

Necessary level of skills and abilities of family physicians from decision-makers' perspective in transitional Kosovo

Fitim Skeraj^{1,2}, Katarzyna Czabanowska³, Iris Mone²,
Gazmend Bojaj², Zejdush Tahiri², Genc Burazeri³

¹ Principal Family Medicine Center, Prizren, Kosovo

² University of Medicine, Tirana, Albania

³ Department of International Health, School for Public Health and Primary Care (CAPHRI), Faculty of Health, Medicine and Life Sciences, Maastricht University, Maastricht, The Netherlands, Instytut Zdrowia Publicznego, Wydział Nauk o Zdrowiu, Uniwersytet Jagielloński Collegium Medicum

Corresponding Author: Katarzyna Czabanowska MA, PhD, Address: P.O. Box 616, 6200 MD Maastricht, kasia.czabanowska@maastrichtuniversity.nl
Phone: + 31 43 3881592, Fax: +31 43 38 84 172

Abstract

Objective: The aim of this study was to assess the necessary level of abilities and competencies of family physicians from the decision-makers' perspective in Kosovo, a post-war country in the Western Balkans.

Methods: Our study was conducted in May–July 2013 and included a nationwide representative sample of 100 decision-makers operating at different primary health care institutions or public health agencies in Kosovo (63 men aged 48.6 ± 5.5 years, and 65 women aged 46.2 ± 5.7 years). A structured self-administered questionnaire was employed aiming to assess the necessary level of skills, abilities and competencies of family physicians in Kosovo regarding different domains of the quality of health care. The questionnaire included 37 items organized into six subscales/domains. Answers for each item of the tool ranged from 1 (“novice” physicians) to 5 (“expert” physicians). An overall summary score (range: 37–185) and a subscale summary score for each domain were calculated for each participant. Cronbach’s alpha was used to assess the internal consistency of the instrument, whereas Mann-Whitney’s U-test was employed 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.

Results: The internal consistency of the whole scale (37 items) was Cronbach’s alpha = 0.92. The summary score of the 37-item instrument was higher in men than in women (162.3 ± 17.9 vs. 156.1 ± 17.5 , respectively, $P = 0.071$). The subscale scores were all higher in men than in women, a finding which was borderline statistically significant for the “patient care and safety” domain only (33.4 ± 4.4 vs. 32.0 ± 4.0 , respectively, $P = 0.057$). There was a weak correlation between the overall summary score of the tool and the work experience of decision-makers (Spearman’s rho = 0.234, $P < 0.001$).

Conclusion: In the context of Kosovo, this study provides important evidence on the expected skills and competencies of family physicians from the decision-makers' viewpoint. Future studies in Kosovo should compare our findings related to the *necessary* skills and competencies vis-à-vis the actual *self-perceived* skills and competencies of family physicians.

Key words: abilities, competencies, decision-makers, family physicians, primary health care, skills

Słowa kluczowe: kompetencje, lekarz rodzinny, podstawowa opieka zdrowotna

Introduction

In previous studies, we have argued that family physicians and general practitioners are currently facing increasing demands due to mounting and complex patients' expectations, as well as fast changing technological and scientific developments [1, 2]. Hence, worldwide, health care professionals are more and more expected to provide higher quality health care services. However, different restrictions and limitations within the health care systems may lead to competency gaps for health care professionals [1]. Based on these considerations, especially in the past decade, quality improvement and performance evaluation have become fundamental issues in health care practice [1, 2] and, as such, quality improvement needs to be included at all levels of medical education and in all aspects of health care service provision [1]. From this point of view, medical students at all teaching and training levels should not only obtain medical knowledge in the course of their studies, but should also attain skills, abilities and competencies in the areas of quality improvement and quality assurance [3].

In primary health care including family medicine or general practice (depending on the specific characteristics of organization of health care systems in different countries), quality of health care is a multifaceted domain which includes a wide range of health professionals' focus and scope of work such as a comprehensive approach to health care provision, management skills, community orientation, problem-solving skills and abilities, as well as an individual-centered approach to health care services [1, 4].

Therefore, competencies in quality improvement are vital for primary health care professionals in order to improve continuously patient care. To meet this end, precise roles, abilities, skills and competences at all training/expertise levels for medical doctors including also continuing medical education have been defined and developed [5]. Such roles and competences have been even classified in specific *frameworks* in the USA, in Canada and in Europe [5–8]. Furthermore, models of abilities, skills and competencies are also considered a useful tool for self-assessment of primary health care physicians and general practitioners committed to practice-based learning [1, 9, 10] who want to improve their health care practices, analyze their clinical experience, plan improvement strategies, and determine a supposed improvement integrating knowledge, skills and abilities into the routine daily practice [1, 10].

Nonetheless, data on the content and outcomes of teaching quality improvement topics within the medical curricula in European countries are scarce to date. This is especially the case for the countries of Southeast Europe including the Albanian-speaking countries.

In this context, the aim of our study was to assess the *necessary* level of skills, abilities and competencies of family physicians from decision-makers' perspective in Kosovo, a transitional post-war country in the Western Balkans which became independent from Serbia only five years ago.

Methods

Study population

A representative nationwide sample of 100 decision-makers (overall mean age: 47.7 ±5.7 years) operating at different primary health care institutions or public health agencies in Kosovo was interviewed in May–July 2013 (63 men aged 48.6 ±5.5 years, and 65 women aged 46.2 ±5.7 years). All decision-makers were sent an official invitation letter where the aims and procedures of the survey were explained in detail.

In this nationwide representative sample of 100 decision-makers in Kosovo (63 men and 37 women), median age was 47 years (interquartile range: 44–51 years) (Table I). Overall, the median duration of working experience in decision-making was 5 years (interquartile range: 3–10 years). Thirty-three percent of the interviewees worked in Pristina, the capital city of Kosovo. Thirteen percent of participants were directors of primary health care centers, 30% were coordinators of different health care programs and projects, 23% were health managers at different primary health care institutions or public health agencies, 27% were involved in training and educational activities in Family Medicine, and the remaining 7% operated in other mid-level managerial and administrative positions pertinent to primary health care institutions (Table I).

Data collection

An international instrument was developed with the support of the European Community Lifelong Learning Program aiming to assess the level of skills, abili-

Variable	Distribution
Age (years)	47.0 (44.0–51.0)*
Sex:	
Men	63 (63.0)†
Women	37 (37.0)
Working experience in policymaking (years)	5.0 (3.0–10.0)*
Working place:	
Pristina	33 (33.0)†
Gjilan	5 (5.0)
Gjakova	5 (5.0)
Prizren	11 (11.0)
Peje	5 (5.0)
Other areas	41 (41.0)
Job position:	
Director of health center	13 (13.0)†
Coordinator of health programs	30 (30.0)
Manager	23 (23.0)
Trainer in Family Medicine	27 (27.0)
Other	7 (7.0)

* Median values and interquartile ranges (in parentheses)

† Numbers and column percentages (in parentheses)

Table I. Distribution of demographic characteristics, job position and work experience in a representative sample of health care policymakers (N = 100) in Kosovo, in 2013.

Source: Own elaboration.

ties and competencies of family physicians from the decision-makers' standpoint. All policymakers included in this survey were asked to assess the *expected/necessary/required* level of skills, abilities and competencies of family physicians in Kosovo regarding the following six essential domains of 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 [11, 12], 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 decision-makers included in this study.

Demographic data (age and sex of participants) and information on job position/function and duration of work experience in decision-making in the health care sector were also collected.

Statistical analysis

Median values (and their respective interquartile ranges) were used to describe the distribution of age and duration of working experience (in years) in decision-making among the survey participants. Conversely, the absolute numbers (and their respective percentages) were used to describe the distribution of sex, working place and job position of the interviewees.

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) between the overall summary score of the 37-item instrument and the duration of working experience among decision-makers included in this study.

Mean values (\pm standard deviations) were used to describe the distribution of the summary score of the whole instrument (37 items) and the summary scores of each of the six subscales/domains. 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.

Results

The internal consistency of the whole scale (37 items) was Cronbach's alpha = 0.92 (**Table II**). Cronbach's alpha was high for all the subscales (range: 0.87–0.93), except the *equity and ethical practice* domain (Cronbach's alpha = 0.63) which exhibited a low internal consistency.

Domain (subscale)	Cronbach's alpha
Overall scale (37 items)	0.92
Patient care and safety (8 items)	0.89
Effectiveness and efficiency (7 items)	0.93
Equity and ethical practice (8 items)	0.63
Methods and tools (5 items)	0.91
Leadership and management (4 items)	0.87
Continuing professional development (5 items)	0.88

Table II. Internal consistency of each domain (subscale) of the instrument.

Source: Own elaboration.

Overall, the summary score for the 37 items of the instrument was 160.0 ± 17.9 (**Table III**). It was higher in men than in women (162.3 ± 17.9 vs. 156.1 ± 17.5 , respectively, $P = 0.071$). The subscale scores were all higher in men than in women, a finding which was borderline statistically significant for the *patient care and safety* domain only (33.4 ± 4.4 vs. 32.0 ± 4.0 , respectively, $P = 0.057$).

There was evidence of a weak but statistically significant positive linear relationship between the overall summary score of the 37-item instrument and the duration of working experience among study participants (Spearman's rho = 0.234, $P < 0.001$) (not shown in the tables).

We obtained evidence on the *necessary* level of skills, abilities and competencies of family physicians from decision-makers' perspective in transitional Kosovo. Overall, the international tool employed in this survey exhibited a high internal consistency in this representative sample of decision-makers operating at different primary health care institutions or public health agencies in Kosovo. The internal consistency was high for each domain of the instrument, except for the subscale on *equity and ethical practice*. Future studies on this topic, in Kosovo and elsewhere, should refine further this domain/subscale of the instrument.

Discussion

In previous studies, we have elaborated on the process of development of the questionnaire assessing the required level of skills, abilities and competencies of family physicians [1, 11, 12]. This instrument was designed in line with the Quality Improvement Competency Framework (QICF) which, in turn, was developed in the course of a systematic consensus study carried out among European primary care experts interested or specializing in quality improvement [10]. The QICF is structured into six domains associated with the self-administered questionnaire which we used in our study involving policymakers for assessment of the required skills, abilities and competencies of family physicians: Patient Care and Safety, Effectiveness and Efficiency, Equity and Ethical Practice, Methods and Tools, Leadership and Manage-

Domain (subscale)	Overall (N = 100)	Sex-specific		
		Men (N = 63)	Women (N = 37)	P†
Overall scale (score range: 37–185)	160.0 ±17.9*	162.3 ±17.9	156.1 ±17.5	0.071
Patient care and safety (score range: 8–40)	32.9 ±4.3	33.4 ±4.4	32.0 ±4.0	0.057
Effectiveness and efficiency (score range: 7–35)	28.9 ±4.2	29.4 ±4.1	28.1 ±4.3	0.153
Equity and ethical practice (score range: 8–40)	37.1 ±5.6	37.5 ±6.4	36.4 ±3.8	0.329
Methods and tools (score range: 5–25)	21.7 ±3.0	22.0 ±3.0	21.3 ±3.0	0.139
Leadership and management (score range: 4–20)	17.4 ±2.2	17.7 ±2.1	16.9 ±2.5	0.160
Continuing professional development (score range: 5–25)	22.1 ±2.7	22.4 ±2.8	21.6 ±2.6	0.121

* Mean values ± standard deviations.

† P-values from Mann-Whitney U test.

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

Source: Own elaboration.

ment, and Continuing Professional Education [10]. Each of the subscales/domains of the instrument taps a vital element of the quality of primary health care. As argued earlier [1], the domains of the instrument imply reflection and self-assessment in order to improve the quality of health care provision [9]. Each domain of the instrument measures a number of specific competencies which represent individual standards [10].

The current study provides precious evidence on the necessary level of skills, abilities and competencies of family physicians from the decision-makers' perspective in a post-war transitional population in the Western Balkans. Findings from this survey may help decision-makers in Kosovo to reflect over the job description and terms of references pertinent to the work contracts of general practitioners and family physicians who run the primary health care services in this country.

In conclusion, in the context of Kosovo, the newest independent state in Europe, we attained useful evidence on the necessary level of competencies of family physicians from the decision-makers' perspective. Future studies should compare our findings related to the *necessary* skills, abilities and competencies vis-à-vis the actual *self-perceived* skills and competencies of family physicians in Kosovo.

Source of support

The instrument for this survey was developed with the support of the European Commission Lifelong Learning Program in the framework of the Leonardo da Vinci Project "Innovative lifelong learning of European General Physicians in Quality Improvement supported by information technology" (InGPInQI): No. 2010-1-PL1-LEO05-11473.

References

1. Czabanowska K., Burazeri G., Klemens-Ketic Z., Kijowska V., Tomasik T., Brand H., *Quality improvement competency gaps in primary care in Albanian, Polish and Slovenian contexts: A study protocol*, "Acta Inform. Med." 2012; 20: 254–258.
2. Sipkoff M., *The new consensus favouring IOM's definition of quality*, "Manage Care" 2004; 13: 18–27.
3. Engels Y., Wollersheim H., Verheggen F., Grol R., *Final Report "Education on the Quality of Care in the Faculties of Medicine, Biomedical Sciences and Health Sciences in the Netherlands"*, Radboud University Nijmegen Medical Centre, Centre for Quality of Care Research, Nijmegen 2007. Available from: http://www.wokresearch.nl/UserFiles/Docs/product_44.pdf; accessed: 28.08.2013.
4. Allen J., Gay B., Crebolder H., Heyrman J., Svab I., Ram P., *The European definition of General Practice/Family Medicine*, Evans P. (ed.), Wonca Europe; 2005. Available from: <http://www.woncaeurope.org/Web%20documents/European%20Definition%20of%20family%20medicine/Definition%20nd%20ed%202005.pdf>; accessed: 28.08.2013.
5. Michels N.R., Denekens J., Driessen E.W., Van Gaal L.F., Bossaert L.L., De Winter B.Y., *A Delphi study to construct a CanMEDS competence based inventory applicable for workplace assessment*, "BMC Medical Education" 2012; 12: 86.
6. Frank J.R., Danoff D., *The CanMEDS initiative: implementing an outcomes-based framework of physician competencies*, "Medical Teacher" 2007; 29(7): 642–647.
7. Tomorrow's Doctors, *London: General Medical Council*. Available at: http://www.gmcuk.org/static/documents/content/TomorrowsDoctors_2009.pdf; accessed: 20.08.2013.
8. Accreditation Council for Graduate Medical Education, *Competencies and Outcome Assessment*. Available at: <http://www.acgme.org>

- www.acgme.org/outcome/comp/compHome.asp; accessed: 20.08.2013.
9. Leach D.C., *Changing education to improve patient care*, "Quality in Health Care" 2001; 10(Suppl. II): ii54–ii58.
 10. Czabanowska K., Klemenc-Ketis Z., Potter A., Rochfort A., Tomasik T., Csiszar J., Vanden Bussche P., *Development of the competency framework in quality improvement for Family Medicine in Europe: a qualitative study*, "Journal of Continuing Education in the Health Professions" 2012; 32: 174–180.
 11. Alla A., Czabanowska K., Klemenc-Ketis Z., Roshi E., Burazeri G., *Cross-cultural adaptation of an instrument measuring primary health care users' perceptions on competencies of their family physicians in Albania*, "Med. Arh." 2012; 66: 382–384.
 12. Alla A., Czabanowska K., Kijowska V., Roshi E., Burazeri G., *Cross-cultural adaptation of a questionnaire on self-perceived level of skills, abilities and competencies of family physicians in Albania*, "Mater Sociomed." 2012; 24: 220–222.