

Social Determinants of Healthcare Utilisation in Serbia: General Practitioner and Specialist Consultations

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Healthcare utilisation and access to healthcare services are shaped by a range of social and structural factors. Previous research has shown that socioeconomic position, demographic characteristics, and health status can influence patterns of healthcare utilisation. However, these relationships may vary across different institutional and welfare contexts. The aim of this paper is to examine the determinants of healthcare utilisation in Serbia, with particular attention to the role of social class. The analysis is based on data from the European Social Survey (Round 11) and employs logistic regression models to examine the association between healthcare utilisation and a set of predictors, including social class, gender, age, education, self-rated health, type of settlement, and respondents' evaluation of healthcare services. Social class did not emerge as a statistically significant predictor of visits to general practitioners, but it was significantly associated with specialist consultations. Gender and self-rated health were significant predictors, with women and respondents reporting poorer health being more likely to use healthcare services. Age and education were associated with visits to general practitioners but were not significant predictors of specialist consultations. The results also suggest that inequalities in healthcare utilisation are more strongly related to social class than to spatial differences. The findings suggest that social inequalities in healthcare utilisation in Serbia are more

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pronounced for specialist care than for primary care. These patterns should be interpreted in the broader context of the Serbian healthcare and welfare system, where institutional constraints and informal mechanisms may shape access to specialist services.

KEYWORDS: healthcare utilisation / primary and specialist care / social determinants of health / social class / Serbia / European Social Survey

Introduction

Any attempt to understand the relationship of different individuals and social groups to a country's health care system must take into account the development of the welfare state. It can justifiably be asserted that every country, or every health care system, possesses its own distinctive features. These include specific trajectories in the development of the right to health care, particular modes of financing the health system, the scope of the population covered by its services, and the evolution of institutions and personnel within the system, among others. However, on the other hand, the clear global contours of the development of the welfare state, and of the health care system as its inseparable component, cannot be denied.

A comprehensive theory of the development of the welfare state was proposed by Gøsta Esping-Andersen. It is well known that in his now widely recognised study, *The Three Worlds of Welfare Capitalism*, he classifies welfare states into three principal groupings (Esping-Andersen, 1990). The author established that highly developed countries (a total of 18 nations were analysed) can be divided into three groups (types) of welfare state: social-democratic, liberal, and conservative-corporatist. As the principal criterion for distinguishing among the countries in question, he adopts the degree of *de-commodification*: "Inspired by the contributions of Karl Polanyi, we choose to view social rights in terms of their capacity for 'de-commodification'. The outstanding criterion for social rights must be the degree to which they permit people to make their living standards independent of pure market forces" (Esping-Andersen, 1990, p. 3). Thus, in countries characterised by the liberal type of welfare state, the highest degree of de-commodification can be observed; it is somewhat lower in conservative-corporatist welfare states, and lowest in social-democratic ones (Filipović, 2016). It is not necessary to emphasise that the de-commodification of services within the domain of the health care system constitutes part of his analysis. Esping-Andersen explains the emergence of different types, in each of the analysed countries, primarily through the

class alliances that developed, or their absence. He identifies the principal actors as representatives of the aristocracy, the bourgeoisie, the peasantry, and the working class. In a work published somewhat later, Esping-Andersen engages in a debate with authors who argue that it is necessary to introduce a greater number of welfare regime types (Esping-Andersen, 1999). However, we can say that this author did not devote particular attention to the countries of real socialism, nor to considerations of the welfare state in post-socialist countries. Such considerations can be found in the works of some other authors (Bohle & Greskovits, 2012; Potůček, 2008).

Esping-Andersen is not the only author who has sought to identify the roots of the emergence of the welfare state within historical events and development. One such attempt is that of T. H. Marshall. In his arguably most influential work, *Citizenship and Social Class*, Marshall presents a concise account of the evolution of the welfare state, examining it through the development of civil, political, and social rights (Marshall, 1950). Civil rights – “liberty of the person, freedom of speech, thought and faith, the right to own property and to conclude valid contracts, and the right to justice” – are situated in the eighteenth century (Marshall, 1950, p. 10). Political rights entail “the right to participate in the exercise of political power, as a member of a body invested with political authority or as an elector of the members of such a body.” (Marshall, 1950, p. 10). These rights developed in the nineteenth century. Finally, in the twentieth century, social rights emerge: “the right to a modicum of economic welfare and security, to share fully in the social heritage, and to live the life of a civilised being according to the standards prevailing in society” (Marshall, 1950, p. 10).

We can observe that major theories of the welfare state largely focus on the existence of specific rights as a measure of welfare state development. Formally proclaimed and declaratively established rights thus become the basic “unit of measurement” of welfare state development. There are many reasons that could be advanced in support of such an approach to examining the nature, structure, and development of the welfare state. Social and political struggles have very often been waged precisely to realise specific social rights—for example, the right to fair wages, safe working conditions, the right to (free) healthcare, the right to a pension, and so forth. Many social struggles continue to be waged in these domains: eligibility criteria for retirement, universal (free) health care, free higher education, and so forth. Another reason for focusing on rights as the “unit

of measurement” in welfare state research is methodological in nature. It is entirely reasonable to ground comparisons between two or more states in the differences regarding the rights they do (or do not) enable for their citizens. The same can be said for comparisons of a welfare state at different historical moments.

Serbia is commonly described as a post-socialist welfare regime that shares certain institutional features with the conservative-corporatist model identified by Esping-Andersen, particularly the strong reliance on contributory social insurance and the continued importance of family support. According to classifications of post-socialist welfare regimes in Central and Eastern Europe, Serbia is typically grouped within the South-Eastern European welfare regime, characterised by comparatively weaker welfare institutions, fragmented social protection systems, and a stronger reliance on family-based support (Laužadytė-Tutlienė et al., 2018).

Is an analysis based on (social) rights sufficient to understand the nature of the welfare state, its scope, and its mode of operation? Could other criteria also be important for this type of analysis? We believe that the answer to the latter question is affirmative. This is not to suggest that established rights (or their absence) are not the foundation and starting assumption of any analysis. Quite the contrary. If something more should be added to the analysis of the rights that the welfare state guarantees to its citizens, an obvious question arises: what might that be? The very consumption of the rights provided by the welfare state. We argue that the question of socially conditioned differences in the capacity to make use of these rights must be raised. An undertaking aimed at examining the extent of socially conditioned differences in the effective use of the rights offered by the welfare state would indeed exceed the scope of this paper. Even if we were to limit ourselves to a single, specific country within a given time frame. Therefore, this paper focuses on a single aspect of the broader problem: health care utilisation and inequalities in access to health care.

In his paper *The Determinants of Access to Healthcare: A Review of Individual, Structural, and Systemic Factors*, Nikolaos Tzenios (2019) provides a systematic overview of the factors that influence access to healthcare. The author classifies all factors, i.e., determinants, into individual, structural, and systemic categories. Under individual determinants, he includes income level, educational attainment, and health literacy. It requires little explanation to understand why income level is a relevant factor. This is particularly significant in countries where universal

(free) healthcare does not exist. Even in cases where such coverage is available, income may still play an important role, as it can affect access to private healthcare institutions whose services are not covered by the public (universal) health insurance system. The level of education is likewise, to a certain extent, a self-evident factor “Furthermore, people with less education are more likely to have low-paying occupations and no health insurance” (Tzenios, 2019, p. 3). It could be argued that the level of education is associated with health literacy, which the author defines as the “ability to comprehend, interpret, and apply healthcare information in order to make sound decisions” (Tzenios, 2019, p. 3). At the conclusion of the factors he classifies as individual, Tzenios identifies challenges that may arise due to language barriers, the presence of certain disabilities, as well as specific personal and cultural views. Insufficient proficiency in the official language (or the language spoken by the majority of the population) may constitute a significant barrier to accessing health care, or at the very least, to doing so under equitable conditions. The author identifies the inability or unwillingness of healthcare institutions to accommodate the needs of persons with disabilities as a distinct problem faced by this population. Finally, as an example of how cultural views may constitute a barrier in this regard, Tzenios notes that diminished trust in the healthcare system can limit individuals’ willingness to utilise its services at all.

As one of the most important structural determinants, Tzenios highlights the availability of healthcare services. “Structural factors of access to healthcare, such as availability, distribution, accessibility, and quality of healthcare services, play a key influence in deciding whether or not an individual can obtain the care they require” (Tzenios, 2019, p. 4). It should be noted that Tzenios uses the adjective “structural” in reference to the welfare state itself, rather than to society as a whole. Structural determinants in that regard should not be viewed from the perspective of social stratification. This is perhaps best illustrated by the following quotation, which emphasizes the availability of healthcare institutions as the most important component of structural factors: “One of the most important structural determinants of access to healthcare is the availability of healthcare services. Factors such as the number of primary healthcare facilities in a region or the number of specialists accessible to give care can all have an impact on the availability of healthcare services”. At the very end, the same author identifies the following as systemic determinants: factors that affect the overall design and financing of a country's healthcare

system. “These factors can play a significant role in determining whether an individual is able to access the care they need to maintain their physical, mental, and social well-being” (Tzenios, 2019, pp. 4–5).

Building on previous research that emphasises the role of individual, structural and systemic determinants of access to healthcare, this paper examines patterns of healthcare utilisation in Serbia. In particular, the analysis focuses on whether social class is associated with the likelihood of visiting a general practitioner (GP) and a medical specialist, while taking into account demographic characteristics, education, self-rated health, and contextual factors related to the healthcare system.

Institutional Context of Healthcare Access in Serbia

Healthcare systems in post-socialist countries have undergone profound institutional changes, involving a shift from centralised, state-financed provision towards mixed systems that combine public funding, private provision, and increased patient cost-sharing. While these reforms were expected to improve efficiency and sustainability, they have often been accompanied by persistent inequalities in access, driven by limited public resources and high out-of-pocket payments. In this context, barriers to healthcare do not arise only through formal rules, but also through implicit mechanisms such as waiting times, service availability, and system capacity constraints, which may be particularly relevant for specialist care. Another important feature of post-socialist healthcare systems is the often blurred distinction between free and paid care. Even where a broad package of publicly guaranteed services formally exists, actual access may depend on whether care is available within a reasonable timeframe and under acceptable conditions. In such settings, private provision and out-of-pocket spending may come to supplement public healthcare not as an exception, but as a routine mechanism for obtaining care (Shishkin et al., 2026, Tambor et al., 2021).

The healthcare system in Serbia should be understood both within the broader post-socialist transformation and through its specific institutional features. It is primarily based on mandatory health insurance administered by the Republic Health Insurance Fund, complemented by voluntary private insurance. In practice, this results in a mixed system combining public and private provision, as well as multiple sources of financing, including compulsory contributions, state budget allocations, and direct

out-of-pocket payments. Although broad access to healthcare is formally guaranteed, coverage does not extend to all costs, and individuals frequently contribute financially to the services they use. The system is organised across three levels (primary, secondary, and tertiary care) with primary care relatively accessible through a network of health centres, while specialist services are more centralised and constrained by limited resources. At the same time, despite the expansion of the private sector, it remains only partially integrated into the public system, which further complicates access pathways (Gavrilović & Trmčić, 2012).

While healthcare provision is formally grounded in the principle of universal access, actual availability is often shaped by organisational and financial constraints. Research highlights the centralisation of specialist care, workforce-related challenges, and the growing role of out-of-pocket spending, all of which may hinder timely and equitable access (Đurić, 2021). In this context, voluntary insurance plays a supplementary role, partially compensating for the limitations of mandatory coverage, particularly under increasing financial pressures linked to demographic ageing and rising healthcare costs. However, the regulatory framework in Serbia remains characterised by certain ambiguities, including insufficiently defined contractual arrangements and an uneven relationship between public and private sectors, which may affect both the organisation and accessibility of healthcare (Petrović Tomić, 2024). Consequently, the gap between formal entitlement and actual access emerges as a key dimension for understanding patterns of healthcare utilisation in Serbia.

Methods

The analysis is based on data from Round 11 of the European Social Survey (ESS11), a biennial cross-national survey collecting harmonised data on attitudes, beliefs, and behavioural patterns across Europe. In addition to its core questionnaire, ESS Round 11 featured rotating modules on social inequalities in health and gender in contemporary Europe. This study draws primarily on variables from the health inequalities module. Fieldwork for ESS Round 11 in Serbia was conducted between 11 December 2023 and 2 May 2024. The achieved response rate was 42.6%, resulting in a final sample of 1,563 respondents.² Analyses were weighted

² <https://ess.sikt.no/en/country/321b06ad-1b98-4b7d-93ad-ca8a24e8788a/rs/>

using the ESS post-stratification weight to adjust the sample distribution to match the population structure (European Social Survey ERIC, 2023).

In line with the conceptual framework of the European Social Survey health module (round 11), healthcare utilisation is understood as individuals' use of health services and is commonly examined through contacts with different types of healthcare providers. Previous research has consistently documented socioeconomic differences in healthcare utilisation patterns, with lower socioeconomic groups tending to rely more on primary care, while higher socioeconomic groups report more frequent use of specialist services. For this reason, the ESS health module distinguishes between primary and secondary care in order to capture potential social inequalities in healthcare utilisation (see Balaj et al., 2024).

Health care utilisation was operationalised using two binary indicators from the ESS health module referring to the previous 12 months: (1) whether the respondent had discussed their health with a General Practitioner and (2) whether they had discussed their health with a medical specialist (excluding dentists). Both variables were recoded into dichotomous measures (1 = yes, 0 = no).

Class position was constructed using the ESS-recommended SPSS syntax provided by Daniel Oesch. The Oesch class schema is based on the intersection of two dimensions: a *vertical axis* capturing the degree of advantage in employment relations, as theoretically elaborated by Erikson and Goldthorpe, and a *horizontal axis* reflecting differences in work logic, developed in the contributions of Kriesi, Esping-Andersen, Kitschelt, and Müller. While the vertical axis is theoretically well documented, within the analysis of the horizontal axis among wage-earners, it is possible to distinguish three different work logics, each of which gives rise to a separate hierarchy (Oesch, 2008).

1. *an interpersonal work logic*, where individuals are employed in face-to face attendance to people's personal demands and primarily depend on social skills;
2. *a technical work logic*, where daily work either consists in the development and use of technical expertise or the deployment of craft;
3. *an organizational work logic* defined by bureaucratic imperatives, work experience being shaped by coordination, control and administrative tasks.

Oesch added a fourth work logic – *the independent work logic* – based on differences in employment status, thereby separating employers and the self-employed from the much larger group of employees (Oesch, 2008).

The operationalization of class position based on data from the European Social Survey relies on the following three variables:

1. Employment status, separating employers and the self-employed from employees;
2. Number of employees, distinguishing between large and small employers on the one hand and the self-employed without employees on the other.
3. Occupational title, assigning individuals to different work logics and different hierarchical levels based on their occupation;

To distinguish as precisely as possible between different occupations, the International Standard Classification of Occupations (ISCO-08) at the 4-digit level was used. ISCO-08 classifies jobs according, first, to the tasks and duties related to it and, second, to skills that are necessary. Occupation is the most important for the construction of the class scheme. In this study, the five-class version of the Oesch scheme will be used, while eight- and sixteen-class versions are also available (Oesch, 2006)³. The five-class version of the Oesch schema retains key distinctions between work logics (technical, organisational, interpersonal) while maintaining statistical stability in a single-country analysis.

Both descriptive and analytical statistical analysis were employed. Descriptive statistics were used to examine the distribution of key variables, while binary logistic regression analysis as the analytical method was estimated to assess the independent associations between occupational class and health care utilisation and access. Separate models were estimated for GP visits (Model 1), and specialist visits (Model 2). A set of theoretically relevant independent variables was included in the regression models in order to estimate their independent associations with health care utilisation and access. Model fit was evaluated using Nagelkerke's R^2 .

Building on previous research on individual, structural, and systemic determinants of healthcare use, several expectations can be formulated. First, social class is expected to be associated with healthcare utilisation.

³ For the scripts for social class & OEP, see <https://people.unil.ch/danieloesch/scripts/>

Second, visits to general practitioners are expected to be more strongly related to indicators of need, such as age and self-rated health, and less structured by social class differences. Third, individual characteristics such as gender and education are expected to be associated with healthcare utilisation, reflecting differences in health-related behaviour and resources. Finally, contextual factors such as type of settlement and evaluation of healthcare services are expected to have a more limited effect compared to individual and social-structural characteristics.

Results

As expected, contact with general practitioners was more common than contact with medical specialists, reflecting the role of primary care as the main entry point into the healthcare system. Descriptive statistics indicate that 55.8% of respondents reported having discussed their health with a general practitioner in the past 12 months, while 44.2% reported no such contact. In the same period, 43.1% reported having discussed their health with a medical specialist, whereas 56.9% had not.

To identify social-structural and individual determinants of health care utilisation—specifically visits to general practitioners and medical specialists—binary logistic regression models were estimated. Table 1 presents the results of two binary logistic regression models examining health care utilisation. The models include seven independent variables: age, occupational class, education, gender, type of settlement, self-rated health, and evaluation of the national healthcare system. The reference categories for both models are large city (settlement type), women (gender), and higher-grade service class (occupational class). All remaining variables were entered as continuous predictors.⁴

The full Model 1, predicting the likelihood of visiting a general practitioner, was statistically significant, $\chi^2(12, N = 1225) = 159.16, p < .001$, indicating that the model reliably distinguishes between respondents who did and did not visit a GP. The model explained between 12.5% (Cox & Snell R^2) and 16.7% (Nagelkerke R^2) of the variance and correctly classified 64% of cases.

⁴ Variance inflation factors (VIF) were tested and the obtained values were within acceptable limits. Although education and class position are correlated, which is theoretically expected, class position retained a statistically significant effect even after controlling for education, supporting the inclusion of both predictors in the analysis.

Table 1

Predictors of primary healthcare utilisation – visits to a general practitioner (M1) and to a specialist physician (M2)

Variable	Model	<i>B</i>	<i>SE</i>	Wald	<i>df</i>	<i>p</i>	OR	95% CI
Class position	M1			8.85	4	.072		
Lower-grade service class	M1	-0.43	0.24	3.21	1	.073	0.65	[0.40, 1.04]
Small business owners	M1	-0.05	0.21	0.05	1	.818	0.95	[0.63, 1.44]
Skilled workers	M1	0.11	0.23	0.21	1	.646	1.11	[0.71, 1.74]
Unskilled workers	M1	0.19	0.24	0.64	1	.424	1.21	[0.76, 1.94]
Gender	M1	-0.57	0.13	19.72	1	< .001	0.57	[0.44, 0.73]
Age	M1	0.02	0.00	12.17	1	< .001	1.02	[1.01, 1.03]
Education	M1	-0.06	0.03	5.24	1	.022	0.94	[0.90, 0.99]
Self-rated health	M1	0.45	0.08	33.28	1	< .001	1.56	[1.34, 1.82]
Place of residence				3.50	3	.320		
Suburbs of a large city	M1	0.07	0.21	0.10	1	.747	1.07	[0.71, 1.63]
Small town	M1	-0.17	0.18	0.91	1	.341	0.84	[0.56, 1.20]
Village	M1	-0.24	0.17	2.03	1	.155	0.78	[0.56, 1.10]
Assessment of healthcare services	M1	0.01	0.02	0.20	1	.652	1.01	[0.96, 1.06]
Constant	M1	-0.41	0.53	0.61	1	.435	0.66	
Class position	M2			11.57	4	.021		
Lower-grade service class	M2	-0.07	0.24	0.10	1	.758	0.93	[0.58, 1.47]
Small business owners	M2	-0.69	0.24	7.88	1	.005	0.50	[0.31, 0.81]
Skilled workers	M2	-0.53	0.21	6.41	1	.011	0.59	[0.39, 0.89]
Unskilled workers	M2	-0.46	0.23	4.07	1	.044	0.63	[0.40, 0.99]
Gender	M2	-0.40	0.13	9.87	1	.002	0.67	[0.53, 0.86]
Age	M2	0.01	0.00	1.75	1	.186	1.01	[1.00, 1.02]

(table continues)

Table 1*(continued)*

Variable	Model	B	SE	Wald	df	p	OR	95% CI
Education	M2	0.02	0.03	0.50	1	.478	1.02	[0.97, 1.07]
Self-rated health	M2	0.59	0.08	58.23	1	<.001	1.81	[1.56, 2.1]
Place of residence				4.65	3	.199		
Suburbs of a large city	M2	0.06	0.21	0.09	1	.759	1.07	[0.71, 1.60]
Small town	M2	-0.15	0.18	0.70	1	.404	0.86	[0.61, 1.22]
Village	M2	-0.29	0.17	3.01	1	.083	0.75	[0.54, 1.04]
Assessment of healthcare services	M2	0.01	0.02	0.08	1	.784	1.01	[0.96, 1.05]
Constant	M2	-1.39	0.54	6.72	1	.010	0.25	

Note: *B* – unstandardized regression coefficient; *SE* – standard error; Wald – Wald test statistic; *OR* – odds ratio; *CI* – confidence interval. Significant *p* values are shown in bold.

Among the predictors, *gender*, *age*, *education*, and *self-rated health* emerged as statistically significant. Men were significantly less likely to visit a general practitioner compared to women ($OR = 0.6$, $p < .001$). Increasing age was associated with a higher likelihood of visiting a GP ($OR = 1.016$, $p < .001$), consistent with expectations. Education was negatively associated with GP visits, indicating that each additional year of schooling reduced the odds of a GP visit by approximately 5.6% ($OR = 0.94$, $p = .022$). Finally, poorer self-rated health was strongly associated with a higher probability of visiting a GP ($OR = 1.56$, $p < .001$).

On the other side, the type of settlement did not emerge as a significant predictor, either as an overall effect ($p = .320$) or across individual categories. Similarly, evaluation of the healthcare system was not significantly associated with the likelihood of visiting a GP ($p = .652$). Regarding class, the overall effect approached statistical significance ($p = .072$); however, individual class differences did not meet conventional significance levels.

In the second logistic regression model (Model 2), the likelihood that a respondent had consulted a medical specialist during the previous 12 months was examined. The model was statistically significant ($\chi^2 (12, N =$

1225) = 151.24, $p < .001$), but, similarly to Model 1, demonstrated moderate explanatory power (Nagelkerke $R^2 = .159$) and correctly classified 64.5% of cases.

Men were significantly less likely than women to have visited a specialist (OR = 0.67, $p = 0.002$). Respondents who reported *poorer self-rated health* had a substantially higher likelihood of consulting a specialist (OR = 1.81, $p < .001$), representing the strongest individual effect in the model. *Social class emerged as a significant predictor* overall ($p = 0.021$). Several specific class categories were statistically significant when compared to the higher-grade service class (reference category). Several specific class categories were statistically significant when compared to the higher-grade service class (reference category). Small business owners had significantly lower odds of visiting a specialist (OR = 0.50, $p = .005$). Skilled workers were also less likely to consult a specialist (OR = 0.59, $p = .011$), as were unskilled workers, the effect was borderline significant (OR = 0.63, $p = .044$).

On the other hand, age ($p = .186$) and years of education ($p = .478$) were not statistically significant predictors in this model, in contrast to the model for general practitioner visits. Overall, the type of settlement was not significant ($p = .199$), and the evaluation of the state of healthcare services was not statistically significant ($p = .784$), consistent with the findings from the previous model.

Discussion

In our model predicting visits to general practitioners, the observed pattern is consistent with findings from comparative analyses based on ESS data (Fjær et al., 2017). Overall, the findings largely align with the expectations outlined earlier, although the role of social class differs depending on the level of care. Utilisation of primary health care appears to follow the logic of health need, while socioeconomic differences are weaker and less consistent than in the case of specialist care (Lueckmann et al., 2021). This is consistent with our expectation that general practitioner visits would be more strongly driven by indicators of need than by social class differences. A systematic review by Lueckmann et al. (2021) shows that when utilisation is measured as a binary outcome (whether a visit occurred or not), many studies do not find a clear association between socioeconomic status and the probability of visiting a general practitioner, whereas inequalities tend to be more pronounced in

specialist care. In our model, the strongest predictors of visiting a general practitioner are indicators of “need” and demographic characteristics (poorer self-rated health and older age) as well as gender, with men being less likely to report contact with a GP, which is a well-established finding in research on health behaviour. Possible explanations for this gender difference include women’s more frequent contact with the healthcare system due to reproductive health needs, a greater propensity to seek medical consultation shaped by gendered and cultural norms, as well as differences in the perception and interpretation of health needs (Hunt et al., 2011; Jørgensen et al., 2016; Wang et al., 2013).

The negative association between education and GP visits is also consistent with Fjær et al. (2017), who show that educational differences in GP utilisation are not uniform across countries (in Ireland, Portugal, and Lithuania, the more highly educated were less likely to use a GP). Namely, in some contexts, higher educational status may be associated with less frequent use of primary care, whereas clearer and more consistent inequalities tend to emerge in specialist care. Moreover, higher education is linked to better health knowledge and service navigation (greater health literacy, more proactive health behaviour, and better understanding of health needs) (Fletcher & Frisvold, 2009), which leads higher-educated individuals to seek GP care more selectively, contributing to lower odds of visiting a general practitioner for general consultations. This finding partially supports our expectation regarding the role of individual characteristics in shaping healthcare utilisation.

The gender pattern in health care utilisation is consistently observed in specialist care: men are significantly less likely to consult a specialist than women, suggesting that these differences reflect broader gendered patterns of health-related behaviour rather than characteristics specific to primary care. This indicates that the observed disparities are less likely to stem from the organisation of the health care system itself and more from deeper normative and cultural differences in symptom perception and help-seeking behaviour. At the same time, the strong effect of self-rated health in this model further underscores that specialist care is more clearly driven by perceived need. Individuals who assess their health as poorer are substantially more likely to consult a specialist, indicating that secondary care primarily serves as a response to more serious or persistent health problems.

Class position emerges as a structurally meaningful predictor of specialist utilisation. This finding supports our expectation that social class would be associated with healthcare utilisation, although this association is not uniform across levels of care. This pattern is fully consistent with findings (Fjær et al., 2017; Lueckmann et al., 2021) that socioeconomic inequalities are substantially more pronounced in specialist care than in general practitioner care. Interpretatively, this is usually linked to several mechanisms: higher “threshold barriers” when moving from primary to secondary care, the need for greater informational and communicative resources, different expectations and preferences regarding the healthcare system, and potential indirect costs (time, job flexibility, co-payments or private supplements).

However, the results indicate that class differences in specialist utilisation are not strictly hierarchical. While small business owners, skilled workers and unskilled workers show significantly lower odds of visiting a specialist compared to the higher-grade service class, the lower-grade service class does not differ significantly from the reference category. This pattern indicates that inequalities broadly follow a vertical class gradient, but are not entirely linear. Rather, they appear to reflect differences related to the type of employment, degree of autonomy, job security and access to organisational resources. The fact that small business owners and manual workers (skilled and unskilled) exhibit similarly reduced odds of specialist visits suggests that employment conditions, autonomy, and organisational resources may shape access to specialist care alongside vertical status position (for example, limited time flexibility, income loss when absent from work, or weaker institutional support). In contrast, employees in lower service positions, despite not occupying elite professional roles, may still benefit from more stable employment arrangements and better familiarity with bureaucratic systems, narrowing the gap with the higher service class.

Finally, the lack of statistical significance for the type of settlement in both models suggests that territorial differentiation (distinction among large cities, smaller towns, and villages) does not constitute a key mechanism structuring healthcare utilisation in the analysed sample. This finding is in line with our expectation that contextual factors would play a more limited role compared to social and individual characteristics. In the case of general practitioner visits, this finding may be interpreted as reflecting the relatively even availability of primary care, consistent with a healthcare system organised around a widespread network of local health

centres. However, with respect to specialist care, although there is a tendency toward fewer visits among residents of rural areas, these differences in the model are not strong enough to outweigh class-based disparities. In other words, patterns of inequality appear to be shaped more decisively by social stratification than by spatial marginalisation.

Two contextual explanations may help account for these findings in Serbia. These patterns should also be understood in the broader context of post-socialist healthcare systems, particularly in South-Eastern Europe, where formal access is often constrained by institutional limitations and supplemented by private provision and informal networks. First, specialist care within the public healthcare system often constitutes a bottleneck due to long waiting lists and limited appointment availability. While access to general practitioners is relatively straightforward, obtaining a consultation with a specialist through the public system can be much more difficult and time-consuming. For this reason, patients often seek alternative ways to access specialist care. Those who can afford it may turn to the private sector, where waiting times are usually much shorter. This pattern reflects the broader gap between formal entitlements and actual access to healthcare, as outlined in the contextual framework. In such circumstances, access to specialist care may depend more strongly on individual resources, which could help explain why class differences are more visible in specialist visits than in visits to general practitioners.

Second, access to healthcare services may also be shaped by social networks. In a system where waiting times are often long, people sometimes rely on personal contacts to obtain appointments more quickly. Knowing someone who works in the healthcare sector, or having friends or relatives who can help arrange a consultation, may make it easier to reach a doctor or specialist. These informal practices may therefore also influence patterns of healthcare utilisation and contribute to social differences in access to specialist care.

Conclusion

This paper examined the determinants of healthcare use in Serbia, focusing on factors associated with visits to general practitioners and medical specialists. The findings suggest that predictors of healthcare utilisation vary by level of care. While social class did not emerge as a statistically significant predictor of visits to general practitioners, it was

significantly associated with the likelihood of consulting a medical specialist. In particular, small business owners, skilled workers, and unskilled workers were significantly less likely to visit a specialist than those in the higher-grade service class. Across both models, gender and self-rated health consistently emerged as important predictors, with women and individuals reporting poorer health being more likely to use healthcare services. In contrast, the type of settlement and respondents' evaluation of healthcare services were not significantly associated with healthcare utilisation in either model. Age and education were associated with visits to general practitioners: older respondents were more likely to visit a general practitioner, while higher levels of education were associated with a lower likelihood of general practitioner visits. However, these effects did not remain significant in the model predicting specialist consultations.

Our findings are consistent with broader international evidence suggesting that socioeconomic inequalities in primary health care are generally weaker and less consistent than those in specialist care. Our findings should also be considered in the broader institutional context of the Serbian healthcare and welfare system. In such a context, inequalities in healthcare utilisation may emerge not only from individual socioeconomic resources but also from structural constraints within the healthcare system. In particular, specialist care in the public healthcare sector often represents a bottleneck due to long waiting lists and limited availability of appointments. As a result, individuals may seek alternative ways of accessing specialist care, either through private healthcare providers or through personal contacts within the healthcare system.

This study also has several limitations that should be considered. Although the European Social Survey is one of the most reliable comparative datasets available, the wording of some questions may be problematic in the Serbian context. In particular, respondents were asked whether they had "talked" to a general practitioner or a medical specialist during the previous 12 months. In Serbia, healthcare contacts are usually understood as visits to a doctor rather than consultations in a broader sense, which in some healthcare systems may also include telephone or other forms of contact. Because of this, respondents may have interpreted the question differently, which could have affected how healthcare utilisation was reported. Moreover, speaking of healthcare utilisation, the ESS data allow us to identify whether respondents had contact with a general practitioner or a specialist during the previous 12 months, but they do not capture how frequently these services were used. As a result, the analysis

cannot distinguish between respondents who visited a doctor only once and those who relied more intensively on healthcare services. Future research could build on these findings by comparing Serbia with other countries that share similar welfare regime characteristics. This would help to better understand whether the patterns observed in this study reflect broader regional trends or are specific to the Serbian healthcare system.

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Društvene determinante korišćenja zdravstvenih usluga u Srbiji: Obraćanje lekaru opšte prakse i lekaru specijalisti*

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Korišćenje zdravstvenih usluga i pristup zdravstvenoj zaštiti oblikovani su nizom društvenih i strukturnih faktora. Dosadašnja istraživanja pokazala su da socioekonomski položaj, demografske karakteristike i zdravstveno stanje mogu uticati na obrasce korišćenja zdravstvenih usluga. Međutim, ovi obrasci mogu se razlikovati u zavisnosti od institucionalnog i socijalnopolitičkog konteksta. Cilj rada je da ispita prediktore korišćenja zdravstvenih usluga u Srbiji, sa posebnim fokusom na ulogu društvene klase. Analiza je zasnovana na podacima Evropskog društvenog istraživanja (European Social Survey, runda 11), a za ispitivanje povezanosti između korišćenja zdravstvenih usluga i skupa prediktora primenjeni su logistički regresioni modeli. U modele su uključene sledeće varijable: klasni

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položaj, pol, starost, obrazovanje, samoprocena zdravstvenog stanja, tip naselja i procena stanja zdravstvenih usluga. Klasni položaj se nije pokazao kao statistički značajan prediktor poseta lekaru opšte prakse, ali je bio značajno povezan sa verovatnoćom odlaska kod lekara specijaliste. Pol i samoprocena zdravstvenog stanja pokazali su se kao značajni prediktori u oba modela, pri čemu su žene i ispitanici koji su svoje zdravlje ocenili lošijim imali veću verovatnoću korišćenja zdravstvenih usluga. Starost i obrazovanje bili su povezani sa posetama lekaru opšte prakse, ali se nisu pokazali kao značajni prediktori specijalističkih pregleda. Rezultati takođe ukazuju na to da su nejednakosti u korišćenju zdravstvenih usluga snažnije povezane sa društvenom klasom nego sa prostornim razlikama. Nalazi istraživanja ukazuju na to da su društvene nejednakosti u korišćenju zdravstvenih usluga u Srbiji izraženije u pristupu specijalističkoj nego primarnoj zdravstvenoj zaštiti. Ovi obrasci mogu se razumeti u širem kontekstu zdravstvenog i socijalnog sistema Srbije, u kome institucionalna ograničenja i neformalne prakse mogu uticati na pristup specijalističkim uslugama.

KLJUČNE REČI: korišćenje zdravstvenih usluga / primarna i specijalistička zdravstvena zaštita / društvene determinante zdravlja / klasni položaj / Srbija / Evropsko društveno istraživanje

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