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ORIGINAL RESEARCH

Level of satisfaction and socio-demographic correlates among users of primary health care services in Kosovo

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Abstract

Aim: The aim of this study was to assess the level and socio-demographic correlates of satisfaction with services among adult primary health care users in Kosovo.

Methods: A cross-sectional study was conducted in Kosovo during the period May-June 2022 including a representative sample of 510 adult users (238 men and 272 women) of primary health care services in Kosovo (mean age: 44.6±19.2 years). In addition to socio-demographic data, a structured 23-item questionnaire aiming at assessing the level of satisfaction with primary health care services was administered to all participants (each item ranging from 1 [high] to 5 [low]). A summary score was calculated for all 23 items related to satisfaction level ranging from 23 (the highest satisfaction level) to 115 (the lowest satisfaction level). General linear model was used to assess the association between the summary score of satisfaction level with primary health care services and socio-demographic factors of study participants.

Results: Mean summary score of the 23 items related to the satisfaction level with primary health care services was 49.8±13.0; median score was 49 (interquartile range: 41-57). In multivariable-adjusted models, the level of satisfaction with primary health care services was significantly higher among participants with a lower educational attainment, individuals with e lower income level, and ethnic Albanian participants.

Conclusion: This study identified important socio-demographic correlates of the level of satisfaction with primary health care services in the adult population of Kosovo. Findings from this study should raise the awareness of policymakers and decision-makers in Kosovo and elsewhere in order to improve the quality of primary health care services.

Keywords: epidemiology, Kosovo, patients, primary health care, satisfaction, socioeconomic factors, users of services.

Introduction

Almost 15 years after declaring its independence, Kosovo is still undergoing a difficult political and socioeconomic transition, striving for wider recognition in the international arena and aspiring to join European Union in due time.

According to the World Bank data (1), life expectancy in Kosovo in 2020 was 71 years (74 years in women and 69 years in men), which is substantially lower than the national report of about 76 years (which is related to a significant under-registration of deaths) (2). Crude death rate in Kosovo is 8 per 1,000 population, whereas crude birth rate is 15 per 1,000 people. In turn, fertility rate is 1.9 births per woman of childbearing age (3).

Similar to most of the Central and Eastern European countries, Kosovo has experienced a development of health care reform that shifted its Semashko health care system established during the communist era, towards social health insurance (4).

Primary health care services in Kosovo are regulated, somehow well-organized and standardized in all communes. In 2021, overall, there were registered about 3.2 million visits at primary health care services (5), which exhibits a decreasing trend from the previous year (2020) which registered more than 4 million primary health care visits (6).

The current scientific evidence about the level and determinants of satisfaction with primary health care services in Kosovo is scarce. At an international level, assessment of satisfaction level among users of healthcare service is considered an essential part of the overall assessment of health care services regarding quality and health care system responsiveness (7,8). Despite the wide range of the level of satisfaction with healthcare services, three key individual determinants of satisfaction have been consistently reported from previous studies conducted internationally: expectations, health status and socio-demographic characteristics (9).

The associations of users' satisfaction with age, health status and education are usually fairly consistent, whereas the relationship between satisfaction and gender has been reported to be somehow inconsistent (10). In this context, the aim of this study was to assess the level of satisfaction and selected socio-economic correlates among adult primary healthcare users in Kosovo. We hypothesized a higher level of satisfaction among younger participants, male individuals, and higher socioeconomic status participants.

Methods

A cross-sectional study was conducted in Kosovo during the period May-June 2022 in a sample of primary healthcare users.

The study was carried out in three regions of Kosovo: Gjakova, Peje, and Prizren, which constitute some of the main regions of the Republic of Kosovo. A representative sample of individuals attending primary healthcare services in the regions of Gjakova, Peje and Prizren was included in this survey. More specifically, the study population consisted of a random sample of 510 adult individuals (91% response rate; 238 men and 272 women – all 18 years and above) attending different primary healthcare centres/facilities in the aforementioned three regions of Kosovo. A structured 23-item questionnaire (11) inquiring about the level of satisfaction with primary healthcare services was administered to all study participants. Assessment of satisfaction level consisted of the 23-item EUROPEP instrument (11). This instrument has been previously validated in the adult population of Kosovo (12).

A summary score was calculated for all 23 items related to the level of satisfaction with primary healthcare services ranging from 23 (highest level of satisfaction) to 115 (lowest level of satisfaction with primary healthcare services).

Furthermore, information about demographic factors (age, sex, ethnicity, marital status and place of residence) and socioeconomic characteristics (employment status, educational attainment and income level) were gathered for all study participants.

The study was approved by the Ethics Commission and Council of the Faculty of Medicine, University of Gjakova.

Fisher's exact test was used to compare differences in socio-demographic factors (age, place of residence, marital status, ethnicity, employment status, educational attainment and income level) between male and female participants.

Conversely, general linear model was used to assess the association between the summary score of the satisfaction level with primary healthcare services (23-item instrument) and socio-demographic factors of study participants. Firstly, crude (unadjusted) mean values, their respective 95% confidence intervals (95%CIs) and p-values were calculated. Secondly, multivariable-adjusted models were run controlling simultaneously for all socio-demographic factors of study participants (age, sex, ethnicity, place of residence, employment, educational attainment and income level). Multivariable-adjusted mean values, their respective 95%CIs and p-values were calculated.

A p-value ≤0.05 was considered as statistically significant in all cases. Statistical Package for Social Sciences (SPSS, version 19.0) was used for all the statistical analyses.

Results

Mean age (±SD) of participants included in this study was 44.6±19.2 years; median age was 44 years (interquartile range: 27-59 years); the age range was: 18-88 years (not shown in the tables).

Table 1 presents the distribution of socio-demographic factors of study participants (N=510), separately in men and in women.

Overall, about 32% of individuals were aged ≤30 years, whereas 38% of participants were 51 years and above. About 50% of participants resided in rural areas, whereas about 90% were ethnic Albanians. About 62% of individuals were currently married (which was more prevalent in men than in women, P=0.01).

Only half of study participants (51%) were currently employed (62% in men vs. 40% in women, P<0.01). Around 41% of individuals had a low educational attainment (≤8 years of formal schooling), whereas 26% of them had a high educational level (with significant gender differences: P=0.01).

On the whole, 49% of individuals had a low-income level, whereas only about 7% of participants reported a high-income level. There were no statistically significant differences in the distribution of the other socio-demographic characteristics between men and women included in the study (Table 1).

A summary score was calculated for all 23 items of the satisfaction level with primary healthcare services ranging from 23 (indicating the highest level of satisfaction with primary healthcare services) to 115 (indicating the lowest level of satisfaction with primary healthcare services). Mean summary score of the 23 item-instrument of the level of satisfaction with primary healthcare services was 49.8±13.0; median

score was 49 (interquartile range: 41-57) [data not shown in the tables].

Table 1. Socio-demographic factors in a sample of primary health users in Kosovo in 2022 (N=510)

Socio-demographic factors	Total (N=510)	Men (N=238)	Women (N=272)	P †
Age-group:				
≤30 years	164 (32.2)*	65 (27.3)	99 (36.4)	0.073
31-50 years	154 (30.2)	74 (31.1)	80 (29.4)	
≥51 years	192 (37.6)	99 (41.6)	93 (34.2)	
Place of residence:				
Urban areas	254 (49.8)	111 (46.6)	143 (52.6)	0.106
Rural areas	256 (50.2)	127 (53.4)	129 (47.4)	
Region:				
Peje	146 (28.6)	68 (28.6)	78 (28.7)	0.986
Prizren	176 (34.5)	83 (34.9)	93 (34.2)	
Gjakove	188 (36.9)	87 (36.6)	101 (37.1)	
Ethnicity:				
Other	50 (9.8)	22 (9.2)	28 (10.3)	0.403
Albanian	460 (90.2)	216 (90.8)	244 (89.7)	
Marital status:				
Other	191 (37.5)	76 (31.9)	115 (42.3)	0.010
Married	319 (62.5)	162 (68.1)	157 (57.7)	
Educational level:				
Low	209 (41.0)	91 (38.2)	118 (43.4)	0.008
Middle	167 (32.7)	94 (39.5)	73 (26.8)	
High	134 (26.3)	53 (22.3)	81 (29.8)	
Employment status:				
Employed	257 (50.5)	147 (62.0)	110 (40.4)	<0.001
Unemployed	157 (30.8)	49 (20.7)	108 (39.7)	
Retired	95 (18.7)	41 (17.3)	54 (19.9)	
Income level:				
Low	250 (49.1)	124 (52.3)	126 (46.3)	0.269
Middle	226 (44.4)	101 (42.6)	125 (46.0)	
High	33 (6.5)	12 (5.1)	21 (7.7)	

* Numbers and *column* percentages (in parenthesis).

† P-values from Fisher's exact test.

Table 2 presents the association between summary score of satisfaction level with primary healthcare services and socio-demographic factors of study participants. In crude (unadjusted) general linear models, the mean summary score of the 23-item

instrument measuring the level of satisfaction with primary healthcare services was significantly higher among ethnic Albanians compared to other ethnic groups: 49.3 vs. 54.8, respectively (P=0.01). Furthermore, the level of satisfaction with primary healthcare services was higher among low-income participants compared to their high-income counterparts (47.5 vs. 54.9, respectively), and among low-educated individuals compared to highly educated participants (49.2 vs. 51.9). Conversely, there were no differences in summary scores of the level of satisfaction with primary healthcare services between male and female participants, urban and rural residents, or between different age-groups of individuals included in this study.

Table 2. Association between the level of satisfaction with primary healthcare services and socio-demographic factors – results from the General Linear Models

Socio-demographic factors	Unadjusted models			Multivariable-adjusted models		
	Mean*	95%CI	P	Mean	95%CI	P
Sex:						
Women	49.8	48.1-51.5	0.952	53.1	50.6-55.7	0.624
Men	49.8	48.2-51.3		53.7	50.9-56.5	
Age-group:			**0.963 (2)†**			**0.699 (2)**
≤30 years	50.0	48.0-52.0	0.914	53.7	50.6-56.8	0.874
31-50 years	49.6	47.5-51.7	0.862	52.7	49.7-55.7	0.442
≥51 years	49.8	47.9-51.7	reference	53.9	51.0-56.9	reference
Ethnicity:						
Albanian	49.3	48.1-50.5	0.007	51.2	49.2-53.2	0.032
Other groups	54.8	51.0-58.6		55.7	51.7-59.6	
Place of residence:						
Urban areas	49.8	48.2-51.5	0.985	53.3	50.7-55.9	0.832
Rural areas	49.8	48.2-51.4		53.6	50.9-56.2	
Educational level:			**0.111 (2)**			**0. 019 (2)**
Low	49.2	47.5-51.0	0.073	51.9	49.3-54.6	0.012
Middle	48.9	46.9-50.9	0.054	52.2	49.2-55.1	0.011
High	51.9	49.6-54.1	reference	56.2	52.9-59.5	reference
Employment:			**0.610 (2)**			**0.742 (2)**
Employed	50.4	48.7-51.9	0.681	53.7	51.2-56.3	0.941
Unemployed	49.0	47.0-51.1	0.703	52.7	49.7-55.7	0.577
Retired	49.7	47.0-52.4	reference	53.9	50.1-57.6	reference
Income level:			**<0.001 (2)**			**<0.001 (2)**
Low	47.5	45.6-49.1	0.003	49.3	46.8-51.8	0.004
Middle	51.7	50.0-53.4	0.196	54.2	51.7-56.8	0.321
High	54.9	50.3-59.5	reference	56.7	52.0-61.5	reference

* Range of the summary score from 23 (the highest level of satisfaction) to 115 (the lowest level of satisfaction with primary healthcare services).

† Overall p-values and degrees of freedom (in parentheses).

In multivariable-adjusted models, the significant association with ethnicity persisted strongly, with ethnic Albanians exhibiting a significantly higher satisfaction level with primary healthcare services compared with the other ethnic groups, whereas the association with educational attainment was accentuated. In brief, upon simultaneous multivariable adjustment for all socio-demographic characteristics, mean summary score of satisfaction level with primary healthcare services was significantly higher among: low-educated individuals compared to highly educated participants (51.9 vs. 56.2, respectively); in low-income participants compared to high-income individuals (49.3 vs. 56.7, respectively); and ethnic Albanian participants compared to other ethnic groups (51.2 vs. 55.7, respectively) [Table 2].

Discussion

The main finding of this study consists of a remarkably significant relationship between satisfaction level with primary healthcare services and selected key socio-demographic characteristics including educational attainment, income level, and ethnicity. The associations with these three characteristics persisted upon adjustment for several other key socio-demographic factors including age, gender, place of residence, and employment status.

Our working hypotheses on a positive relationship of satisfaction level with age and male gender were not evidenced, in contrast with a previous study conducted in Kosovo (12), and also a fairly recent report from the neighbouring Albania (unpublished – personal communication), which both reported a higher satisfaction level among younger and male primary healthcare users. On the other hand, the association with socio-economic level evidenced in our study is compatible with the previous reports from Kosovo (12) and Albania.

A few studies conducted in Turkey employing the same EUROPEP instrument have reported a higher level of satisfaction with primary healthcare services among the low-educated participants (13,14), a finding which is in line with our study. A factor that may be related to users' satisfaction concerns the individuals' expectations from health care: the lower the expectations, the higher the level of satisfaction, and vice versa (15). This may also explain the higher satisfaction level evidenced in our study among the low-educated individuals.

In our study we found a lower satisfaction level with primary healthcare services among ethnic minorities. This finding is compatible with international reports which have similarly evidenced a lower satisfaction level among ethnic minorities (16-20).

Regarding the inverse association between satisfaction level and income status, our findings are not in line with a previous study (21), whereas several other studies have reported similar results with our study (i.e., a higher level of satisfaction among the low-income individuals) (22,23).

However, there are several limitations of this study conducted in three regions of Kosovo which consist of the sample size of primary healthcare users, the sample representativeness, the odds of information bias and the issue of study design. Seemingly, the sample size included in our study was sufficient to assess the extent (magnitude) of satisfaction level among primary healthcare users and the association with socio-demographic characteristics. Yet, subtle differences in the level of satisfaction among patients belonging to different socio-demographic categories might have been

missed, given the sample size at hand. Hence, a larger sample size would allow for exploration and comparison of smaller differences in the levels of satisfaction between different socioeconomic groups. More importantly, study participants were pertinent only to three regions of Kosovo and, therefore, generalizability of our findings should be interpreted with caution. The EUROPEP instrument employed in our study has been previously successfully validate in the adult population of primary healthcare users in Kosovo (12), which is comforting. Nonetheless, the possibility of information bias cannot be discarded. Finally, associations observed in cross-sectional studies do not imply causality.

Despite of these potential limitations and drawbacks, this study provides valuable evidence about the level of satisfaction with primary healthcare services among adult patients in three regions of Kosovo. Findings from this study should raise the awareness of policymakers and decision-makers in Kosovo in order to improve the quality of primary health care services.

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