

Primary health care users' perceptions on competencies of their family physicians in Kosovo: Preliminary results from a cross-sectional study

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Abstract

Aim: The aim of this study was to assess the level of skills, abilities and competencies of family physicians from primary health care users' perspective in Kosovo, a post-war country in the Western Balkans.

Methods: In this article we report the preliminary results of a nationwide cross-sectional study, conducted in Kosovo in January-June 2013, including a representative sample of 601 primary health care users aged ≥ 18 years (301 males and 300 females; mean age: 49.1 ± 17.7 years). All participants were asked to assess the level of abilities, skills and competencies of their respective family physicians regarding different domains of the quality of health care. Overall, the questionnaire included 37 items organized into six domains. Answers for each item of the tool ranged from 1 ("novice" physicians) to 5 ("expert" physicians). An overall summary score (including 37 items; range: 37-185) and a subscale summary score for each domain were calculated. Demographic and socioeconomic information was also collected. Cronbach's alpha was used to assess the internal consistency of the instrument, whereas Mann-Whitney's U-test was used to compare the mean scores for the overall scale and each subscale between males and females.

Results: Overall, the internal consistency of the instrument (37 items) was Cronbach's alpha=0.94; it was higher in males than in females (0.95 vs. 0.92, respectively). The overall summary score for the 37-item instrument was 123.7 ± 19.1 ; it was similar in males and females (123.4 ± 20.1 vs. 124.1 ± 18.0 , respectively, $P=0.587$). There was a weak inverse correlation of the overall summary score of the instrument with age of participants and the number of visits to the health center in the past year, but a mild positive correlation with educational attainment and income level.

Conclusions: The preliminary findings from this nationwide survey provide useful information on the level of skills, abilities and competencies of family physicians from primary health care users' standpoint in transitional Kosovo.

Keywords: abilities, competencies, family physicians, general practitioners, primary health care, quality of care, skills.

Introduction

Several studies have reported a positive relationship between patient satisfaction and quality of primary care (1) and health outcomes (2,3). Therefore, in order to meet patients' demands, quality improvement and performance evaluation have currently become fundamental issues in primary health care practice (4). A useful instrument to improve the quality of care is considered the continuous assessment of physicians' performance in order to identify potential gaps in their level of knowledge, skills, abilities and competencies (4,5). For this purpose, there have been developed conceptual frameworks and instruments which help to self-assess and self-determine competency gaps among primary health care professionals (4,5). At the same time, however, it is similarly important to develop measuring tools aiming to assess patients' perceptions regarding abilities, skills and competencies of their family physicians and general practitioners.

In this framework, an international instrument has been recently developed aiming to assess the level of skills, abilities and competencies of family physicians from both physicians' perspective (self-assessment) and from primary health care users' viewpoint (5). This measuring instrument has been already validated in Albania among primary health care users (6) and in general practitioners and family physicians (7). More recently, a cross-cultural adaptation of this tool has been also conducted in Kosovo among primary health users (8) and family physicians (9).

In this context, the aim of the current study was to assess the level of skills, abilities and competencies of family physicians from primary health care users' perspective in Kosovo, a post-war country in the Western Balkans. To meet this end, we employed the validated version of the aforementioned international instrument developed with the support of the European Community Lifelong Learning Program. This cross-culturally adapted tool addresses competency levels of general practitioners and family physicians regarding different domains of quality of health care (4,5).

Methods

Study population

In this article we report the preliminary results of a nationwide cross-sectional study, conducted in Kosovo in January-June 2013, including a representative sample of 601 primary health care users aged ≥ 18 years (301 males and 300 females; overall mean age: 49.1 ± 17.7 years).

Data collection

In this study, we employed an international instrument aiming to assess the level of skills, abilities and competencies of family physicians from primary health users' viewpoint. All participants included in this survey were asked to assess the level of skills, abilities and competencies of their family physicians in regarding the following six essential domains pertinent to the quality of primary health care:

- Patient care and safety (8 items);
- Effectiveness and efficiency (7 items);
- Equity and ethical practice (8 items);
- Methods and tools (5 items);
- Leadership and management (4 items), and;
- Continuing professional development (5 items).

As reported in prior validation studies of the current instrument (6-9), answers for each item of each subscale ranged from 1 ("novice"= physicians have little or no knowledge/ ability, or no previous experience of the competency described and need close supervision or instruction) to 5 ("expert"=physicians are the primary sources of knowledge and information in the medical field).

An overall summary score (including 37 items; range: 37-185) and a subscale summary score for each of the six domains were calculated for all policymakers included in this study.

Demographic and socioeconomic data (age and sex of participants, educational attainment, employment status and income level) and information on the overall satisfaction with the medical encounter and the number of health visits in the past year were also collected.

Statistical analysis

Mean values (and their respective standard deviations [SD]) were used to describe the distribution of age, educational attainment (years of formal schooling), the summary score of the whole instrument (37 items) and the summary scores of each of the six subscales/ domains among survey participants. On the other hand, absolute numbers (and their respective percentages) were used to describe the distribution of sex, income level, employment status, number of health visits in the past year and the overall satisfaction level with medical encounter among primary health care users.

Cronbach's alpha was used to assess the internal consistency of the full scale (37 items) and each of the six subscales of the instrument.

Spearman's rho was used to assess the linear association (correlation) of the overall summary score of the 37-item instrument with the age of participants, educational attainment, income level and the number of visits to the health center in the past year.

Mann-Whitney's U-test was used to assess sex-differences in the mean values of the summary score

of 37-item instrument and the summary scores of each of the six subscales of the tool.

Results

In this nationwide representative sample of 601 primary health care users in Kosovo (50% males and 50% females), the overall mean (\pm SD) age was 49.1 ± 17.7 years (Table 1). Mean age in males was higher than in females (51.6 ± 18.4 years vs. 46.7 ± 16.6 years, respectively). Overall, mean years of educational attainment (years of formal schooling) was 8.8 ± 4.1 years. On average, males had a higher educational level than women (9.7 ± 3.8 years vs. 7.9 ± 4.2 years, respectively). Overall, about 29% of study participants reported a low income level and only 4.5% reported a high income level. There were no sex-differences regarding the self-reported income level. On the whole, 32% of individuals were employed, 42% were unemployed, whereas the remaining 26% were either students or retirees. The degree of unemployment was considerably higher in females compared with their male counterparts

Table 1. Distribution of socioeconomic characteristics and satisfaction with health care services in a sample of primary health care users (N=601) in Kosovo, in 2013

Variable	Men (N=301)	Women (N=300)	Overall (N=601)
Age (years)	$51.6 \pm 18.4^*$	46.7 ± 16.6	49.1 ± 17.7
Educational level (years)	9.7 ± 3.8	7.9 ± 4.2	8.8 ± 4.1
Income level:			
Low	82 (27.2)†	90 (30.0)	172 (28.6)
Middle	206 (68.4)	196 (65.3)	402 (66.9)
High	13 (4.3)	14 (4.7)	27 (4.5)
Employment status:			
Employed	121 (40.2)	71 (23.7)	192 (31.9)
Unemployed	78 (25.9)	174 (58.0)	252 (41.9)
Students and retirees	102 (33.9)	55 (18.3)	157 (26.1)
No. health visits in the past 12 months:			
1-2	79 (26.2)	65 (21.7)	144 (24.0)
3-4	104 (34.6)	84 (28.0)	188 (31.3)
5-6	47 (15.6)	76 (25.3)	123 (20.5)
≥ 7	71 (23.6)	75 (25.0)	146 (24.3)
Overall satisfaction with health services:			
Very good/good	223 (74.1)	240 (80.0)	463 (77.0)
Average	65 (21.6)	49 (16.3)	114 (19.0)
Poor/very poor	13 (4.3)	11 (3.7)	24 (4.0)

* Mean values \pm standard deviations.

† Numbers and column percentages (in parentheses).

(58% vs. 26%, respectively). About 24% of the study participants reported 1-2 health visits at the primary health care services in the past year, 31% reported 3-4 health visits, 21% reported 5-6 health visits, and the remaining 24% reported seven or more health visits. There was evidence of a high degree of overall satisfaction with primary health care services in this survey sample: 77% of participants rated as “good” or “very good” the medical encounter, compared to only 4% of individuals who rated as “poor” or “very poor” the quality of primary health care services. Compared to males, the females tended to rate slightly higher the overall quality of primary health care services (Table 1).

Overall, reliability (internal consistency) of the whole scale (37 items) was Cronbach’s alpha=0.94

(95%CI=0.93-0.95); it was higher in males than in females (0.95 vs. 0.92, respectively) [Table 2]. Overall, Cronbach’s alpha ranged from 0.72 for the “*effectiveness and efficiency*” domain to 0.92 for the “*continuing professional development*” subscale. Among males, the “*methods and tools*” subscale displayed the lowest internal consistency (Cronbach’s alpha=0.68, 95%CI=0.62-0.74), whereas “*equity and ethical practice*” exhibited the highest (Cronbach’s alpha=0.95, 95%CI=0.94-0.96). On the other hand, in females, the lowest internal consistency was evident for the “*equity and ethical practice*” subscale (Cronbach’s alpha=0.67, 95%CI=0.61-0.72), whereas the highest was exhibited for “*continuing professional development*” domain (Cronbach’s alpha=0.91, 95%CI=0.90-0.93) [Table 2].

Table 2. Internal consistency of each domain (subscale) of the instrument by sex

Domain (subscale)	Men (N=301)	Women (N=300)	Overall (N=601)
Overall scale (37 items)	0.95 (0.94-0.96)*	0.92 (0.91-0.93)	0.94 (0.93-0.95)
Patient care and safety (8 items)	0.74 (0.70-0.78)	0.81 (0.77-0.84)	0.77 (0.74-0.80)
Effectiveness and efficiency (7 items)	0.75 (0.71-0.79)	0.68 (0.62-0.73)	0.72 (0.68-0.75)
Equity and ethical practice (8 items)	0.95 (0.94-0.96)	0.67 (0.61-0.72)	0.78 (0.76-0.81)
Methods and tools (5 items)	0.68 (0.62-0.74)	0.87 (0.85-0.90)	0.75 (0.72-0.78)
Leadership and management (4 items)	0.91 (0.90-0.93)	0.86 (0.83-0.89)	0.89 (0.88-0.91)
Continuing professional development (5 items)	0.93 (0.92-0.94)	0.91 (0.90-0.93)	0.92 (0.91-0.93)

* Cronbach’s alpha and their respective 95% confidence intervals (in parentheses).

The overall summary score for the 37-item instrument was 123.7±19.1; it was negligibly higher in females than in males (124.1±18.0 vs. 123.4±20.1, respectively, P=0.587) [Table 3]. All the subscale summary scores were very similar in both sexes and, hence, there were no statistically significant differences in the subscale summary scores between males and females (Table 3).

Overall, there was a weak inverse correlation between the whole summary score and age of participants (Spearman’s rho= - 0.15, P<0.001) and the number of visits to the health center in the past year (Spearman’s rho= - 0.18, P<0.001). Conversely, there was evidence of a mild positive correlation of the overall summary score of the 37-item tool with educational attainment (Spearman’s rho=0.22, P<0.001) and income level (Spearman’s rho=0.29,

Table 3. Summary score of each domain (subscale) of the instrument by sex

Domain (subscale)	Overall (N=601)	Sex-specific		P†
		Men (N=301)	Women (N=300)	
Overall scale (score range: 37-185)	123.7±19.1*	123.4±20.1	124.1±18.0	0.587
Patient care and safety (score range: 8-40)	26.8±4.6	26.8±4.9	26.7±4.2	0.567
Effectiveness and efficiency (score range: 7-35)	23.0±4.0	22.9±4.2	23.1±3.7	0.491
Equity and ethical practice (score range: 8-40)	27.4±5.7	27.2±5.3	27.6±6.1	0.997
Methods and tools (score range: 5-25)	16.0±3.1	15.9±3.5	16.1±2.6	0.095
Leadership and management (score range: 4-20)	13.2±2.4	13.2±2.6	13.3±2.1	0.813
Continuing professional development (score range: 5-25)	17.4±3.3	17.3±3.5	17.4±3.2	0.787

* Mean values ± standard deviations.

† P-values from Mann-Whitney's U-test.

P<0.001) [data not shown in the tables].

Discussion

Our preliminary findings provide useful information on the level of skills, abilities and competencies of family physicians from primary health care users' perspective in Kosovo. The assessment instrument administered in our study sample exhibited a rather high internal consistency, particularly in men. The internal consistency in our study (sex-pooled Cronbach's alpha=0.94) was higher than in a prior validation study in Kosovo, which reported an overall Cronbach's alpha=0.88 (8). Furthermore, the questionnaire employed in our current survey in Kosovo showed a higher reliability (internal consistency) than in a prior validation study conducted in the neighboring Albania (6). Interestingly, in our study the internal consistency was higher in men than in women, a finding which differs from a previous report from Albania (6). The overall summary score of the 37-item instrument was quite high in this representative sample of primary health care users in Kosovo, with no evidence of sex-differences. This finding related to a high score of family physicians' skills and competencies goes in line with the rather positive assessment of the quality of primary health care services among our study participants. As a matter

of fact, the overall summary score of the tool was higher in our current study compared to the previous validation exercise which was conducted in a sample of 98 primary health care users in Kosovo (8). Also, the overall summary score in our study was particularly higher compared to prior reports from Albania (6,7).

In our study, the level of skills, abilities and competencies as assessed by patients' perspective was positively correlated to educational attainment and income level, contrary to the Albanian study which obtained no evidence of associations with socioeconomic characteristics of study participants (6). It is appealing to compare primary health care users' assessment scores with the self-assessed scores of their respective family physicians. Patients' views about the quality of health care services including the skills and competencies of their physicians may vary considerably from the standpoints of health professionals themselves. Therefore, future studies in Kosovo should explore this interesting issue in detail.

In conclusion, the preliminary findings from this nationwide survey provide useful information on the level of skills, abilities and competencies of

family physicians from primary health care users' standpoint in transitional Kosovo.

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