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REGIONAL SETTLEMENT SYSTEM AS A FACTOR OF DISTRIBUTION OF HEALTH CARE INSTITUTIONS (ON EXAMPLE OF VOLYN REGION OF UKRAINE)

Abstract: *The article deals with regional settlement system as a factor of distribution of health care institutions (on example of volyn region of Ukraine). The publication focuses on defining an index of population concentration (which shows how the population is distributed in relation to the total population of the territory) and the main parameters of the spatial distribution of the population (the arithmetic, median and modal centers).*

Keywords: *settlement system, health care, population density, index of population concentration, arithmetic center, median center, modal center.*

Topicality. Health care - a key element of national security, an important component of social sector, a branch of the state industry, whose purpose is to organize and to provide an affordable health services. Healthcare facilities that are located in a particular area are in certain respects and relations between each others. They form a kind of territorial entities, the totality of which forms the territorial structure of the healthcare system. Territorial organization of health care institutions is characterized by certain specific features, depending on the area of the territory, the state of the economy and its structure, population characteristics and its settlement, environmental situation, as well as having a direct or indirect impact on health of the population in the region.

Preset that Volyn region has different allocation of health care institutions: universal (for rural medical stations, dispensaries, pharmacies), selective (city and district hospitals, clinics, children's hospitals), and spot (medical centers of rare care, rehabilitation and wellness centers) [6]. Accordingly, the research of the spatial distribution of the population is an important task, because from the population is largely dependent formation of inter-regional relations, specialization of the economy, location and specialization of the non-productive sector institutions, including institutions of medical fields. Population as consumer greatly influences on the development of industries that provide their needs, particularly for health care, ultimately, determine the conditions of domestic demand. Data on the structure and distribution of the population is widely used in planning and managing the economy and the social sphere, in particular for the medical sphere.

The main material. The population of Volyn region on January 1, 2014 amounted to 1041.3 thousand people, every year observed the population increases due to the natural and migration movement of the population. In particular, in 2013 the natural growth rate was 1‰, migration was 0,3‰ [5].

The organization of the population as a territorial organization of social production is directly linked to the settlement system of the region. Administrative division of Volyn region includes administrative (regional) center - Lutsk, 16 districts, 33 urban settlements (cities of regional subordination - 4, district-level towns - 7, townships - 22) and 1054 settlements of rural type. [3]. In the Volyn region, the number of urban and rural population is almost equal, with a slight predominance of urban (543.7 thousand and 497.6 thousand respectively) [4].

The average population density of the Volyn region - 51.5 inhabitants/km², which is less than the average for Ukraine (73 persons/km²). The main trend in the region is the concentration of population around the major cities, especially the regional center, because of that the largest population density is observed in the south (table 1, figure 1), where located the largest cities - Lutsk district (with Lutsk) - 279.7 persons/km², Ivanichi district (with Novovolynsk) - 140.5 persons/km², Kovel district (with Kovel) - 63.5 persons/km², Vladimir-Volynskiy district (with Vladimir-Volyn) - 62.1 persons/km². The lowest density in the north-western and north-eastern districts - Turiysk district - 21.9 persons/km², Shatsk district - 22.5 persons/km², Manevychi district - 24.5 persons/km², Lyubeshiv district - 25.2 persons/km². Such a situation developed so that these districts are remote from the regional center. The most densely populated southern districts, due to the location of the regional center and more favorable natural and geographical conditions [1, 2], the distance from the state border and so on.

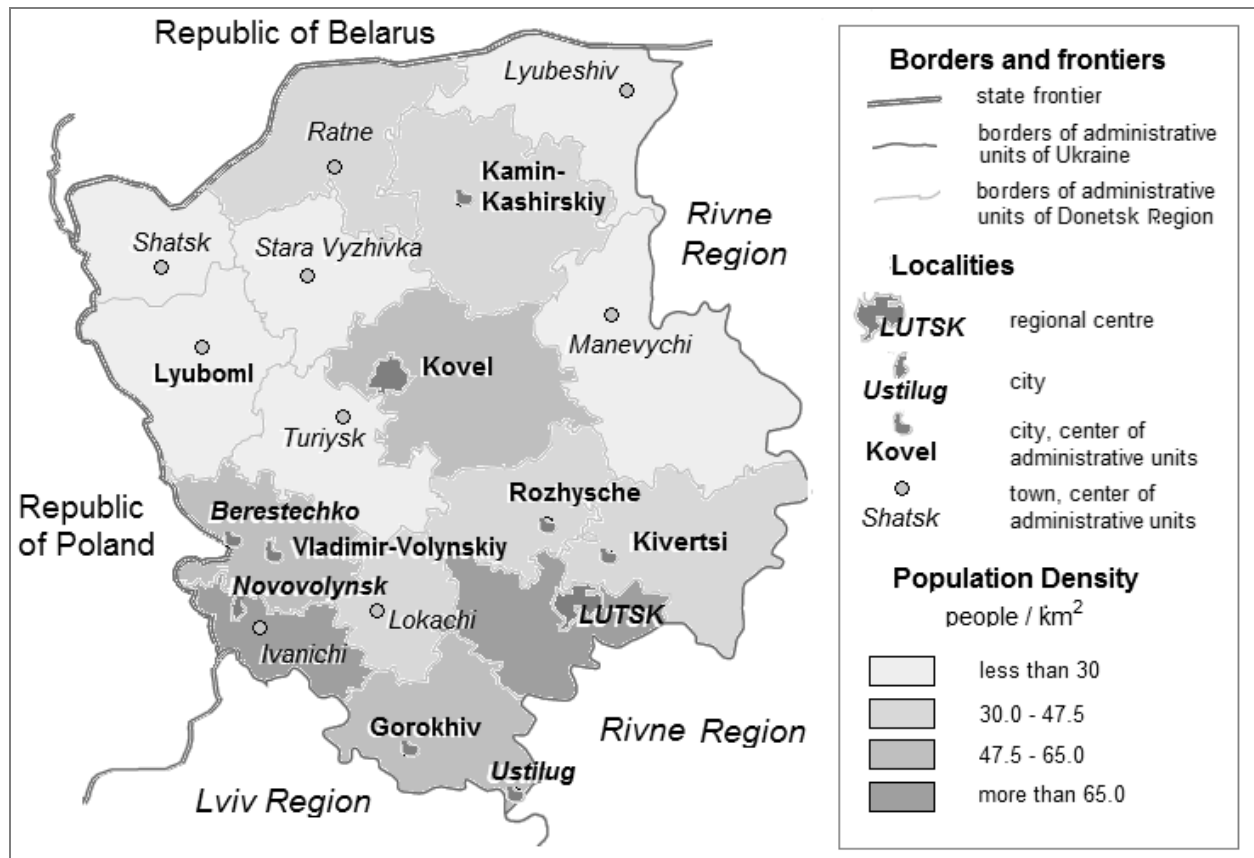


Figure. 1. Population density of Volyn region (calculated and constructed by authors)

To determine the degree of uniformity of population settlement in the Volyn region we used **an index of population concentration** (table 1), which shows how the population is

distributed in relation to the total population of the territory. [7]. Index of population concentration in a particular area is calculated as the difference in particle size and population of the district. This figure - 29.5% - determine inconsiderable uneven in distribution of population in the Volyn region.

Table 1.

Calculation of the index of population concentration of Volyn region
(calculated according to [4])

Districts	The population of the district (people)	The area (km ²)	Density (people / km ²)	$x_i * 100\%$	$y_i * 100\%$	$ x_i - y_i * 100\%$
Vladimir-Volynskiy district	64408	1038	62,1	5	6	1
Gorokhiv district	53073	1122	47,3	6	5	1
Ivanichi district	90644	645	140,5	3	9	6
Kivertsi district	63630	1747	36,4	9	6	3
Kovel district	63567	1414	45,0	7	6	1
Kamin-Kashirsky district	109476	1723	63,5	9	10	1
Lokachi district	22922	712	32,2	4	2	2
Lutsk district	272195	973	279,7	5	26	21
Lyubeshiv district	36479	1450	25,2	7	4	3
Lyuboml district	39809	1481	26,9	7	4	3
Manevychi district	55449	2265	24,5	11	5	6
Ratne district	52062	1437	36,2	7	5	2
Rozhysche district	40189	928	43,3	5	4	1
Starovyzhivka district	30967	1721	18,0	6	3	3
Turiysk district	26443	1205	21,9	6	3	3
Shatsk district	17114	759	22,5	4	2	2
an index of population concentration = 29,5 %						$\Sigma = 59$

The main parameters of the spatial distribution of the population are the arithmetic, median and modal centers (Figure 1). **Arithmetic center** is a measure of the central point of the spatial distribution of the population. It is measured by using of two coordinates **x** and **y**, which

form straight lines that intersect at the arithmetic center of the region. To determine the **arithmetic center**, the massive numbers of distances (the length of the region) was multiplied by the population of the districts and divided by the population of the entire region [7].

$$x = \sum_{i=1}^{16} P_i \times L / P = 97,3 \quad y = \sum_{i=1}^{16} P_i \times L / P = 112,1$$

P_i – population of the district (region);

L – distance between the vertical (horizontal) straight;

P – population of the region

Arithmetic center of Volyn region is located in the central part of the Kovel district. Coordinates of the arithmetic center of the region is almost the same as the coordinates of the geographical center of the region.

The **median center** of the spatial distribution is similar to the median in linear statistics, which can be regarded as the position of the point which divides the population into two equal parts by latitude and longitude. The median center of the spatial distribution - a point on the surface, the sum of the distances from which all other units of the population is minimal. The median center is located in the southern part of Rozhishche district. It is "shifted" to the south of the region, indicating the uneven settling of the population due to the influence of the population of neighboring cities (Kovel, Manevichi) and the regional center - the city of Lutsk. That's because in the southern part of the region are more developed industrial centers and cities with a large concentration of population, and also in the south better living conditions than in the north.

Modal center can be defined as the bigger point on the surface area distribution. This is one of the most important indicators of spatial distribution, which determines the location of the largest concentrations of population. Modal Center is located in the city of Lutsk, because of the maximum population density is in the regional center.

To identify and analyze the location and dispersion of the population we determined the **center of gravity** of the geographical phenomenon - a point with the average coordinates of the geographical coordinates of the centers of individual territorial units of area-weighted quantity (mass) of any signs of these areas [7].

The center of gravity is calculated by the following formula:

$$x_0 = \frac{\sum_{i=1}^{16} (p_i - p_1) * x_i + p_1 x_1}{\sum_{i=1}^{16} p_i} = 55,7 \quad y_0 = \frac{\sum_{i=1}^{16} (p_i - p_1) * y_i + p_1 y_1}{\sum_{i=1}^{16} p_i} = 92,1$$

x_0, y_0 – coordinates of the center;

p – population of the region;

p_i – population of the districts; p_0 – population of the regional centers;

x_i, y_i – coordinates of the districts;

x_1, y_1 – coordinates of the regional centers

The center of gravity of the population of Volyn region (table 2) is located in the southwestern part, namely in Lokachi district (fig. 1). This dislocation caused by its finding close to the administrative center of the region - the city of Lutsk. At first, Lutsk district was the center of gravity of the population, but due to the fact that it has become overpopulated, then the center of gravity has shifted a little higher - in Lokachi district that has not worse living conditions than Lutsk.

Table 2.

Determination of the center of gravity of Volyn region

Districts	Population of the district, people. (P_i)	Population of the regional center, people (P_i')	x	y	x'	y'	X_0	Y_0
Vladimir-Volynskiy district	64408	38444	58	72	53	71	1505912	4598932
Gorokhiv district	53073	9186	98	38	82	29	4300926	1934100
Ivanichiv district	90644	6784	59	58	57	59	4947740	5264136
Kivertsi district	63630	21600	113	157	103	161	4749390	10076310
Kovel district	63567	14916	158	71	138	71	7686858	4513257
Kamin-Kashirsky district	109476	68451	101	109	82	111	4143525	12069786
Lokachiv district	22922	3941	84	62	81	59	1594404	1409341
Lutsk district	272195	210605	121	59	138	61	7452390	16480715
Lyubeshiv district	36479	5627	131	178	141	181	4041612	6510143
Lyubomir district	39809	10129	38	119	38	121	1127840	4757529
Manevychiv district	55449	11600	151	119	138	130	6621199	6726031
Ratne district	52062	9483	68	171	69	161	2895372	8807772
Rozhyshche district	40189	13441	117	81	124	79	3129516	3228427
Starovzhivka district	30967	5161	69	139	63	142	1780614	4319896
Turiysk district	26443	5697	73	92	73	103	1514458	2495423
Shatsk district	17114	5370	27	142	30	142	317088	2430188
						Sum:	57808844	95621986
							55,7	92,1

$$S_{\text{of the district}} = 1038423 \text{ km}^2$$

Lokachi gas field is situated in this district, which belongs to the Volyn-Podolsk oil and gas field of Western Ukraine. This leads to the need of labor force, so many people from neighboring regions move to work in this district.

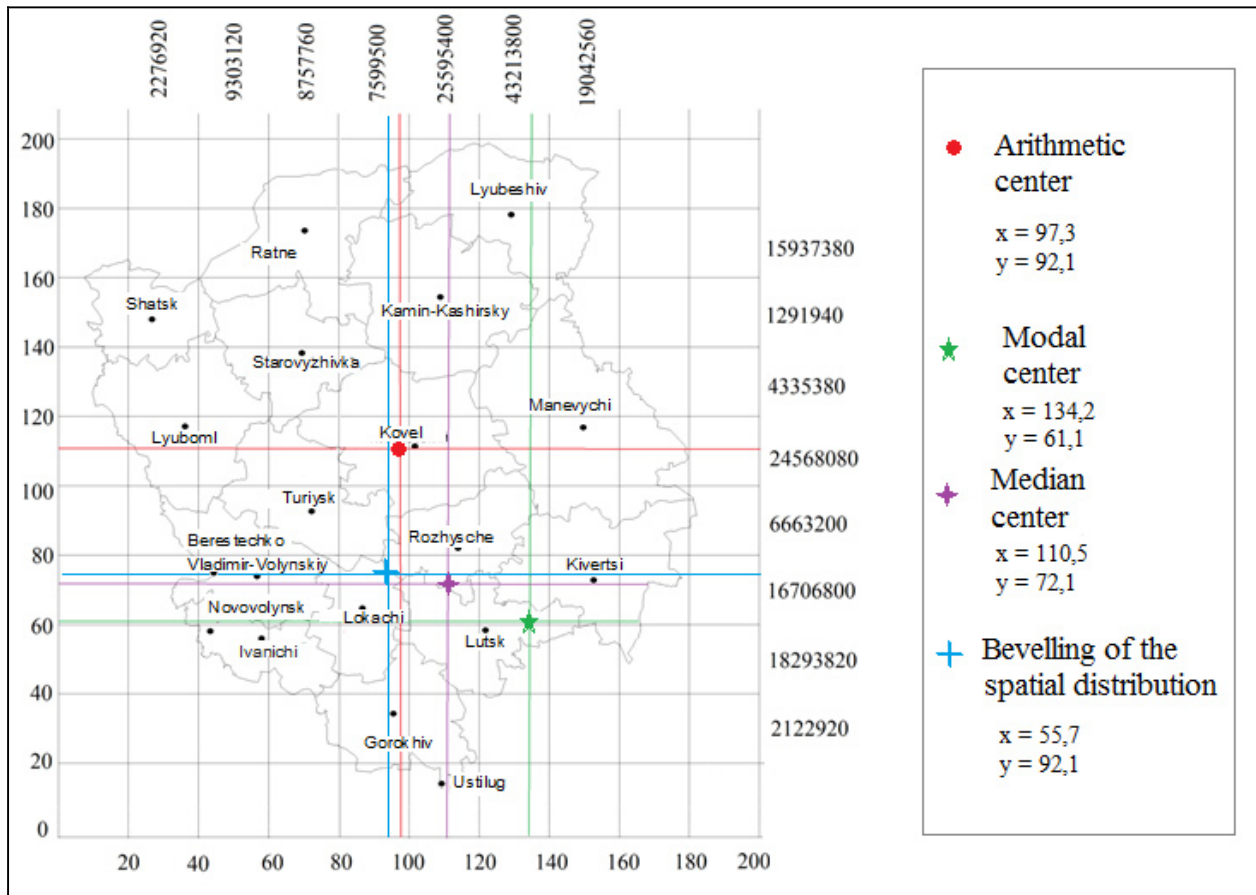


Figure. 2. Centers of spatial distribution of the population in Volyn region (calculated and constructed by the authors)

To determine the **beveling of the spatial distribution of the population** of Volyn region we used the nearest neighborhood analysis. This parameter is based on the determination of the distance of each point to the nearest neighbor populations. It is the arithmetic mean of the actual distance between each member of the population and its nearest neighbor [7].

$$R_n = \frac{\bar{D}}{0,95 \cdot \sqrt{\frac{S}{N}}} = 2,1,$$

$$D = \frac{r_1 + r_2 + r_3 + \dots + r_n}{n};$$

R_n – distance to the nearest neighbor;
 D – the average distance between the regional centers;
 S – area of the region;
 n – number of regional centers.

$r_1 + r_2 + r_3 + \dots + r_n$ – distance between each point;
 n – number of neighborhood between districts.

The largest number of connections in Volyn region have: Turiysk (6), Lokachi (6), Rozhysche (6), Kovel (5), Manevychi (5) and Kamin-Kashirsky (5) districts, due to their geographical location. The smallest number of links have the most remote districts – Gorokhiv (3), Ivanichi (3), Lyubeshiv (3) and Shatsk (3) districts. After determining the average distance to the nearest neighbor in the Volyn region by districts, we can note that the arithmetic mean of the actual distance between each regional center and its nearest neighbor rather small (37.3 km) and the nearest neighbor index - 2.1 km - suggests strong territorial connections between districts.

Висновки. Administrative division of Volyn region includes administrative (regional) center - Lutsk, 16 districts, 33 urban settlements (cities of regional subordination - 4, district-level towns - 7, townships - 22) and 1054 settlements of rural type [1]. The average population

density of the Volyn region - 51.5 inhabitants/km², which is less than the average for Ukraine (73 persons/km²). The population is concentrated more in the south than in the other area. The center of gravity of Volyn region is located in the northeastern part of Lokachi district. The nearest neighbor index - 2.1 km - suggests strong territorial connections between districts. Thus, the settlement system of Volyn region growing and changing, remains one of the key factors of location of health care facilities, further study will allow to improve the territorial organization of the medical sphere in the region and improve the quality and availability of these services to the public for every single territorial unit.

References:

1. Влах М. Історико-географічні передумови формування системи розселення Волинської області / М. Влах, В. Поручинський // Історія української географії. Всеукраїнський науково-теоретичний часопис. – Тернопіль: Підручники і посібники, 2007. – Випуск 1 (15). [Електронний ресурс]. – Режим доступу: <http://ukr-tur.narod.ru/istoukrgeo/allpubl/krajnavstvo/istgeoperd/istgeperedfor.htm>
2. Немець Л. М. Демографічний розвиток Харківського регіону: монографія / Л. М. Немець, К. Ю. Сегіда, К. А. Немець. – Х.: ХНУ імені В. Н. Каразіна, 2012. – 200 с
3. Офіційний сайт Волинської обласної державної адміністрації [Електронний ресурс]. – Режим доступу: <http://www.voladm.gov.ua/>
4. Офіційний сайт Головного управління статистики у Волинській області [Електронний ресурс]. – Режим доступу: <http://www.lutsk.ukrstat.gov.ua/>
5. Офіційний сайт Державної служби статистики України [Електронний ресурс]. – Режим доступу: <http://www.ukrstat.gov.ua>
6. Погребський Т. Г. Ресурсне забезпечення системи охорони здоров'я Волинської області // Матеріали Міжнародної науково-практичної конференції молодих вчених, присвяченої 95-річчю Національної академії наук України «Потенціал сучасної географії у розв'язанні проблем розвитку регіонів» (м. Київ, 3-5 жовтня 2013 р.). – Київ: Логос, 2013. – 448 с. – с.119-123.
7. Сегіда К. Ю. Методичні основи аналізу розселення населення регіону / К. Ю. Сегіда // Проблеми безперервної географічної освіти і картографії: Збірник наукових праць. – Харків: ХНУ імені В.Н. Каразіна, 2013. – Вип. 18. – с. 150 – 155.

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