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THE TERRITORIAL DISTRIBUTION OF NURSING HOMES IN SERBIA: PROS AND CONS

Abstract:

Over 22% of the whole Serbian population represent the elderly, i.e. the people aged 65 and above. Accordingly, national policies had to be adjusted to this growing demographic group. However, there is a gap relating territorial aspects of ageing in Serbia, crucial for the mobility of the elderly people. An umbrella document – the National strategy on active and healthy ageing 2024-2030 – addresses this group in general terms, despite the fact that the share of elderly people differs greatly across the country, with higher concentrations in the remote and less developed regions. Consequently, the aim of this paper is to open a debate about the territorial aspects of ageing. This is done through the spatial analysis of nursing homes for elderly people in Serbia and its comparison with their capacities and local demographics. The analysis confirms that the key factor for the distribution of nursing homes is the level of development, and not the share of elderly people

Keywords: ageing, territorial aspect, elderly population, nursing home, location analysis

ПРОСТОРНА РАСПОДЕЛА ДОМОВА ЗА СТАРА ЛИЦА У СРБИЈИ: ПРЕДНОСТИ И ОГРАНИЧЕЊА

Сажетак:

Преко 22% становништва Србије је старије, тј. има преко 65 година. То значи да се развојне политике морају прилагодити овој растућој демографској групи. Међутим, постоји раскорак у вези са просторним аспектима старења у Србији, што је кључно за мобилност старијих лица. Национална Стратегија активног и здравог старења 2024-2030. као главни документ се не бави њима упркос томе што се удео старијих битно разликује широм земље, а неразвијени и удаљени крајеви су са већим концентрацијама. Циљ овог рада је да се отвори разговор о просторним аспектима старења. Дато је урађено кроз просторну анализу домова за стара лица у Србији и њено поређење са њиховим капацитетима и локалном демографијом. Анализа потврђује да је кључни чинилац за расподелу домова за старе ниво развоја, а не удео старијих лица

Кључне ријечиs: старење, просторни аспект, стара лица, домови за старе, анализа локације

1. INTRODUCTION

Population ageing has been described as one of the most significant challenges in global development. By definition, population ageing is the process of the increase of median age in population due to decreasing fertility rate and longer human life [1]. These demographic trends are included under the umbrella term of the second demographic transition, characterised by below replacement fertility rates, the different types of families and unions, dramatic improvements in life expectancy, etc. [2] In the developed countries, the second demographic transition started already in the 1970s, with very visible consequences today [3], [4].

Many developed countries have the large and rising share of elderly population, i.e. the retired population above 65 years. The Organisation for Economic Co-operation and Development (OECD) [5], which gathers most of the developed world, estimated that this elderly contingent will make more than ¼ of the whole population in member countries in 2030, from 17% in 2010. An infamous leader in this consideration is highly developed Japan, where 29.1% of the entire population was above 65 years in 2022 [6].

For affected countries, the challenge of ageing population is not new and the numerous policy instruments have been created to deal with it. The spatial aspects of population ageing are among the most prominent ones, as elderly people usually have limited mobility and problems with spatial accessibility, which can significantly disturb the quality of their everyday life [7]. They usually refer to micro-spatial measures through architectural and urban design, such as those focused on dwellings, open public space (streets, parks) and public facilities (hospitals, administrative buildings, etc.). However, the macro-spatial aspects of population ageing within wider territory are rarely examined. The limited movement and accessibility of elderly population also apply to this level, as longer travel is more demanding, especially for those with accompanying health obstacles. Moreover, the other important challenge is the place attachment of older adults, as they tend to be more attached to the places they have been using, including people, places, and bonds [8]. All these issues significantly shape the space which elderly population usually use.

The previous explanation underpins the importance of developing and promoting elderly- and ageing-sensitive measures in urban and regional planning in the future. This is important for Serbia as a very aged society [9]. The last official population census in Serbia (2022) has revealed the continuation of severe ageing trends. The share of population above 65 years was already critical in the 2011 census – 17.4%, but the latest one shows its sharp rise – 22.1% (Fig. 1). Similar to this negative trend, the average age of Serbian population rose from 42.2 years in 2011 to 43.8 years in 2022 [10].

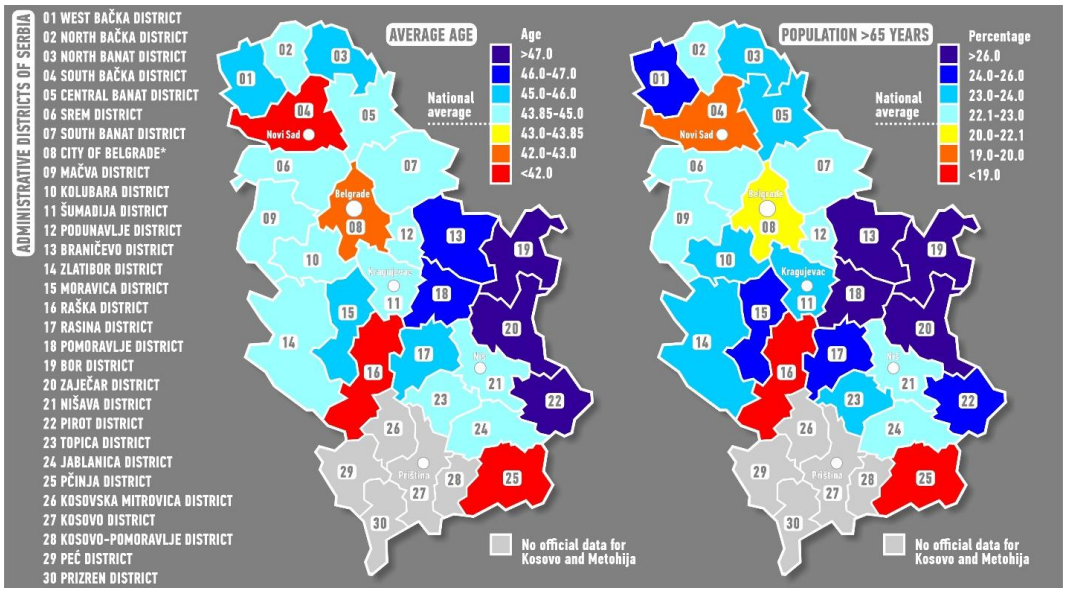

Figure 1. The territorial aspects of population ageing in Serbia according to the Population Census 2022: The average age of population (left) and the share of elderly population (right) per district (Author: B. Antonić; Source: SORS, 2023)

Evidently, the country is not well prepared for these trends, as Serbia was traditionally among the youngest nations in Europe just a few decades ago. For example, after the World War II the average

age was 29 years, while elderly people represented just 5.6% of the entire population. The current trends are therefore the reflection of a harsh post-socialist transition [11]. The second national strategy on ageing population, adopted in the late 2023, emphasises all these challenges.

Taking into account the territorial aspects of population ageing, Serbia has huge regional differences in both the share of elderly population and the average age (Fig. 1). The newest demographic data from the 2022 census clearly show this [12]. Higher regional differences are visible regarding the share of elderly population, where administrative districts with traditionally significant emigration along eastern borders have the highest share of elderly adults. A bit different situation is for the average age, since the districts with the larger cities characterised by significant immigration patterns have population with longer life expectancy. For instance, the City of Belgrade has the longest life expectancy in the country [13]. Unofficially, it is well known that larger cities and related districts in Serbia offer better quality of life [14], which probably influences this trend. On the other side, more rural districts, with smaller cities, are usually less developed and accessible [15].

This paper aims to open a debate about the importance of territorial aspects in dealing with ageing population. One of the main elements in these concerns represent nursing homes for elderly people, as nursing care becomes a relevant issue for both Serbian seniors and their families. The topic of nursing homes is also important, as the general organisation and management of nursing care and homes for elderly population is still problematic at national level; for example, a severe accident (fire in 2016) in an illegal nursing home in Pančevo caused death of three persons [16]. Although nursing care and homes are still under-represented topic in research at the national level, certain contributions have been published, mainly focusing on the micro-spatial aspects, e.g., the urban and architectural design of spaces for elderly people [17]. Hence, this research about macro-spatial/territorial aspects is valuable. It is done as the analysis of their locations and capacities regarding the local demographics of ageing population, where the administrative districts of Serbia were used as research units.

2. METHODOLOGY

This paper presents original scientific research with the segments of contextual and policy review, as it also investigates the Serbian context and relevant policy documents in the field of the territorial aspects of nursing homes in Serbia. The introductory section has already explained the general topic and why it matters for Serbia. The next section is the contextual analysis of the policy documents related to the territorial aspects of nursing homes in Serbia. This is done in the next step, where the macro-location of nursing homes is compared to regional demographics, with final results. The last section is the discussion about the acquired results and concluding remarks.

The research units used in this paper are the administrative districts in Serbia, resembling its regional level. There are 25 de facto districts in Serbia, without Kosovo and Metohija, including the City of Belgrade, which functions in the same mode [18]. They include several municipalities and one-two cities, usually gathering around 100-300 thousand inhabitants. Despite a relatively small autonomy of Serbian districts, they are fully statistically covered by the Statistical Office of the Republic of Serbia. Municipalities, as research units, are quite small for this type of study.

Nursing homes in Serbia are explained in brief in the section with policy analysis. Statistical data for nursing homes – their location and capacities – is acquired from the official list of licensed nursing homes, issued by the Ministry of Labour, Employment, Veteran and Social Affairs of the Republic of Serbia (MLEVSA). Currently, there are 177 nursing homes with a valid working licence [19]. Although there is no difference between the homes for elderly population and other/disabled persons, a predominant group in nursing homes in Serbia are elderly adults, usually above 75 years old and with physical and/or mental disabilities, which prevents them to live independently.

3. POLICY RESEARCH

Policy research is this paper is done by focusing on the territorial aspects of nursing homes in three relevant national policy documents:

1) Law on social care (hereinafter: the law),
2) Strategy on Active and Healthy Aging in the Republic of Serbia 2024-2030 (hereinafter: the strategy), and
3) Bylaw on Precise Conditions for Starting Work and Performing Activities and Norms and Standards for Performing Activities of Social Welfare Institutions for Housing Pensioners and Other Elderly Persons (hereinafter: the bylaw).

LAW ON SOCIAL CARE: This law is an umbrella legislative document in this field. It was adopted in 2011, with the recent harmonisation (in 2022). The law does not define nursing homes, but it legally introduces them and prescribes that their activities and service are also under health care legislation in the Article 59 [20]. Any other elaboration about nursing homes, including the territorial aspects, is not mentioned.

BYLAW ON SOCIAL WELFARE HOUSING INSTITUTIONS: This legal document is the most important one, as it precisely defines the term of a nursing home and all conditions, standards, and norms for its establishment and functioning. This is pretty old bylaw for Serbia, as it was adopted 30 years ago, with many harmonisations. However, the last harmonisation is from 2009; thus, the creation of a new bylaw is in progress.

The bylaw defines nursing homes as social welfare institutions for housing pensioners and other elderly persons for longer stay and regardless their ownership, as they can be both public and private. However, the bylaw differentiates nursing homes from gerontological centres, in the articles 1 and 3 [21]. Gerontological centres in Serbia are more focused on the social care and active day life for aged population, like dormitories for student population. In contrast, the definition of nursing homes is more a "mainstream", in line with the given theory.

All aspects of nursing homes, crucial for the planning of their location, represent rather short section in the bylaw. All of them are comprised in one article – Article No. 2. By this article, the location for establishing a nursing home has to fulfil the following conditions [21]:

1) To be in a built-up area;
2) To be accessible by modern transport means;
3) To be covered by basic infrastructure (electricity, water system, phone signal, etc.);
4) To have outdoor space – "Nursing home should have "20 sqm of outdoor space around the building per user". Notice: this outdoor space is not concurred with the space of the plot of the nursing home, which can lead to misunderstands.
5) Recommendation: to be located near public green areas. The outdoor nursing home should have min. 5 sqm of outdoor green space around the building per user, "which can be reduced to 3 sqm per user if there is a possibility of using public green areas near the building." Notice: the "possibility of using public green areas" is not defined by any clear threshold, such critical distances or path inclinations.

The wider/territorial aspects of the location of nursing homes in areas related to the size and/or share of local elderly population in a surrounding region/district are not mentioned in the bylaw. To sum up, this element is completely in the hands of free market, i.e., the private sector can establish a nursing home if it estimates that it can be locally lucrative.

STRATEGY ON ACTIVE AND HEALTHY AGING 2024-2030: This strategy is a new and comprehensive document, adopted in the late 2023. Although it is not specially dedicated to nursing homes and care, this topic is also analysed in this strategy, being important for the wider topic of population ageing. There is just one mention of nursing homes, implying their relevance for population ageing in Serbia and related measures – the numbers of nursing homes and their employees have been in a constant increase during last years [22]. There is also a specific measure (No 5.5) related to the development of a framework and capacities to accommodate elderly people in families, as a 'deinstitutionalised' alternative to nursing homes. More attention is given to nursing care in general, while nursing homes are described as an existing segment of dealing with population ageing, with certain challenges.

It is important for this research to discuss the section of the strategy about undertaken surveys, highlighting the fact that elderly population in Southern and Eastern Serbia (30.7%) and in rural settlements (31.4%) rated their living conditions as bad in a significantly higher percentage than national average [22]. This indirectly implies noticeable differences in nursing care and the availability of nursing homes across Serbia, as well as a general division between the main urban regions and the rest of the country.

To conclude, all analysed policy documents do not cover adequately the wider/territorial elements of nursing care and nursing homes.

4. NURSING HOMES IN SERBIA

The data on active and licensed nursing homes in Serbia has been taken from the national register, managed by the Ministry of Labour, Employment, Veteran and Social Affairs (MLEVSA) of the Republic of Serbia. The data are available from the MLEVSA website and regularly updated (information from the website). The data from late 2024 are used in this research. The bullet points about nursing homes in Serbia from the MLEVSA register are in the following points:

177 active licensed nursing homes with 10,661 resident places. This shows that nursing homes in Serbia usually have rather small capacity – 60 places per home in average;

- State-owned nursing homes noticeably make a minority in total number (16/9.0%), but they are licensed for 4,506 places (45.5%);
- The previous fact is related to a sharp distinction in typical capacity between the state-owned and the private nursing homes. Former ones have 300 resident places in average, while later ones have just 38. Furthermore, the state-owned nursing homes are rarely with less than 100 resident places – just two of them, whereas private nursing homes are rarely with more than 100 places – again, just two of them;
- From regional perspective, the most of nursing homes is located in Belgrade Region – incredible 101 or 57.1%. On the other side, there are just 10 (5.6%) in the Region of Šumadija and Western Serbia, the largest one in the term of population;
- There is a huge variation between administrate districts in Serbia by both the number of nursing homes and their capacity (Fig. 2). Three districts in the Region of Eastern and Southern Serbia – Pirot, Podunavlje and Toplica – are without licensed nursing homes.

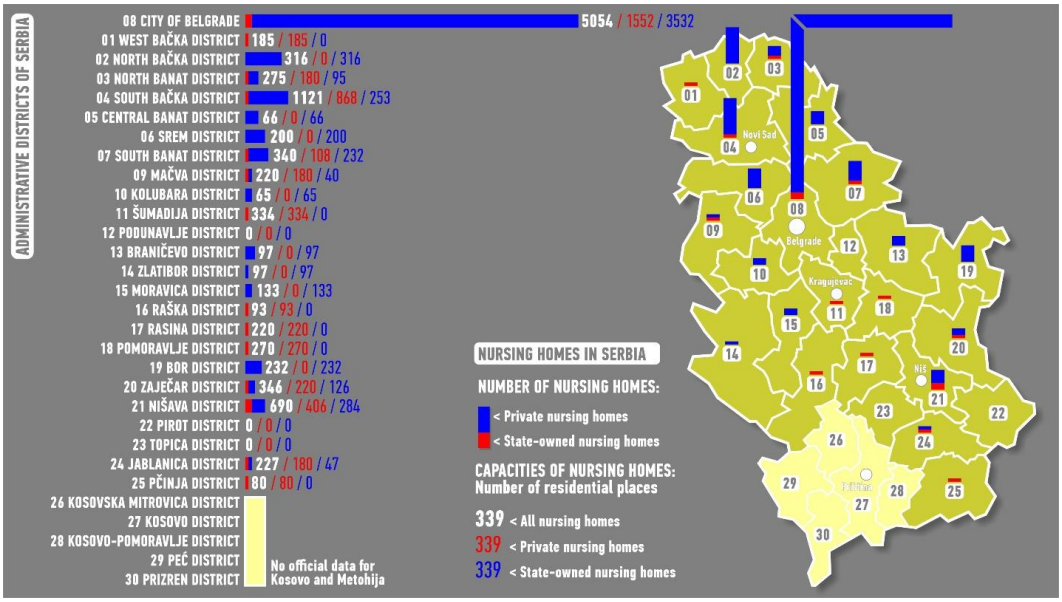

Figure 2. The distribution of the licensed nursing homes and their capacities (resident places) in administrative districts in Serbia (Author: B. Antonić; MLEVSA register, n.d.).

5. ANALYSIS RESULTS

The core of the analysis is based on the correlation of two types of statistical data established at the district level: (1) data extracted from the last population census regarding the share of elderly population and average age, and (2) the data from the aforementioned MLEVSA register. The main obtained results from the analysis are given below (Fig. 3).

The results from these two analyses clearly illustrate the current state of the territorial coverage of institutionalised nursing care in licensed homes in Serbia. Generally, the districts with larger cities (Belgrade, Novi Sad, Niš) are better covered. Interestingly, two districts in Eastern Serbia, traditionally known for the highest and long-lasting emigration abroad, also contain the above-average capacity of local nursing homes. A probable reason might be found in the higher share of elderly voluntary repatriates, who more often use nursing care due to the absence of their children and grandchildren living abroad. From the regional perspective, Northern Serbia/Vojvodina has a

higher capacity of nursing homes vs. elderly population, while less populated and more rural districts in the west and south of the country have the smallest one, including three aforementioned districts without any of them.

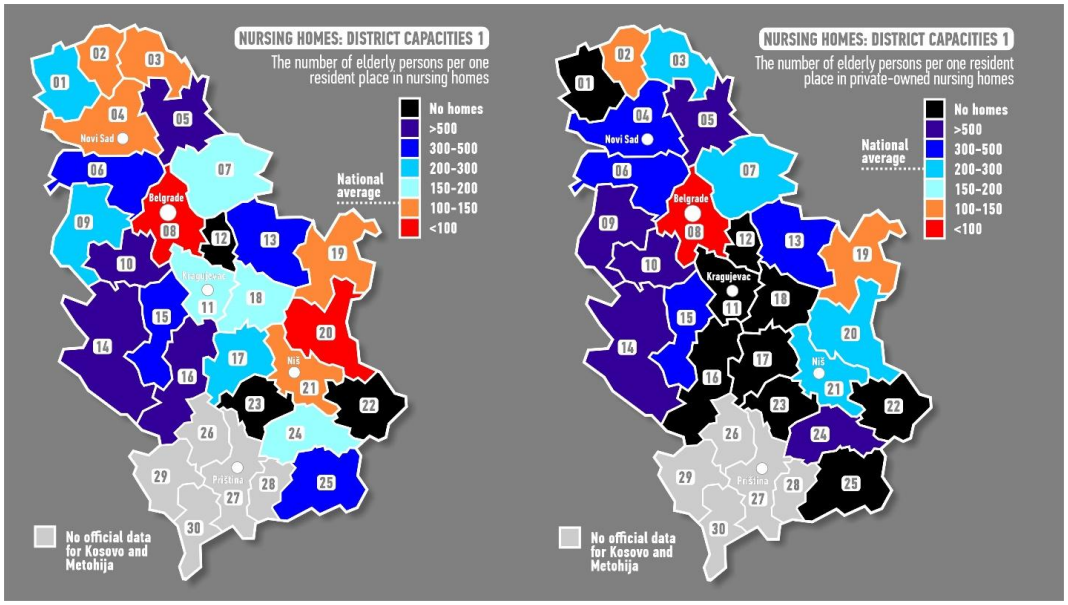

Figure 3. The number of elderly persons (>65 years) per one resident place in licensed nursing homes per district (left) and the number of elderly persons (>65 years) per one resident place in licensed private-owned nursing homes per district (right) (Author: B. Antonić).

As the most of 16 state-owned nursing homes were opened during the last years of the socialist Yugoslavia (the 1980s), it is important to do a similar analysis by taking in account private nursing homes only. These results show even more polarised situation among Serbian districts, where smaller and more rural districts with the higher share of aged people are usually without or with the negligible capacities of private nursing homes. An interesting result is that the districts along national border to Hungary, Romania, and Bulgaria are above or around national average. They have 'suffered' from a hard international border since the World War II and have had rampant population ageing recently. This obviously reflects present-day state, where state-owned nursing homes cannot meet local needs, so private ones obviously fulfil this gap.

The last population census in 2022 revealed the fast-rising average age of Serbian population, indicating the future condition. If the average age of the district population is compared to the capacities of local nursing homes (Fig. 4 left), there are several specific results. The districts with largest cities are demographically younger. Nevertheless, they have more capacities in nursing homes, which is probably the result of their better economic situation. The opposite condition could be noticed in smaller and more rural districts in Western and Southern Serbia. Again, districts in Eastern Serbia, with the most severe population ageing and long-lasting mass emigration, also have more capacities in local nursing homes, which indicates that 'the future at national level is already here'.

For better understanding of this phenomenon, another analysis was conducted. It is based on the human development index, extracted from the National Human Development Report for Serbia in 2022 (Fig. 4 right). This is a more complex indicator, which includes economic, educational, health, and demographic components [23]. "The Human Development Index (HDI) is a commonly accepted proxy for the overall improvement in education, health and living standards of a population" [14, p. 62].

The last analysis gives a very intricate picture. As it was seen in the previous results, the districts of the largest cities in Serbia - while demographically younger - also have more capacities in nursing homes, i.e. their better-than-average economic situation makes an impact on this sector. The other results are fluid, such as those for western Bačka, northern Banat, Bor, and Pirot districts. The recent rise of incomes in these traditionally more rural and depopulating districts, with the highest share of elderly population due to the exhaustion of the contingent of local working force, has changed local living and economic prospects significantly. Thus, there are significant gaps regarding the district HDI values and the capacities in local nursing homes.

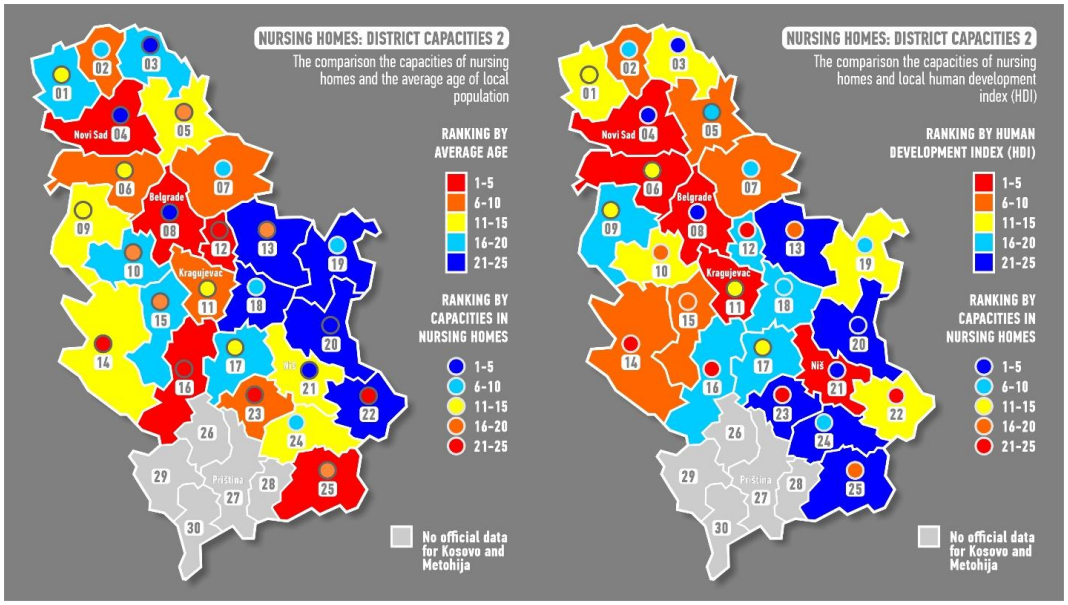

Figure 4. The comparison of the capacities of nursing homes vs. (1) the average age of population (left) and (2) human development index –HDI (right) per district (Author: B. Antonić; Source: Nikitović, 2022).

6. CONCLUSION

The aim of this paper is to underline the territorial aspects of nursing homes for elderly people in Serbia regarding the recent demographic trends in ageing. The administrative districts of Serbia were used as study units, representing the most adequate territorial level to address both the disparities and the polarisation tendencies.

The results highlight several key findings. Serbia inherited a relatively well-balanced territorial network of state-owned nursing homes for elderly population from the late socialist period of the former Yugoslavia – usually one institution per district. However, the rise of elderly population during the post socialist period - both in numbers and share - has made their capacities insufficient. Consequently, new, private-owned nursing homes have been established. Paradoxically, their main concentration is rarely in the districts with the highest share of elderly population, but in those with main cities. These districts also have youngest population and are economically advanced. Such constellation means that the main driver to establishing a nursing home is not a negative local demography (e.g. higher-than-average population age, share of elderly population), but economic factors. The indirect confirmation of this phenomenon is an 'unorthodox situation' in two districts in Eastern Serbia (Bor and Zaječar), with high level of repatriated elderly population which has foreign pensions (higher financial resources for Serbia). Usually without family care, they triggered the 'boom' of the capacities in local private nursing cares.

The main research conclusions could be extracted from the afore explained findings. With the expected increase of the elderly population in Serbia, their needs for institutionalised nursing care will also increase. The recent rise of the HDI in Serbia in general will just widen the pool of potential users. This means that national authorities have to develop adequate strategies. Meanwhile, the new national strategy already points out the necessity to accommodate elderly people in families, as an alternative to nursing homes. However, it seems that this completely new approach will need a certain time to be established. Therefore, new (private) nursing homes are necessary, especially in the districts with limited capacities or without any of these facilities. Maybe national authorities should experiment with pilot projects, but focusing on the different parts of Serbia. This (re)action would especially support the establishment of new nursing homes in the most vulnerable and undeveloped administrative districts, while creating a framework for new family-run accommodations for elderly people in well-to-do districts of largest cities.

Finally, it is clear that the study of the wider territorial aspects of institutionalised nursing care and nursing homes for elderly population is a very up-to-date topic for Serbia, deserving more attention regardless of the model which will be applied.

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