. and the Spanish fever are excluded. Diphtheria was a frequent cause of sporadic deaths in the observed territory during the mentioned period, with the fact that in some parishes it appeared in the form of particularly deadly local epidemics during 1914, before the start of the war. For example, during the period 1911-1913, four people died of this disease in the Dračić parish, and 14 in 1914. However, an even greater escalation of diphtheria occurred in 1915, near the end of the great typhus epidemic and after it ended. The 148 victims of diphtheria in 1915. represent 60.66% of the victims of this disease in the eight-year period. Only in the Kosjerić parish, where this disease was not observed in earlier years, in the typhus of 1915, it claimed 85 lives, more than anywhere else.

TABLE 2: The number of deaths in 26 villages of uzičko and valjevko districts during the period 1911-1918, by epidemic diseases

Year	*Yellowimg*	*Whooping cough*	*Diphtheria*	*Dysentery*	*Cholera*	*Smallpox*	*Typhus*	*Unknown disease*	*Spanish fever*	*Total*
1911	13	8	0	32	0	0	3	55	-	111
1912	1	15	5	40	0	9	5	54	-	129
1913	40	32	6	5	1	86	18	23	-	211
	54	**55**	**11**	**77**	**1**	**95**	**26**	**132**	**-**	**451**
-	-	-	-	-	-	-	-		-	
1914	59	32	35	4	2	26	41	33	-	232
1915	83	28	148	5	0	38	826	61	-	1.189
1916	9	29	44	4	0	1	7	29	-	119
1917	0	35	6	9	0	0	3	0	-	53
1918	0	9	0	23	0	0	10	0	530	572
	151	**133**	**233**	**45**	**2**	**65**	**887**	**123**	**530**	**2.169**
-	-	-	-	-	-	-	-		-	
	205	**188**	**244**	**122**	**3**	**160**	**913**	**255**	**530**	**2.620**

Diphtheria was constantly present but escalated with high mortality during the war years, especially in the 'typhoid' year of 1915. Increased mortality from it was also observed during the previous and following years, while in the pre-war years, fewer people died from it compared to typhus and dysentery. On the other hand, a disease that was constantly present, with a continuously high number of deaths, on average higher than typhus, dysentery, and measles, was whooping cough. Every year in the observed territory, that disease claimed a greater number of lives, from eight to 35. In the eight-year period, it claimed 188 lives, children, and young people, of which 133 in the five-year war sub-period. In some parishes, such as Kosjerićka, it is constantly present, with a significantly higher number of victims during the war years than before the war (54: 7), while in some parishes, deaths as a result of whooping cough are not registered during the war. Such is the situation with the parish church in Dračić, where in the period 1911-1913. ten people died of this disease, and during the period 1914-1918 only four, and that in one year, 1914. Lower mortality during the war years was also observed in the parish church of the Pustinja monastery.

A relatively similar situation is observed concerning scarlet fever. This disease was also almost constantly present; it claimed more lives than whooping cough (205: 188). However, unlike whooping cough, it escalated sharply in 1915, causing 83 deaths. Then, in 1916, the number of deaths fell to nine, and during the last two years of the war, mortality from scarlet fever was not observed in the observed territory.

TABLE 3: Number of deaths in 26 villages of uzičko and valjevko districts during the period 1911-1918, by parishes

PUSTINJA; 5 villages; 4010 inhabitants

Total – Total number of deaths; Yell. – Yellowing; Cough – Whooping cough; Diph. – Diphtheria; Dys. – Dysentery; Chol. – Cholera; Small. – Smallpox; Typh. – Typhus; Unk. dis. – Unknown disease; Sp. f. – Spanish fever; Total – In total.

Year	Total	Yell.	Cough	Diph.	Dys.	Chol.	Small.	Typh.	Unk. dis.	Sp. f.	Total
1911	87	0	0	0	7	0	0	2	55	0	64
1912	94	0	1	2	7	0	0	1	54	0	65
1913	159	17	31	0	0	0	0	3	23	0	75
	340	**17**	**32**	**2**	**14**	**0**	**0**	**6**	**132**	**0**	**204**
	-	-	-	-	-	-	-	-	-	-	-
1914	226	44	26	11	2	0	14	7	33	0	137
1915	466	24	0	10	1	0	29	256	61	0	381
1916	59	0	0	5	0	0	0	0	29	0	34
1917	47	0	0	0	0	0	0	0	0	**0**	**0**
1918	189	0	1	0	2	0	0	0	0	146	149
	987	**68**	**27**	**26**	**5**	**0**	**43**	**263**	**123**	**146**	**701**
	1337	**85**	**59**	**28**	**19**	**0**	**43**	**269**	**255**	**146**	**905**

DRAČIĆ; 8 villages, 2.860 inhabitants

Year	Total	Yell.	Cough	Diph.	Dys.	Chol.	Small.	Typh.	Sp. f.	Total
1911	34	0	0	0	0	0	0	0	-	0
1912	81	0	10	1	20	0	0	1	-	32
1913	98	1	0	3	1	0	7	5	-	17
	213	**1**	**10**	**4**	**21**	**0**	**7**	**6**	-	**49**
-	-	-	-	-	-	-	-	-	-	-
1914	104	1	4	14	1	2	7	13	0	42
1915	300	5	0	20	0	0	7	181	0	213
1916	33	1	0	3	3	0	0	2	0	9
1917	38	0	0	1	0	0	0	0	**0**	1
1918	113	0	0	0	0	0	0	0	**77**	77
	588	**7**	**4**	**38**	**4**	**2**	**14**	**196**	**77**	**342**
	801	**8**	**14**	**42**	**25**	**2**	**21**	**202**	**77**	**391**

SEVOJNO; 6 villages, 3526 inhabitants

Year	Total	Yell.	Cough	Diph.	Дизе.	Кол.	Small.	Typh.	Sp. f.	Total
1911	93	12	4	0	23	0	0	1		40
1912	74	1	0	0	6	0	9	3		19
1913	102	21	0	1	1	0	3	9		35
	269	**34**	**4**	**1**	**30**	**0**	**12**	**13**		**94**
	-	-	-	-	-	-	-	-	-	-
1914	110	14	0	2	0	0	2	19	0	37
1915	296	21	13	15	4	0	2	181	0	236
1916	97	6	22	2	1	0	1	3	0	35
1917	59	0	2	1	0	0	0	2	0	5
1918	202	0	0	0	19	0	0	9	133	161
	764	**41**	**37**	**20**	**24**	**0**	**5**	**214**	**133**	**474**
	1.033	**75**	**41**	**21**	**54**	**0**	**17**	**227**	**133**	**568**

KOSJERIĆ; 3 villages, 2.900 inhabitants										
Year	Total	Yell.	Cough	Diph.	Dys.	Chol.	Small.	Typh.	Sp. f.	Total
1911	44	0	3	0	1	0	0	0		4
1912	43	0	4	0	5	0	0	0		9
1913	120	1	0	0	1	1	62	0		65
	207	**1**	**7**	**0**	**7**	**1**	**62**	**0**		**78**
	-	-	-	-	-	-	-	-	-	-
1914	46	0	2	4	1	0	0	2	0	9
1915	300	5	14	85	0	0	0	166	0	270
1916	66	1	6	25	0	0	0	1	0	33
1917	103	0	27	1	0	0	0	1	**0**	**29**
1918	88	0	5	0	0	0	0	1	62	68
	603	**6**	**54**	**115**	**1**	**0**	**0**	**171**	**62**	**409**
	810	**7**	**61**	**115**	**8**	**1**	**62**	**171**	**62**	**487**
RAŽANA; 4 villages, 2.743 inhabitants										
Year	Total	Yell.	Cough	Diph.	Dys.	Chol.	Small.	Typh.	Sp. f.	Total
1911	48	1	1	0	1	0	0	0		3
1912	42	0	0	2	3	0	0	0		5
1913	56	0	0	2	2	0	14	1		19
	146	**1**	**1**	**4**	**6**	**0**	**14**	**1**		**27**
	-	-	-	-	-	-	-	-	-	-
1914	36	0	0	4	0	0	3	0	0	7
1915	106	28	1	18	0	0	0	42	0	89
1916	63	1	1	9	0	0	0	1	0	12
1917	74	0	6	3	9	0	0	0	**0**	18
1918	146	0	3	0	2	0	0	0	112	117
	425	**29**	**11**	**34**	**11**	**0**	**3**	**43**	**112**	**243**
	571	**30**	**12**	**38**	**17**	**0**	**17**	**44**	**112**	**270**

Conclusion: The epidemic situation in Serbia during the First World War was significantly marked by two major threats: the state-level epidemic of the three combined typhus types during the first half of 1915. and the spread of the second wave of the Spanish flu pandemic in the fall of 1918. The first was a direct product of the wartime conditions in Serbia, while the second was part of the global epidemic process whose occurrence was not directly connected to them. In the observed territory of five parishes with 26 villages and 16,039 inhabitants, these two threats claimed 1,356 lives, representing 8.45% of the population recorded in the 1910. census, 29.99% of all deceased during the eight-year observation period, and 40.27% of those who died during the five-year war period. Generally, these two epidemic events claimed approximately the same number of lives in Serbia (around 125,000 each), but in the observed territory, which was also part of the epicenter of the 1915. epidemic, typhus was deadlier (826:530 victims).

As for other epidemic diseases, the deadliest was scarlet fever (151) and whooping cough (133 victims), with occurrences of typhus and smallpox also observed. These were distinctly local epidemics, common even in the pre-war period, so their occurrence cannot be entirely attributed to wartime conditions, except for the events of 1915. when the general situation caused by the typhus epidemic favored the emergence of other diseases. The disease that particularly escalated in the observed territory during that year was diphtheria, which appeared with significantly more severe consequences than in other years: 148 victims in 1915, compared to 244 victims during the period 1911-1918.

It is noteworthy that after the great suffering of 1915, and until the beginning of the mortality impact of the Spanish flu, there was significantly lower mortality from epidemic consequences than in the previous, even pre-war years.

Acknowledgments: The author expresses gratitude to young colleagues, historians, Jelena Krivošejev Radosavljević MA and Alen Radosavljević MA, currently professors in Hat Yai (Thailand), for their invaluable assistance in translating this work.

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