QUALITY IMPROVEMENT COMPETENCY GAPS IN PRIMARY CARE IN ALBANIAN, POLISH AND SLOVENIAN CONTEXTS: A STUDY PROTOCOL

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1. BACKGROUND

Modern medicine recognises that the outcomes of clinical care not only depend on how doctors put their clinical knowledge and training into practice, but also on other skills such as being able to deal with the continuous flow of new information, emerging medical evidence and effective management of available resources (1). Today, family doctors (FDs) face increasing demands, as a consequence of complex patients’ expectations (2), developments in science and technology, and limitations within healthcare systems which can result in competency gaps. Therefore, there is a need to identify which competencies in quality improvement (QI) are most important for GPs and FDs to possess in order to meet the demands of contemporary healthcare practice. To date, however, little information is available on the self-assessment of competencies related to QI among GPs and FDs. To deal with these issues, a project on QI in continuous medical education was launched in 2011. The project aims to broaden the GPs’/FDs’ continuous education offer, its quality and attractiveness, as well as provide them with opportunities for vocational advancement and enable the development of common, European frame of reference for GPs’/FDs’ occupational competencies. The third work package of the project consists of the validation research of the questionnaire developed on the basis of the competency framework in QI for GPs/FDs in Europe. Methods: A cross-sectional study will be carried out using the self-assessment QI questionnaire which was originally developed in English and subsequently adapted in Slovenian, Albanian and Polish settings by use of a pilot study on a conveniently selected group of FDs/GPs (N=10) in each participating country. The final version of the questionnaire will be administered to large samples in each country involved in the survey. Two weeks after the first administration of the questionnaire, a second round, with the same procedure and including the same group of respondents, will follow. Psychometric tests will be conducted including internal consistency (after the initial and subsequent application of the instrument) and stability over time (two-week test-retest reliability).

Discussion: This self-assessment study will demonstrate the complex environment in which general practice/family medicine operates and, eventually, this gap analysis will set out strategically important areas for collaborative efforts related to QI in primary care. The authors consider that the study should be extended to other European countries to help identify most required competencies that GPs/ FDs should possess in Europe and thus stir system and educational debate around QI curricula and training for primary care in Europe.

Key words: competencies, family physicians, quality improvement, reliability, self-assessment questionnaire, validation study.
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The aim of this article is to present the study protocol on the validation of the QI self-assessment questionnaire. Additional aim is to get first results on the self-perceived level of QI competencies from the perspective of the GPs/FPs, FM teachers, patients and policy makers which will identify priority areas within the general/family practice environment in Albanian, Slovenian and Polish context.

2. AIM AND OBJECTIVES

The project aims to broaden the GPs/FDs’ educational offer and its quality and attractiveness, as well as provide GPs/FDs with opportunities for vocational advancement and enables developing of common, European frame of reference for GPs/FDs’ occupational competencies.

The second part of the questionnaire consists of:

- For GPs/FDs: gender, age, type of practice, whether it is public or private entity, the catchment area of the practice (number of inhabitants and rural/urban), number of years served in practice, remuneration system and whether they are involved in teaching activities;
- For FM teachers/trainers: age, the catchment area of the practice (number of inhabitants and rural/urban), years of experience as family medicine teachers, specialization, type/level of training provided, position in education;
- For patients: gender, age, current life situation, education status, number of times of seeing their family doctor in the period of past 12 months;
• For decision-makers: age, place of residence (number of inhabitants and rural/urban), sector they work for, job title.

2.2. Study design

Three centres will be involved in the validation study: Institute for Development of Family Medicine with cooperation of Departments of Family Medicine Maribor and Ljubljana Medical School, Slovenia (SL), College of Family Physicians in Poland with cooperation with the Department of Family Medicine, Jagiellonian University Medical College (PL) and Department of Public Health, University of Tirana, Albania (AL).

The study aims to validate the questionnaire and to identify the existing gaps between the current/self-perceived level of competencies related to QI possessed by GPs/FDs and the desirable/expected level of competencies by FD teachers FDs should possess to provide high level patient-centred care. In order to do so, several stages of the study are foreseen.

Stages A & B of the study will constitute of a validation exercise as described below:

a) The current/self-perceived level of competencies will be measured from the perspective of GPs/FDs in Poland and Slovenia and from the perspective of GPs/FDs and patients in Albania by using a self-assessment QI questionnaire developed in the framework of InGPinQI Project (Figure 1).

b) The desirable/expected level of competencies will be measured from the perspective of FM teachers/trainers in Slovenia and Poland and from the perspective of FM teachers/trainers and decision-makers in Albania.

2.3. Validation Methods

This cross-sectional study will be carried out as postal survey using the self-assessment QI questionnaire which has been translated back and forth from English to Slovenian, Albanian and Polish and piloted on a conveniently selected group of FDs/GPs (N=10) in each participating country (and patients in Albania).

Furthermore, in three countries, the respective versions of the questionnaires have been language and culturally adapted (16, 17, 18). We will adapt the questionnaire based on the suggestions from the pilot study.

The final version of the questionnaire will be then sent to the study group, described below. To assure the adequate response rate, the first reminder will be sent one week after the first round. Two weeks after the first questionnaire will be sent, the second round with the same procedure will follow. In case of no response, the researchers will try to contact the respondents by phone if the conditions allow. In case of too low response rate, focus groups will be arranged with a group of respondents which does not reach a required quota.

The study will be carried out in stages in Slovenia, Poland and Albania. For stage A & B, 2 psychometric tests will be used: internal consistency (after the initial application of the instrument) and stability over time (after reapplication of the test after 2 weeks to the same group of respondents) [see “Statistical analysis” section for further details].

2.4. Ethical considerations

The study will be performed in line with the Helsinki Declaration using survey. The participants will be informed about the goal and objectives of the study and will be given a possibility to opt out without giving explanation if by any chance they feel uncomfortable with the content of the questions. The information about the research will be posted together with the questionnaire. In case of non-response, the researchers will seek to get a proper consent from the respondents to contact them by the phone. If the focus group has to be arranged with a group of respondents which does not reach a required quota, an informed consent form will be developed to be signed by the respondents. The ethical approval has been applied for and granted by: the National Ethics Committee in Slovenia (No. 96/05/12), the National Committee of Biomedical Ethics in Albania. In Poland the study will be conducted under the terms of all relevant local and national legislation. Approval by Ethical Committee is not necessary because the study has not experimental design and will not involve patients. Moreover, protocol conforms to the ethical guidelines of the 1975 Helsinki Declaration.

Stage A: Current/self-perceived level of QI competencies self-assessment (GPs/FDs and patients’ perspective)

Sampling
The respondents for Stage A: GPs/FDs and patients (only in Albania) will be randomly selected based on the general country register for GPs and GP practice records (for patients). In Poland, the database of the College of Family Physicians will be used. In Slovenia, the database of the Slovenian Family Medicine Society will be used. We aim to achieve N=100 responses from GPs/FDs (and N=100 patients in Albania). In the pre-test phase, a convenient sample of 50 FDs and 100 patients will be recruited in Tirana only.

After the validation exercise, the actual survey will include 2000 patients in 4 districts of Albania (Tirana, Shkoder, Elbasan and Vlore). The sample will be randomly selected based on the GPs’ lists in each of the districts included in the survey. As for the GPs, the questionnaire will be administered to a random sample of GPs operating in primary health care centres in the 4 districts included in the survey.

The details of the study in stage A in each centre are presented below:

Pre-test: Application of the questionnaire on perceived level of QI competencies from GPs/FDs perspective (N=100):
- Calculation of internal consistency;
- Reapplication of the questionnaire to the same groups of respondents after 2 weeks (calculation of test-retest reliability).

Stage B: Expected/required level of QI competencies possessed by GPs from FM/GP teachers and decision makers perspective  

Sampling
The respondents for Stage B: FM/GP teachers and decision makers will be randomly or conveniently selected based on the general country register for GP/FD teachers and professional contacts for decision makers. In Slovenia, the database of the Slovenian Family Medicine Society will be used. We aim to achieve N=50 responses from GP/FD teachers and N=50 from decision makers in respective centres.

In Poland in order to select the randomized sample of FM teachers, approx. 10 centres providing educational programmes for GP/FD teachers (from the total number of 50 institutions) will be randomly selected and invited to the study (a phone call with directors). If the response with a positive attitude will be insufficient, the sample will be complemented by a further number of randomly chosen institutions. 3-4 questionnaires will be sent by a regular mail to those centres which will be interested in participating in the study. Directors of those centres will indicate the respective teachers who should be involved in the study. If the response rate is insufficient they will be contacted by phone.

The details of the study in stage B in each centre are presented below:

Pre-test: Application of the questionnaire on expected level of QI competencies in GPs from FM/GP teaches perspective (N=50):
- Calculation of internal consistency;
- Reapplication of the questionnaire on the same groups of respondents after 2 weeks (calculation of test-retest reliability).

2.5. Statistical analysis
Cronbach’s alpha will be used to calculate the internal consistency of the questionnaire on self-perceived level of QI competencies from GPs/FDs perspective (stage A of the validation study) and of the questionnaire on expected level of QI competencies in GPs/FDs from FM/GP teachers perspective (stage B of the study). Cronbach’s alpha will be calculated for the whole questionnaire and for each of the six domains.

Spearman’s rho will be used to measure test-retest reliability (stability over time) of the questionnaire on self-perceived level of QI competencies from GPs/FDs perspective (stage A of the validation study, during which the instrument will be reapplied after 2 weeks to the same group of respondents) and of the questionnaire on expected level of QI competencies in GPs/FDs from FM/GP teachers perspective (stage B of the study, during which the instrument will be reapplied after 2 weeks to the same group of respondents). The test-retest reliability of the summary score will be calculated for the whole questionnaire and for each of the six domains.

3. EXPECTED RESULTS AND DISCUSSION

With the planned study, we will validate the newly developed competency framework questionnaire (19) in Polish, Albanian and Slovenian language. We expect that the questionnaire will have good reliability and time stability. Based on this questionnaire, we will also get first data on the self-perceived level of QI competencies from the perspective of the GPs/FPs, FM teachers, patients and policy makers specifically focusing on the validity and reliability of the used instrument. This will enable us to identify priority areas within the general practice/family medicine environment in Albanian, Slovenian and Polish context. We expect the
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study will point to differences between the self-perceived competencies by GPs/FDs and between the desired competencies by FD teachers and trainers. Based on this gap, we will be able to identify the weakness which could affect aspects of the quality of care being provided. Therefore, this study can contribute to the development of recommendations for priority actions related to these gaps. Identification of the gaps between possessed and expected/required level of competencies based on the results per centre will enable us to get a first idea on the recommendations for educational interventions needed in QI education/training for GPs/FDs. The results of the study will allow comparisons among participating countries with acknowledging specificities of different health care systems (20, 21).

This self-assessment study will demonstrate the complex environment in which general practice/family medicine operates and this gap analysis will set out strategically important areas for collaborative efforts related to QI in primary care. The authors believe that the study should be extended to other European countries to help identify most required competencies that GPs/FDs should possess in Europe and thus stir system and educational debate around QI curricula and training for primary care in Europe.

List of abbreviations

CME: continuing medical education; CVD: cardiovascular diseases; FDs: family doctors; FM: family medicine; GPs: general practitioners; InGPinQI: Innovative lifelong learning of European General Physicians in Quality Improvement supported by information technology; LLL: lifelong learning; QI: quality improvement; WP: work package.

Authors’ contributions

KC was a lead author responsible for the conceptualisation of the study and drafting the manuscript. GB was responsible for the design and delivery of the study in Albania and statistical correctness of the study. ZKK was responsible for the design and delivery of the study in Slovenia and substantially contributed to the revision of the manuscript. VK was responsible for the acquisition of funding. VK and TT were responsible for the over management of the project and design and delivery of the study in Poland. All authors have made substantial contributions to conception and design of the study. KC, GB have been involved in drafting the manuscript and ZKK, VK, TT and HB were involved in revising it critically for important intellectual content. All authors have given final approval of the version to be published.

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