

Article

Socio-Demographic Correlates of Barriers to Access Healthcare Services among Children in Post-Communist Albania

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Abstract: Access to healthcare services is an essential component of promoting public health and sustainable development. Our aim was to assess socio-demographic correlates of barriers to accessing healthcare services among children in Albania, a post-communist country in Europe. An online survey was conducted in September 2022, including a nationwide representative sample of 7831 school children ($\approx 54\%$ girls) ranging from grades six to nine from all regions of Albania. A structured and anonymous questionnaire was administered to all children inquiring about a range of potential barriers to accessing healthcare services. Overall, about 42% of the children reported that they had barriers to accessing healthcare services. There were no gender differences, but there were significant ethnic differences (51% among Roma/Egyptian children vs. 42% among the general sample of the children); urban/rural differences (46% rural vs. 39% urban); and socio-economic differences (52% among children with a lower maternal education vs. 31% among children with a higher maternal education; 66% among children from poor families vs. 35% among children with a higher family income). In transitional Albania, children residing in rural areas, children from Roma and/or Egyptian communities, and especially those pertinent to low socio-economic families report considerably more barriers to accessing healthcare services, which is a cause of concern.

Keywords: access to healthcare; Albania; barriers; children; school children; socio-demographic factors



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1. Introduction

Basic healthcare services are defined as the least healthcare needed to maintain sufficient health and ensure effective disease protection [1]. Hence, access to healthcare services is an essential component of promoting public health and is a critical factor for health and economic sustainability [2,3]. Furthermore, access to healthcare is one of the most important challenges guiding the development of the healthcare systems in the Sustainable Development Goals era [3]. Uneven distribution of healthcare services stands as the primary barrier to achieving both health equity [4,5] and sustainable development objectives [3,5], as well as developing sustainable healthcare systems [3,5,6].

Access to healthcare services exists when services are available in sufficient supply and when there is an opportunity to receive healthcare when needed and in a timely manner [7]. Barriers to healthcare access constitute factors that prevent an individual or a group of individuals from obtaining essential medical care [8]. Barriers to health services may arise in the presence of financial, organizational, social, or cultural issues pertinent to different communities [7,9]. However, barriers and obstacles to healthcare are multifactorial and have been categorized as systemic, socio-cultural, and individual barriers [8,10].

Individual barriers denote characteristics unique to individuals which hinder their access to healthcare services [8,10,11]. Such individual factors may include lack of time due to overwork or being overburdened with various responsibilities, negative previous experiences with healthcare services, including discrimination, or the presence of diseases that jeopardize access to healthcare services [11]. In particular, disabled individuals face additional obstacles and difficulties accessing health services due to their medical conditions and also due to their dependency on family assistance and specialized transportation [11,12]. In addition, ensuring equal access to healthcare is crucial for building healthy cities.

Nevertheless, individual factors, also referred to as intrapersonal factors [13], are also associated with such individual characteristics as knowledge, attitudes, behavior, and skills [13,14]. As a matter of fact, a fairly recent review reported that the most frequent individual-level barriers to accessing healthcare services consist of scarce knowledge of healthcare services and negative beliefs and experiences with previous care encounters [13].

Children may face some additional and/or specific barriers to accessing healthcare services when needed as, among other things, they are dependent on their parents/caregivers. Regardless of the enormous progress towards achieving universal health coverage, children in low- and middle-income countries (LMIC) may lack access to some essential healthcare services [15,16]. Lack of access to health services can lead to poorer health in children, which hinders school attendance and school achievements, social relationships, quality of life, and employment opportunities in adulthood [16].

In 1991, following the breakdown of the communist regime, Albania embarked on a market-oriented economy characterized by tremendous changes in the political and socio-economic system, but also in the healthcare sector [17]. Albania has experienced an unparalleled level of emigration, which currently persists [18]. The net migration rate in Albania is estimated to range from -5% to -10% , which has led to a loss of over 300,000 people only due to emigration in the past two decades, including more than 400 health professionals [18]. Notwithstanding the enormous progress that Albania has made regarding the improvement of its healthcare system, especially in the past decade, access to healthcare remains limited, particularly in rural and remote areas of the country [19]. This limitation can hinder efforts to improve public health and promote sustainable development [3].

The available information indicates that a substantial proportion of Albanian children have poor knowledge about healthy behaviors and healthy lifestyle practices [20,21]. Poverty and a lack of access to sufficient food may still play an important role in the Albanian context [20,21]. Furthermore, the price of healthy food is an important factor that prevents families from healthy eating [20,21].

However, to date, there are no scientific reports about access to healthcare services among children in Albania. In this framework, we aimed at assessing the association of the barriers to accessing healthcare services with the socio-demographic characteristics of school children in post-communist Albania. We hypothesized that there is a higher degree of barriers to accessing healthcare services among school children within disadvantaged socio-economic categories and marginalized groupings, based on a previous study from Albania conducted among adult primary healthcare users [22].

2. Materials and Methods

An online survey (cross-sectional study) was conducted in Albania in September 2022.

2.1. Study Population

The study population consisted of a nationwide sample of school children ranging from grades 6–9 (overall: 123,998 school children in the age group 12–15 years old) from all regions of Albania (in 2022, mid-year population: 2,793,592 individuals, of whom, 639,285 were children aged 0–18 years old). The sampling frame (registered school children ranging from grades 6–9) was available at the General Directorate of Preuniversity Education, an institution that is under the auspices of the Albanian Ministry of Education and Sport.

The Program for Epidemiologists for Windows (WIN-PEPI: <http://www.brixtonhealth.com/pepi4windows.html> (accessed on 2 May 2023)) was employed for the calculation of the sample size, based on different hypotheses related to the prevalence of the selected barriers related to children's access to healthcare services. Based on fairly conservative assumptions, the minimum required sample size was estimated at around 1400 participants. However, we decided to invite all registered school children, as this was an online survey.

At the end of September 2022, when the online survey was closed, there were 7928 participants (6.4% of all registered school children ranging from grades 6–9) who had completed the questionnaire. Of these, 97 questionnaires were either partially completed ($n = 59$) or invalid ($n = 38$). The final sample included in the analysis consisted of 7831 school children (about 54% girls) aged 12–15 years old (grades 6–9). Of note, the survey participants ($n = 7928$) resembled the socio-demographic characteristics (gender, age, place of residence) of the overall number of registered school children within grades 6–9 ($N = 123,998$). The ethical aspects of research with children are covered under “Ethical Considerations” (see “Section 2.4” below).

2.2. Data Collection

Data collection consisted of a structured, anonymous, and self-administered questionnaire (initially pre-tested successfully in a sample of 32 pupils in a 9-year school in Tirana) which was completed online by all of those children who initially agreed to participate in the survey. To avoid duplicates, unique identifiers were used for each participant (each pupil was provided with a single participant code; hence, once a participant had submitted the questionnaire, it was not possible to submit another one). The school children used the computer labs available at their respective schools and/or their personal/family devices (PCs, tablets, or smartphones) for completing the online survey.

The assessment of the barriers to accessing healthcare services was based on a series of questions asking children about the perceived (self-reported) obstacles/difficulties to accessing healthcare, including the following factors: (i) distance to a healthcare facility; (ii) non-availability of the parents/caregivers to accompany their children to healthcare facilities; (iii) lack of confidentiality when raising/disclosing a medical problem; (iv) lack of school psychologist and/or health personnel to provide counseling and advise; (v) other obstacles, as reported by the children. Potential responses to each of the questions of the instrument were as follows: “yes” vs. “no”.

In addition, regardless of the specific type of difficulty/obstacle/barrier perceived (or not perceived), all children were asked a general question regarding whether they perceived “any barriers to access healthcare services” (potential responses: “yes” vs. “no”). This was the main dependent (outcome) variable used for the in-depth statistical analyses.

Socio-demographic factors included gender (boys vs. girls), age (12, 13, 14, and 15 years old, which in the analysis was also dichotomized into 12–13 years vs. 14–15 years), place of residence (urban vs. rural areas), ethnicity (ethnic Albanians vs. Roma/Egyptian communities), maternal education (high, middle, low, don't know, which in the analysis was also dichotomized into high education vs. other groups), and family economic situation (very good, good, average, poor and very poor, which in the analysis was also trichotomized into very good/good, average, and poor/very poor).

2.3. Statistical Analysis

The chi-square test was used to compare the distribution of socio-demographic characteristics (age, place of residence, ethnicity, maternal education, and family economic situation) between boys and girls included in this study. In addition, Fisher's exact test was used to compare the distribution of the barriers to accessing healthcare services between boys and girls.

Conversely, binary logistic regression was employed to assess the association of socio-demographic characteristics (gender, age, place of residence, ethnicity, maternal education, and family economic situation) with barriers of school children to accessing healthcare

services (outcome variable). Initially, crude (unadjusted) odds ratios (OR: barriers vs. no barriers to access healthcare services), their respective 95% confidence intervals (95% Cis), and their *p*-values were calculated. Subsequently, multivariable-adjusted Ors, their respective 95% Cis, and their *p*-values were calculated in binary logistic regression models adjusted simultaneously for all socio-demographic factors. The Hosmer–Lemeshow test was used to assess the overall goodness-of-fit of the multivariable-adjusted regression models; all analyses fitted the criterion [23]. To check for multi-collinearity between independent variables, the Variance Inflation Factor (VIF) was calculated.

In all cases, a *p*-value ≤ 0.05 was considered statistically significant. The Statistical Package for Social Sciences (SPSS, version 19.0) was used for all of the statistical analyses.

2.4. Ethical Considerations

The study was approved by the Albanian Ministry of Education and Sport in June 2022. In addition, the Commissioner for Information in Albania was informed about the survey. All school children were informed by their respective teachers about the aim and procedures of the study and were told about the research in sufficient detail, particularly the aspects related to the anonymousness of the survey and the successive aggregated data analysis. Passive consent was sought from the parents through to the teachers from each respective school, similar to the approach employed in all of the other school-based studies conducted in Albania, including the periodic “Health Behavior in School-Aged Children” surveys. Apparently, the content of the questionnaire was not deemed sensitive, as there were no parents/caregivers who explicitly objected to the participation of their children after being informed about the study. Furthermore, all teachers were carefully instructed to provide the correct information to the school children.

3. Results

Of the overall 7831 school children included in the analysis, 4204 ($\approx 54\%$) were girls and 3627 ($\approx 46\%$) were boys. The boys were somehow younger than the girls ($p < 0.001$) (Table 1).

Table 1. Distribution of socio-demographic characteristics in a nationwide sample of Albanian school children included in the online survey conducted in September 2022.

Socio-Demographic Factors	Total 7831 (100.0%)	Girls 4204 (100.0%)	Boys 3627 (100.0%)	<i>p</i> -Value ²
Age:				
12 years	2037 (26.0) ¹	988 (23.5)	1049 (28.9)	<0.001
13 years	1792 (22.9)	951 (22.6)	841 (23.2)	
14 years	2128 (27.2)	1193 (28.4)	935 (25.8)	
15 years	1874 (23.9)	1072 (25.5)	802 (22.1)	
Place of residence:				
Urban areas	4838 (62.0)	2517 (60.1)	2321 (64.2)	<0.001
Rural areas	2962 (38.0)	1669 (39.9)	1293 (35.8)	
Ethnicity:				
Roma/Egyptian community	174 (2.3)	77 (1.9)	97 (2.8)	0.009
Ethnic Albanian	7299 (97.7)	3967 (98.1)	3332 (97.2)	
Mother’s education:				
High	2517 (32.5)	1309 (31.4)	1208 (33.8)	0.003
Middle	3728 (48.2)	2060 (49.5)	1668 (46.7)	
Low	1235 (16.0)	677 (16.3)	558 (15.6)	
Don’t know	260 (3.4)	119 (2.9)	141 (3.9)	

Table 1. Cont.

Socio-Demographic Factors	Total 7831 (100.0%)	Girls 4204 (100.0%)	Boys 3627 (100.0%)	p-Value ²
Economic situation:				
Very good	3068 (39.6)	1708 (41.1)	1360 (38.0)	0.005
Good	1439 (18.6)	774 (18.6)	665 (18.6)	
Average	2760 (35.7)	1457 (35.0)	1303 (36.4)	
Poor	397 (5.1)	185 (4.4)	212 (5.9)	
Very poor	76 (1.0)	36 (0.9)	40 (1.1)	

¹ Absolute numbers and their respective column percentages (in parentheses). Discrepancies in the totals are due to the following missing covariate values: n = 31 for residence, n = 358 for ethnicity, n = 110 for the mother's education, and n = 91 for the economic situation. ² p-values from the chi-square test for comparison of independent proportions.

Overall, 38% of the school children were from rural areas (40% in girls vs. 36% in boys, $p < 0.01$). Only 2.3% of the participants belonged to Roma and Egyptian minorities (1.9% in girls vs. 2.8% in boys, $p = 0.01$). Almost one-third of the school children (33%) reported a higher maternal education (31% in girls vs. 34% in boys, $p < 0.01$), and a further 48% reported an average maternal education. On the whole, 40% of the school children reported a very good economic situation (41% in girls vs. 38% in boys, $p = 0.01$), a further 19% had a good economic situation, and only 6% reported a poor and/or a very poor economic situation (5% in girls vs. 7% in boys) (Table 1).

Overall, 29% of the school children responded positively to the proposition that “distance to healthcare facility” is an obstacle/difficulty/barrier to accessing healthcare services (Table 2).

Table 2. Barriers to accessing healthcare services by gender of school children included in the study.

Barriers to Access Healthcare Services	Total (N = 7831)	Girls (N = 4204)	Boys (N = 3627)	p ²
Distance to healthcare facility:				
Yes	2244 (29.1) ¹	1200 (29.0)	1044 (29.4)	0.706
No	5456 (70.9)	2945 (71.0)	2511 (70.6)	
Non-availability of the parents/caregivers to accompany children to healthcare facilities:				
Yes	1393 (18.1)	732 (17.7)	661 (18.6)	0.327
No	6293 (81.9)	3400 (82.3)	2893 (81.4)	
Lack of confidentiality when raising/disclosing a medical problem:				
Yes	1917 (25.3)	1032 (25.3)	885 (25.2)	0.916
No	5668 (74.7)	3042 (74.7)	2626 (74.8)	
Lack of school psychologist and/or health personnel to provide counselling and advise:				
Yes	1596 (20.9)	847 (20.6)	749 (21.2)	0.516
No	6055 (79.1)	3269 (79.4)	2786 (78.8)	
Other barriers:				
Yes	225 (2.9)	120 (2.9)	105 (3.0)	0.946
No	7408 (97.1)	3977 (97.1)	3431 (97.0)	
Any barriers:				
No obstacles at all	4424 (58.1)	2374 (58.0)	2050 (58.3)	0.798
At least one obstacle	3189 (41.9)	1721 (42.0)	1468 (41.7)	

¹ Absolute numbers and their respective column percentages (in parentheses). Discrepancies in the totals are due to the following missing covariate values: n = 131 for “distance”, n = 145 for “non-availability of the parents”, n = 246 for “lack of confidentiality”, n = 180 for “lack of school psychologist/health personnel”, n = 198 for “other obstacles”, and n = 218 for “no obstacles/difficulties at all”. ² p-values from Fisher's exact test.

Furthermore, 18% of participants reported that “non-availability of the caregivers” was an obstacle/difficulty/barrier to accessing healthcare services. In addition, a “lack of confidentiality” was reported by one out of four children as another obstacle to accessing services. Additionally, a “lack of psychologist/health personnel at school” was reported by one in five school children. Only 3% of the school children reported other obstacles/difficulties/barriers (without specifying the type) to accessing healthcare services. There were no gender differences among the types of obstacles/difficulties/barriers to accessing healthcare services.

When asked about the overall barriers to accessing healthcare services regardless of their type, on the whole, 42% of the school children responded positively, whereas the remaining 58% did not perceive any obstacles/difficulties/barriers at all (Table 2). This last variable (“any obstacles/difficulties/barriers”) was used as a dependent (outcome) variable in further analyses.

Table 3 presents the crude (unadjusted) association of “any obstacles/difficulties/barriers to access healthcare services” (response categories: “no” vs. “yes”) with the socio-demographic characteristics of the school children included in the study.

Table 3. Distribution of “any barriers to access healthcare services” by socio-demographic characteristics of school children included in the study (N = 7831).

Socio-Demographic Characteristic	No Barriers (N = 4424)	Barriers (N = 3189)	OR (95% CI) ²	p ²
Gender:				
Boys	2374 (58.0) ¹	1721 (42.0)	1.00 (reference)	0.792
Girls	2050 (58.3)	1468 (41.7)	1.02 (0.92–1.11)	
Age:				0.109 (3) ³
12 years	1130 (57.1)	850 (42.9)	1.10 (0.97–1.25)	0.155
13 years	985 (56.3)	764 (43.7)	1.13 (0.99–1.29)	0.067
14 years	1233 (59.5)	838 (40.5)	0.99 (0.87–1.13)	0.906
15 years	1076 (59.3)	737 (40.7)	1.00 (reference)	-
Age-group:				
12–13 years	2115 (56.7)	1614 (43.3)	1.12 (1.02–1.23)	0.016
14–15 years	2309 (59.4)	1575 (40.6)	1.00 (reference)	
Place of residence:				
Urban areas	2856 (60.7)	1852 (39.3)	1.00 (reference)	<0.001
Rural areas	1550 (53.9)	1326 (46.1)	1.32 (1.20–1.45)	
Ethnicity:				
Roma/Egyptian	83 (49.1)	86 (50.9)	1.46 (1.07–1.97)	0.016
Ethnic Albanian	4151 (58.4)	2956 (41.6)	1.00 (reference)	
Mother’s education:				<0.001 (3)
High	2049 (69.3)	909 (30.7)	1.00 (reference)	-
Middle	1611 (52.1)	1484 (47.9)	2.08 (1.87–2.31)	<0.001
Low	633 (48.3)	677 (51.7)	2.41 (2.11–2.76)	<0.001
Don’t know	109 (51.2)	104 (48.8)	2.15 (1.63–2.85)	<0.001
Mother’s education:				
High	2049 (69.3)	909 (30.7)	1.00 (reference)	<0.001
Middle/Low/Don’t know	2353 (51.0)	2265 (49.0)	2.17 (1.97–2.39)	
Economic situation:				<0.001 (4)
Very good	1967 (65.0)	1057 (35.0)	1.00 (reference)	-
Good	737 (52.9)	656 (47.1)	1.66 (1.46–1.89)	<0.001
Average	1483 (54.8)	1221 (45.2)	1.53 (1.38–1.70)	<0.001
Poor	191 (49.1)	198 (50.9)	1.93 (1.56–2.39)	<0.001
Very poor	26 (34.2)	50 (65.8)	3.58 (2.22–5.78)	<0.001

Table 3. Cont.

Socio-Demographic Characteristic	No Barriers (N = 4424)	Barriers (N = 3189)	OR (95% CI) ²	p ²
Economic situation:				<0.001 (2)
Very good/good	2704 (61.2)	1713 (38.8)	1.00 (reference)	-
Average	1483 (54.8)	1221 (45.2)	1.30 (1.18–1.43)	<0.001
Poor/very poor	217 (46.7)	248 (53.3)	1.80 (1.49–2.19)	<0.001

¹ Absolute numbers and their respective row percentages (in parentheses). Discrepancies in the totals are due to the following missing covariate values: n = 31 for residence, n = 358 for ethnicity, n = 110 for mother's education, and n = 91 for economic situation. ² Odds ratios (OR: obstacles/difficulties/barriers vs. no obstacles/difficulties/barriers to access healthcare services), 95% confidence intervals (95% CIs), and p-values from crude (unadjusted) binary logistic regression models. ³ Overall p-value and degrees of freedom (in parentheses).

There were no gender differences, but an inverse association with age group, with younger children (12–13 years) reporting a slightly higher degree of barriers to accessing healthcare services compared with their older counterparts (14–15 years): 43% vs. 41%, respectively ($p = 0.02$). Furthermore, school children from rural areas reported a higher degree of barriers to accessing healthcare services compared with children from urban areas (46% vs. 39%, respectively; $p < 0.01$). In addition, children pertinent to Roma/Egyptian communities reported a significantly higher level of barriers to accessing healthcare services compared with the ethnic Albanians (51% vs. 42%, respectively; $p = 0.02$). Additionally, there was a strong and graded relationship with maternal education: 31% of school children with a high maternal education reported barriers to accessing healthcare services compared with 48% of those with middle maternal education and 52% of children with a low maternal education (overall $p < 0.01$). Likewise, there was evidence of a strong association with the family's economic situation, as 39% of school children with a good and/or very good economic situation reported barriers to access healthcare services compared with 45% of those with an average economic situation and 53% of children with a poor and/or very poor economic situation (overall $p < 0.01$) (Table 3).

In multivariable-adjusted binary logistic regression models (Table 4) with “any obstacles/difficulties/barriers” introduced as a dependent (outcome) variable (OR: “yes” vs. “no”) and all socio-demographic characteristics introduced simultaneously into the models, there was evidence of a mild positive relationship with age-group (OR = 1.2, 95% CI = 1.1–1.3) and rural residence (OR = 1.1, 95% CI = 1.0–1.3).

Table 4. Association of barriers to accessing healthcare services with socio-demographic characteristics of school children; multivariable-adjusted results from binary logistic regression.

Variable	OR ¹	95% CI ¹	p ¹
Gender:			
Boys	1.00	reference	0.827
Girls	1.01	0.92–1.11	
Age-group:			
14–15 years	1.00	reference	0.001
12–13 years	1.18	1.07–1.29	
Place of residence:			
Urban areas	1.00	reference	0.019
Rural areas	1.13	1.02–1.25	
Ethnicity:			
Ethnic Albanian Roma/Egyptian	1.29	0.94–1.78	0.113
Mother's education:			
High	1.00	reference	<0.001
Middle/Low/Don't know	2.06	1.86–2.28	

Table 4. Cont.

Variable	OR ¹	95% CI ¹	<i>p</i> ¹
Economic situation:			0.002 (2) ²
Very good/good	1.00	reference	-
Average	1.12	1.01–1.24	0.034
Poor/very poor	1.39	1.13–1.70	0.002

¹ Odds ratios (OR: obstacles/difficulties/barriers vs. no obstacles/difficulties/barriers to access healthcare services), 95% confidence intervals (95% CIs), and *p*-values from multivariable-adjusted binary logistic regression models. All covariates presented in the table were entered simultaneously into the binary logistic regression models. The Variance Inflation Factor (VIF) was <5 (indicating the absence of multi-collinearity between independent variables). ² Overall *p*-value and degrees of freedom (in parentheses).

The association with ethnicity was attenuated and lost its statistical significance (OR = 1.3, 95% CI = 0.9–1.8). On the other hand, upon simultaneous adjustment for all covariates, the positive relationship of barriers to accessing healthcare services with a non-high maternal education persisted strongly (OR = 2.1, 95% CI = 1.9–2.3). Furthermore, in multivariable-adjusted models, the positive association of barriers to accessing healthcare services with poor/very poor economic situations was attenuated but remained statistically significant (OR = 1.4, 95% CI = 1.1–1.7) (Table 4).

4. Discussion

The evidence from our study conducted in transitional Albania indicates a relatively high degree of self-perceived barriers (≈42%) to accessing healthcare services by school children. Furthermore, our findings indicate that Albanian children residing in rural areas, children from Roma and/or Egyptian communities, and especially those pertinent to low socio-economic families perceive substantially more barriers to accessing healthcare services.

Notably, most of the studies on this topic have employed a qualitative research methodology and do not provide nationally representative data on the prevalence of barriers to accessing healthcare services [24]. This is especially the case for studies including children's populations in low- and middle-income countries [25]. Indeed, while there is a significant body of literature across many low- and middle-incomes that indicate the presence of barriers to healthcare among children and young people [26,27], quantitative data on the prevalence of healthcare access among these population categories are scant, an issue which has been also acknowledged by the Lancet commission on adolescents [28].

Therefore, it is difficult to compare our quantitative findings related to the prevalence of self-perceived barriers to accessing healthcare with those within literature reports. Nevertheless, our findings related to socio-demographic correlates of self-reported barriers to accessing healthcare services are generally compatible with previous reports from the international literature [7,8,10–13,16,24–26,28].

It has been reported that young individuals are less likely to access healthcare compared to other age groups, and they tend to present later when they seek care which results in poor prognosis [25,29]. In addition, there have been several reports from many countries indicating that young people typically report poorer experiences when they access healthcare compared to other groups [30,31]. We did not inquire about children's previous experiences with medical encounters but obtained evidence that one-fourth of them perceived the lack of confidentiality as a barrier to accessing healthcare services. Seemingly, this is a proxy measure for prior experiences with healthcare services.

A recent scoping review reported on the barriers to accessing healthcare among young people in 30 low- to middle-income-countries [25]. Overall, significantly greater barriers to accessing healthcare were reported in the younger populations compared to older adults [25]. Therefore, the available evidence suggests that young people often face additional barriers to accessing healthcare in many low- to middle-income countries, which resembles findings across many high-income countries [25]. Albania cannot be exempted

from this “pattern”, according to which, children and young people face additional barriers, irrespective of socio-economic development [32].

In our study, we did not ask children to report directly on financial barriers to accessing healthcare services, as this question is not deemed age-appropriate in the Albanian context. However, the available evidence suggests that financial constraints constitute an important barrier to accessing healthcare services in Albania [33]. On the whole, in 2018, out-of-pocket payments comprised about 45% of the overall health expenditure in Albania [34]. This share is very high and constitutes a significant financial barrier to accessing healthcare services, especially for the economically disadvantaged population categories, including children and young individuals pertinent to these marginalized groupings.

Our study may have several limitations related to selection bias (due to sample representativeness), the possibility of information bias (self-reported instrument), and the issue of study design. Our study included a nationwide sample of school children aged 12–15 years old (grades 6–9). All registered school children of this age group were invited to participate over a 1-month period (September 2022). During this time period, 6.4% of the school children completed the online survey which, in absolute terms, constitute a fairly large sample size. More importantly, there were no significant differences regarding the distribution of socio-demographic factors between survey participants and the overall number of registered school children attending grades 6–9, which is comforting. The instrument of data collection consisted of a previously validated (in a sample of school children in Tirana, the Albanian capital), simple (straightforward), and anonymous questionnaire, which was completed online by the children at their convenience (either by using the computer labs available at their respective schools or their personal/family devices at home premises). Nevertheless, computer labs are not available and/or accessible in all 9-year schools in Albania, and access to PCs, tablets or smartphones should not be taken for granted for all children in Albania. Additionally, despite the lack of plausible reasons for differential reporting between children pertinent to different socio-demographic categories, the possibility of information bias cannot be excluded completely. In addition, importantly, the reported barriers to accessing healthcare are the self-perceptions of the children, which means that the extent of the (perceived) barriers may not necessarily reflect the real magnitude (level) of the barriers to accessing healthcare services. Finally, as this was a cross-sectional study, findings should be interpreted with extreme caution.

Regardless of the aforementioned potential limitations, our study provides useful evidence about the self-perceived barriers to accessing healthcare services by school children in Albania, a post-communist country still struggling to reform its healthcare sector. Our findings concerning rural areas are compatible with previous reports which indicate that, in Albania, access to healthcare services remains limited in rural areas, especially in remote parts of the country [19]. There are several challenges that need to be addressed to improve access to healthcare services in Albania, including geographic barriers, limited healthcare infrastructure, and financial barriers [19]. Regardless of the significant progress in improving healthcare infrastructure, there is still a shortage of adequate facilities in rural areas in Albania and a particular shortage of health professionals [19]. Additionally, the cost of healthcare services can be prohibitive, particularly for low-income households, posing significant financial barriers to accessing healthcare services [19,33].

Therefore, in order to improve access to healthcare services in Albania, several strategies should be simultaneously employed, including the improvement of healthcare infrastructure, as well as the implementation of adequate policies for the retention and remuneration of healthcare professionals. In addition, strengthening primary healthcare can help to improve the overall access to services and promote, especially preventive and public, health services [19]. Additionally, the provision of financial support to low-income households to access healthcare services can help to reduce financial barriers and improve access to healthcare services. In an innovative aspect, the utilization of technology, such as telemedicine, can help to improve access to healthcare services, particularly in remote areas of Albania where healthcare infrastructure and human resources are scarce.

5. Conclusions

Our findings from transitional Albania indicate that children residing in rural areas, children from selected minorities, and especially those pertinent to low socio-economic categories report considerably more barriers to accessing healthcare services. Hence, more than three decades after the breakdown of the communist regime, on the face of it, Albania still faces several challenges regarding access to healthcare services; this should be a serious cause of concern for policymakers and decisionmakers because the lack of access to healthcare services jeopardizes health equity [4,5], sustainable development objectives [3,5] and the development of sustainable healthcare systems [3,5,6].

In conclusion, improving access to healthcare services in Albania, and other similar countries in transition, requires a multifaceted approach that addresses geographic barriers, strengthens healthcare infrastructure and human resources, reduces financial barriers, and utilizes technology to improve healthcare delivery. In particular, there is a need to improve the education essential to promoting the socio-economic development of low- to middle-income countries. In addition, data from our study should be exploited in detail in order to explain geographical differences and other socio-demographic determinants of access to healthcare.

Policymakers in all countries should be aware of the fact that access to healthcare services is an essential component of promoting public health and sustainable development.

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Informed Consent Statement: All school children were informed about the aim and procedures of the study and were explained in sufficient detail particularly the aspects related to anonymousness of the survey and the successive aggregated data analysis. Passive consent was sought from the parents through teachers from each respective school.

Data Availability Statement: The data presented in this study is available on request from the corresponding author.

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