

Analysis Of The Existing Training Programs (Educational Models) In The Field Of Quality Improvement In General Practice/Family Medicine In Europe

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1. Introduction

The Leonardo da Vinci project “Innovative lifelong learning of European General Physicians in Quality Improvement supported by information technology” aims to improve the existing training programs for both general practitioners (GPs)/family doctors (FDs) and teachers in family medicine (FM) in the field of quality improvement (QI) by implementing new innovative didactic tools and methods in existing educational systems in Europe supported by Information/Internet Technology (IT).

The European Association for Quality Improvement in General Practice/Family Medicine (EQuiP), is a network organisation of Wonca Europe, and has responsibility for Work Package 1 (WP1) of this project. Central in WP1 of this project is the proposal of a European curriculum in QI for general practice. This proposal is based on the analysis of existing theoretical frameworks for Quality Improvement and for teaching quality. WP1 also comprises an overview of how quality improvement is implemented in the existing European training programs in family medicine and in lifelong learning programs for GPs/FDs.

This chapter starts with a short report on existing recommendations for teaching quality and the establishment of a conceptual framework for teaching quality. Hereto, the working group Teaching Quality Improvement, EQuiP organised an electronic survey among European medical schools, and educators in GP/FM. The results of the survey are presented and combined with the theoretical framework and the results of several workshops with experts and GPs/FDs. Finally, in the conclusions, general recommendations concerning teaching quality in GP/FM curricula are presented.

Since EQuiP focusses on primary care, the scope of this report is on general practice/family medicine. Yet, this report also describes the education and teaching at the start of the medical curriculum because a focus on the topic of quality in care during the vocational training is also of utmost importance for future GPs/FDs. As this topic remains an important part of continuous medical education and continuous medical development of general practitioners, this aspect of the medical training is also included in this report. Although the focus is primarily on general practice/family doctors, many of the conclusions may also be important for education of other medical professionals and specialists.

1.1 Why is there a need for teaching quality improvement in the medical curriculum and continuous medical education?

Teaching medicine has traditionally been primarily focussed on acquiring clinical skills. Students tend to be focussed on diseases and curing patients. They highly rate the importance of acquiring biomedical knowledge and of training to use this knowledge in the practice. In the last decades of the 20th century, we have become acutely aware that the results of clinical care not only depend on the clinical knowledge and training of doctors to put this knowledge into practice, but also on other skills such as being able to deal with the permanent flow of new information and changing evidence. There is also growing evidence that good quality of care is, to a large extent, determined by the organisation or »system« in which this care is delivered. This means that the doctor-of-today needs to be able to reflect about the system in which he/she delivers care and to take responsibility for the way quality care is delivered.

This shift in the thinking on quality of care has important consequences for medical education programmes since this means that students have to be trained in new and additional skills and competencies.

1.2 What do we know about Quality Improvement education in European medical curricula?

In 2005, Y. Engels and H Wollersheim in an analysis of the Dutch situation already stated: »For governmental but also public opinion and professional reasons (cfr. the Order of Medical Specialists and various other scientific organizations in the Netherlands), quality of care is being allocated an increasingly important position on the medical agenda. Examples of this are the establishment of performance indicators, accreditation standards and also safety management systems. For the final attainment levels of medical students, moreover, numerous competencies which are needed for continuous improvement of the quality of care are often mentioned but attention to these competencies is not structurally and thus sufficiently present in the current training curricula.»

Is this conclusion limited to the Dutch situation or is it a pan-European problem? Expert meetings within EQuIP and with other European networks on teaching gave us indications that the existing recommendations are not implemented. There is still no overall

strategy, and the existing actions are largely isolated initiatives from motivated individuals or universities. Additionally, this approach not applies to the vocational teaching programs for doctors but even applicable to lifelong learning programs and continuous medical education (CME). As in the United States, in most European countries »CME has become structured around health education instead of performance improvement« as is stated by the report »Redesigning continuous educations in the health profession« of the Institute of Medicine in December 4th 2009.

1.3 The EQuIP initiative: setting up a teaching quality working group

EQuIP members regularly reported that quality is not yet taught in all European medical curricula and a preliminary analysis of what is thought shows that improvement is necessary and urgent. Additionally, very little is known on how “new topics” related to quality of care are implemented in the different European countries. For example in recent years patient safety has become a major point of action of WHO, yet information on the implementation of this topic in medical training programs is lacking.

In 2008, at the EQuIP meeting in Bucharest, a working group was set up with the aim of achieving a consensus view on what should be taught (content) and to develop a strategy (what, when, where and how) to assure that quality assurance is integrated in the curriculum of medical students and for vocational training. It also wants to support CME and CMD about this topic.

The working group defined several action points. Firstly, the group aims to organise a yearly summer course on quality improvement in healthcare. Central to this summer course are: teaching the teachers, establishing a network across Europe and »infecting« young GPs/FDs with »the quality virus«. The first summer school was organised in 2009 and will be held again in the coming years (in 2011 in Ghent, Belgium). Although the organisation of the summer school is an important aspect of the working group’s activities, it is not included in this report.

Secondly, as described later, the working group aimed to write a state of the art on teaching quality in Europe. It is important for the planning of implementation to know if, what, where and when quality assurance is taught in Europe at present.

Finally, EQuIP also organises open workshops on the topic of quality of care for interested participants from the three Wonca Europa Networks. These open workshops are organized at the Wonca conferences and were first organised at the Wonca Europe Malaga conference in 2010.

For the future, the EQuIP working will continue to identify best practice models of teaching quality improvement, establish cooperation with the Dutch initiative of Wollersheim and Engels, will support people in taking initiatives in their own country and will complete a position paper on the topic of teaching quality.

2 Overview of the European situation

2.1 Method

In 2010, an electronic survey was launched. To do so a brain storming with nominal group technique was organized repeatedly in an international EQuIP expert group during the conferences in Jerusalem and London. This resulted in a preliminary list of 10 possible subjects/topics, which emerged after extensive testing and repeatedly adjusting the questionnaire. It was spread over Europe sending it to 3 representatives (from EQuIP, EURACT and VDGM member) in each country with the request to send it further to all local people possibly involved in teaching quality in their own country (snowballing). A first reminder after 15 days and a reminder with a feedback on response rate of every country after one month was send out. The first data set was analysed using SPSS and qualitative analysis of the answers for open questions.

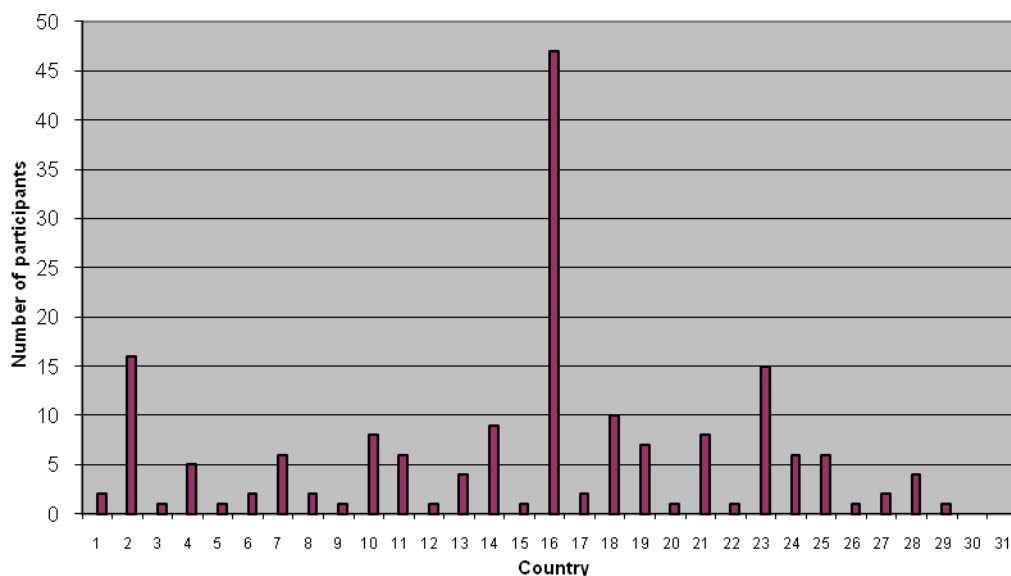
To realise these, we applied for a financial grant by Wonca Europe which we obtained and used to realise the electronic survey and the preliminary data analysis.

2.2 Results

2.2.1 Characteristics of the respondents

2.2.1.1 Countries

The web-based survey provided 176 answers from 29 European countries. Most answers came from the Netherlands, Belgium and Slovenia (Graph 1). Some European countries did not reply to the survey: Italy, Hungary, Bosnia, Serbia, Macedonia, Albania, Latvia, Lithuania, Belarus and Ukraine.

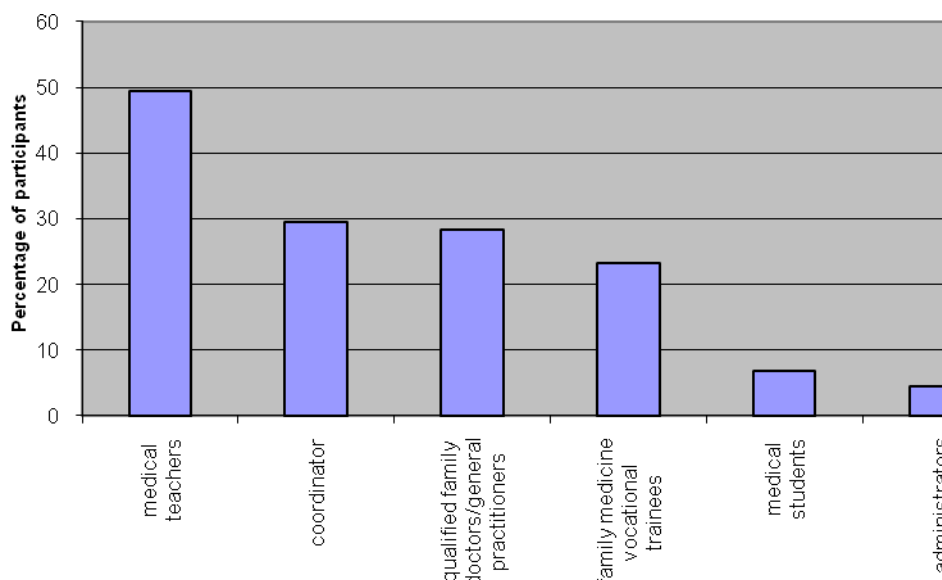


Graph 1: Number of respondents according to individual European countries

Legend: 1 – Austria, 2 – Belgium, 3 – Bulgaria, 4 – Croatia, 5 – Cyprus, 6 – Czech Republic, 7 – Denmark, 8 – Estonia, 9 – Finland, 10 – France, 11 – Germany, 12 – Greece, 13 – Ireland, 14 – Israel, 15 – Malta, 16 – Netherlands, 17 – Norway, 18 – Poland, 19 – Portugal, 20 – Republic of Moldova, 21 – Romania, 22 – Slovakia, 23 – Slovenia, 24 – Spain, 25 – Sweden, 26 – Switzerland, 27 – Turkey, 28 – United Kingdom, 29 – Uzbekistan

2.2.1.2 Respondents

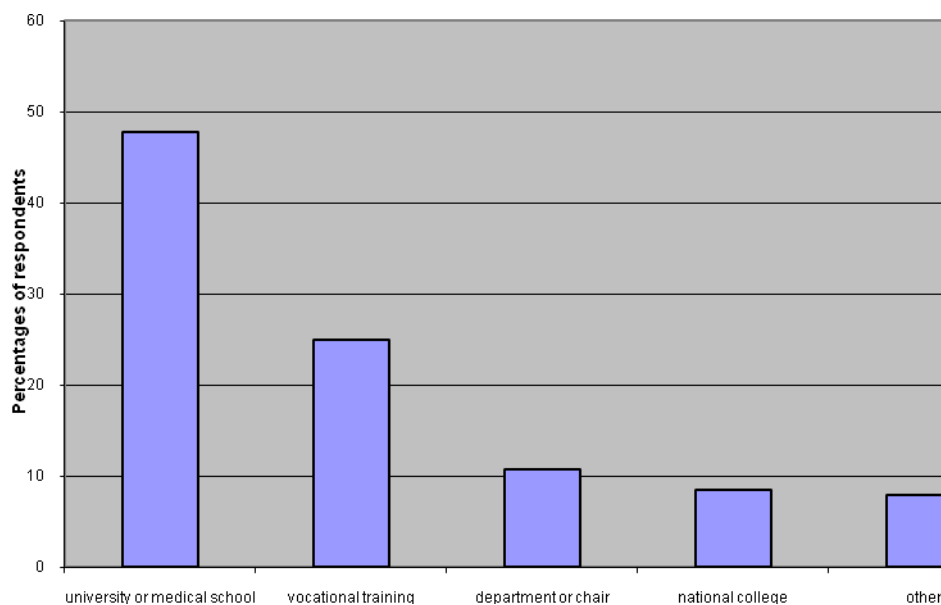
Respondents who answered the questionnaire were medical teachers (49.4%), coordinators (29.5%), qualified family doctors/general practitioners (28.4%), family medicine vocational trainees (23.3%), medical students (6.8%) and administrators (4.5%) (Graph 2). For analysing reasons, we divided the respondents into two groups: teachers (medical teachers, coordinators, qualified family doctors/general practitioners and administrators) and learners (family medicine vocational trainees and students). There were 120 (68.2%) teachers and 56 (31.8%) learners.



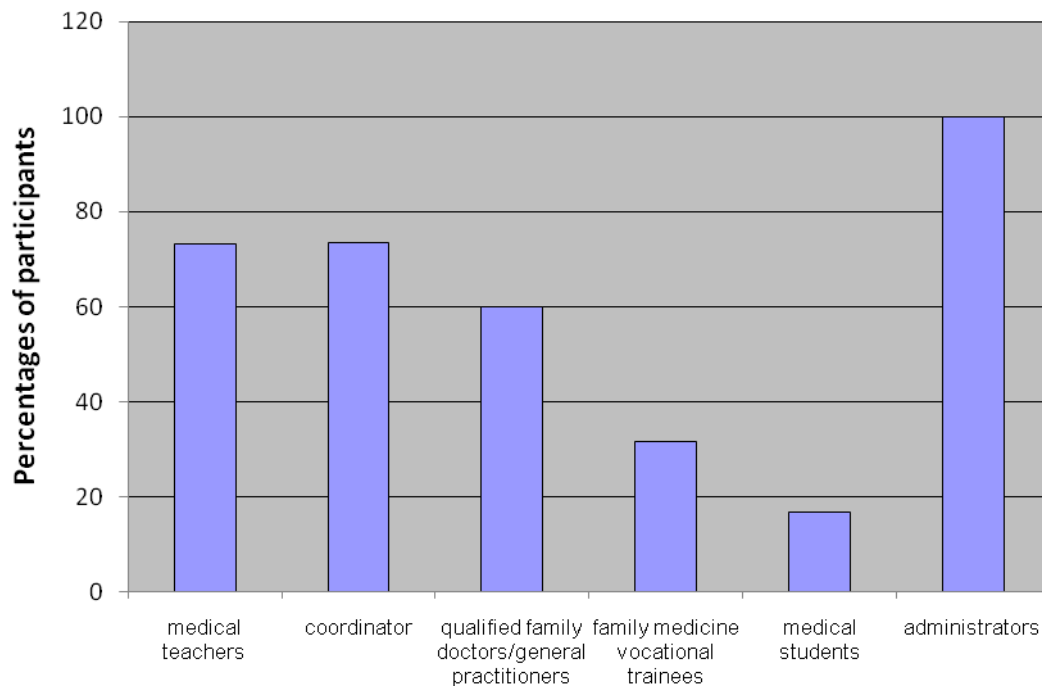
Graph 2: The profiles of respondents

There were 84 (47.7%) of the respondents who answered in the name of universities or medical schools, 44 (25.0%) in the name of vocational training, 19 (10.8%) in the name of departments or chairs, 15 (8.5%) in the name of national colleges and 14 (8.0%) in the name of other organisations (Graph 3). Other organisations included Ministry of health, federations of primary care multidisciplinary teams, medical chambers and research units, More than 50% (55.7%) of the respondents reported that they had a role in QI. They described their roles as directors of courses on QI, as quality projects' coordinators, as members of teams preparing

clinical guidelines, as teachers of QI, as QI researchers, directors of health centres and quality improvement departments, as regional or national consultants for QI, as coordinators of national quality networks and as national delegates in EQuIP. 79 (65.8%) teachers and 19 (33.9%) learners reported that they had a role in QI (Graph 4).



Graph 3: Affiliations of respondents

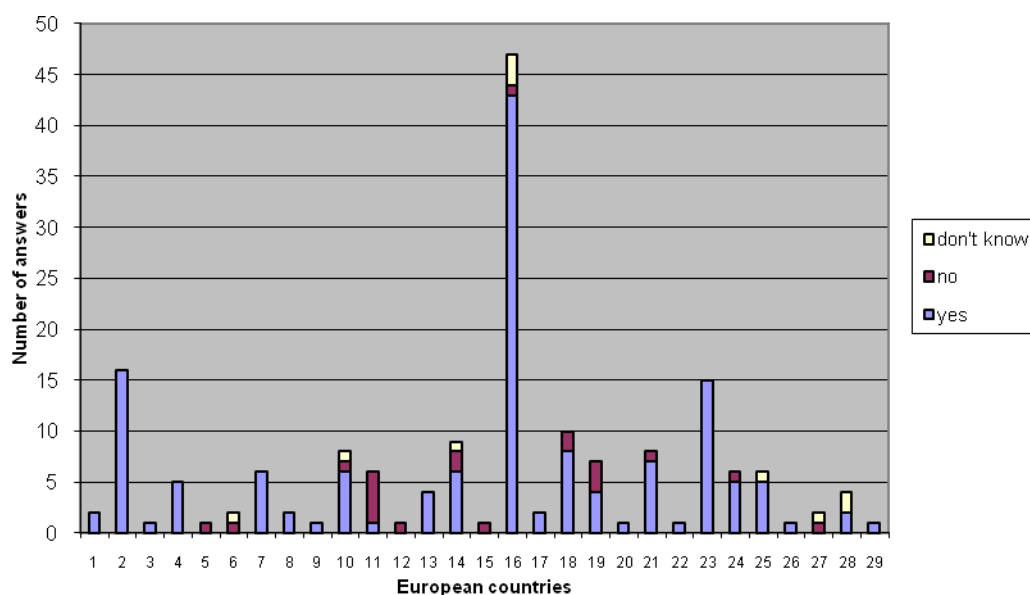


Graph 4: Percentage of participants that had a role in QI according to different profiles.

2.2.2 Quality improvement in curriculum at all educational levels

2.2.2.1 Quality improvement inclusion in curriculum in general

Quality improvement was included in the curriculum of each country's organisations in 16 (55.2%) countries and at least in one country's organisation in 24 (82.8%) countries (Graph 5).



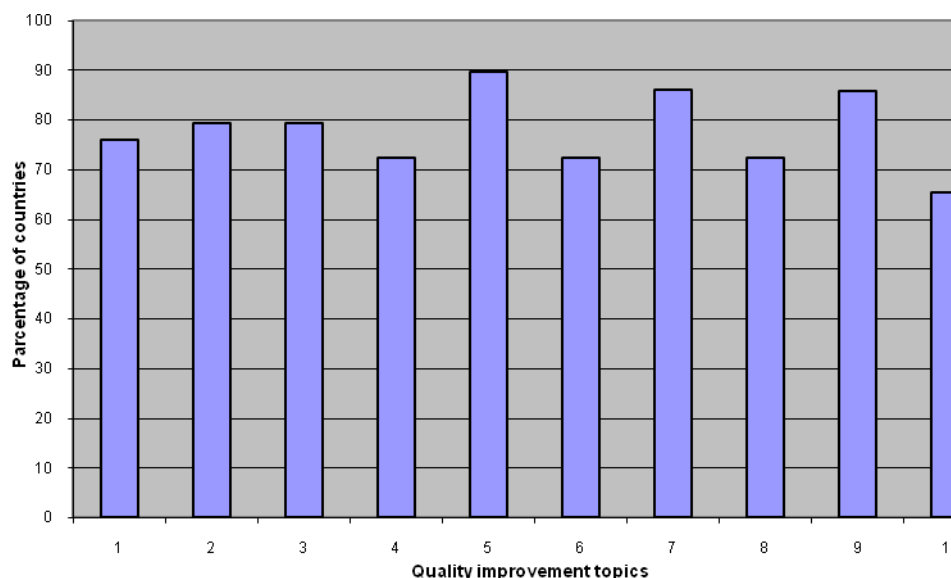
Graph 5: The presence of quality improvement in curriculum according to individual countries

Legend: 1 – Austria, 2 – Belgium, 3 – Bulgaria, 4 – Croatia, 5 – Cyprus, 6 – Czech Republic, 7 – Denmark, 8 – Estonia, 9 – Finland, 10 – France, 11 – Germany, 12 – Greece, 13 – Ireland, 14 – Israel, 15 – Malta, 16 – Netherlands, 17 – Norway, 18 – Poland, 19 – Portugal, 20 – Republic of Moldova, 21 – Romania, 22 – Slovakia, 23 – Slovenia, 24 – Spain, 25 – Sweden, 26 – Switzerland, 27 – Turkey, 28 – United Kingdom, 29 – Uzbekistan

2.2.2.2 Quality improvement inclusion in curriculum according to specific topics

The inclusion of individual quality improvement topics at any level of education was different for different topics: learning to implement guidelines was included in most countries and learning how to take leadership of doctors as a motor for quality improvement was included in least countries (Graph 6). A country was declared to have these topics included in

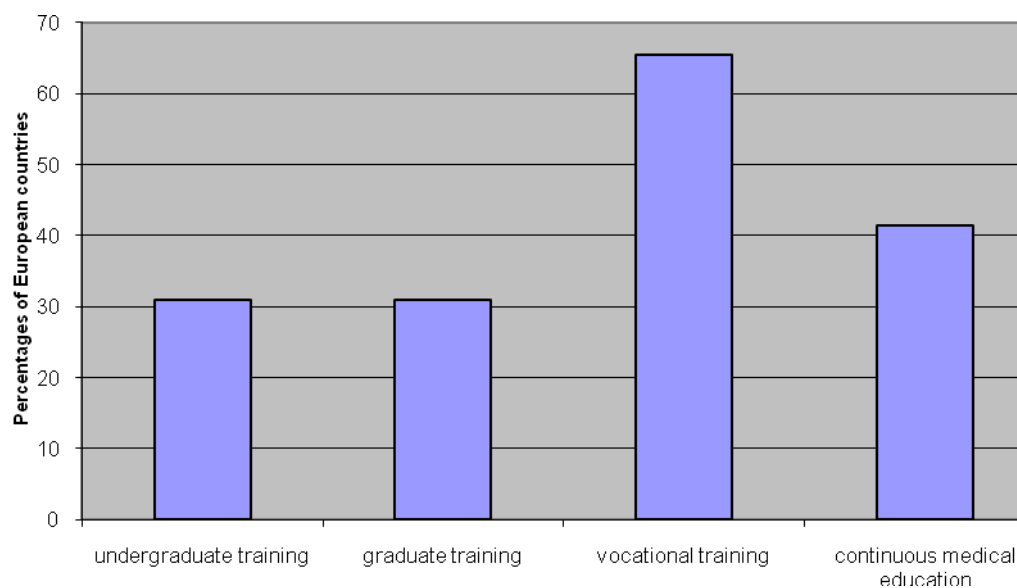
their curriculum if it was a part of the curriculum in at least one organisation in individual country.



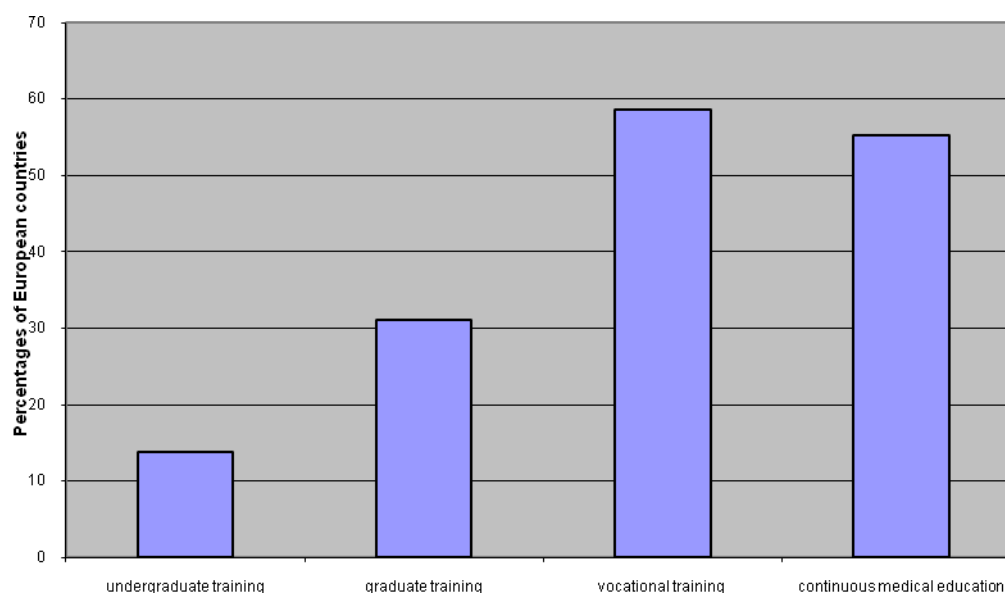
Graph 6: The inclusion of individual quality improvement topics in European countries at any level of education

Legend: 1 – dealing with critical incidents or medical mistakes, 2 – measuring practice performance and competence, 3 – learning to use information, 4 – learning how to use the electronic medical records to support quality, 5 – learning to implement guidelines, 6 – using a Plan-Do-Check-Act-strategy for quality projects, 7 – learning to work patient-centred, 8 – learning to work with practice population, 9 – learning to work in a team, 10 – learning how to take leadership of doctors as a motor for quality improvement

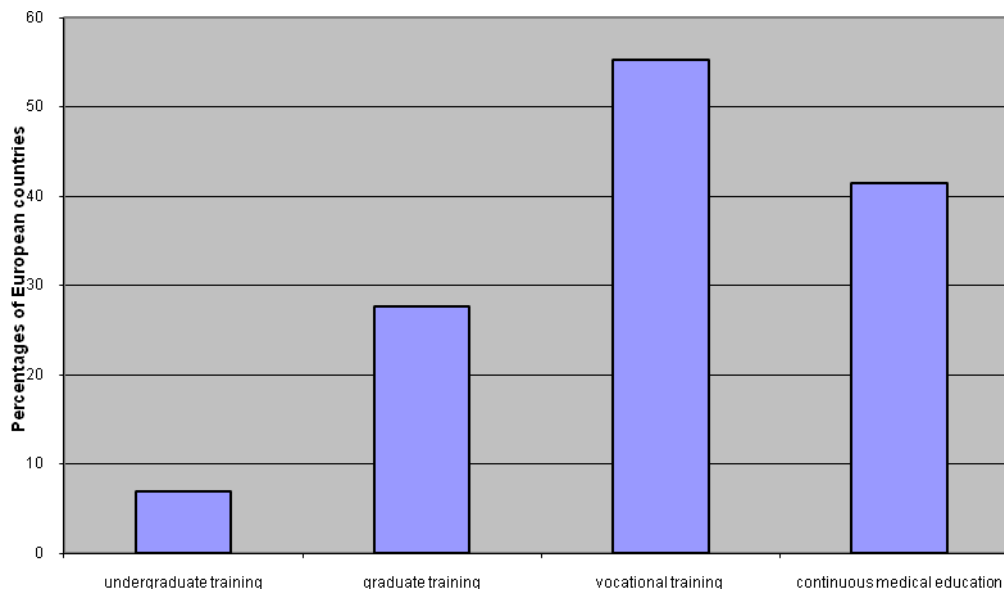
In most countries, the majority of topics were included in vocational training followed by continuous medical education, graduate training and undergraduate training (Graphs 7-16).



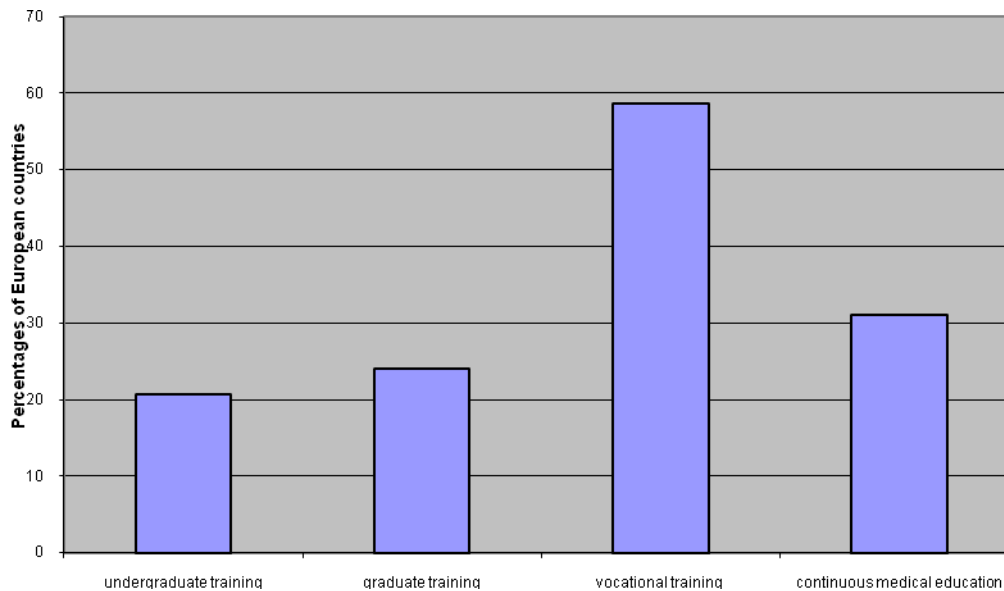
Graph 7: The inclusion of the topic on dealing with critical incidents or medical mistakes in European countries at different levels of education



Graph 8: The inclusion of the topic on measuring practice performance and competence in European countries at different levels of education



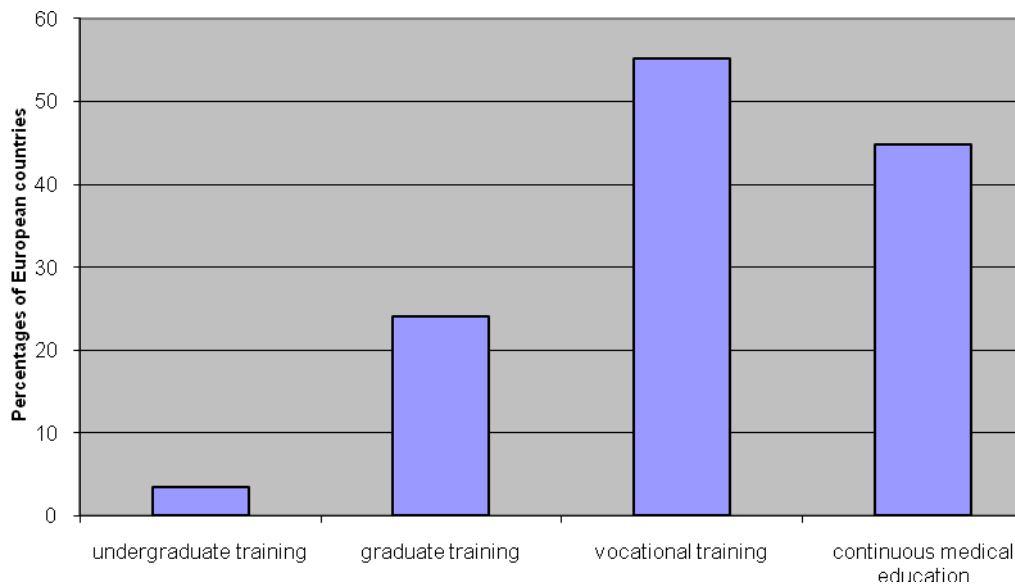
Graph 9: The inclusion of the topic on learning to use information in European countries at different levels of education



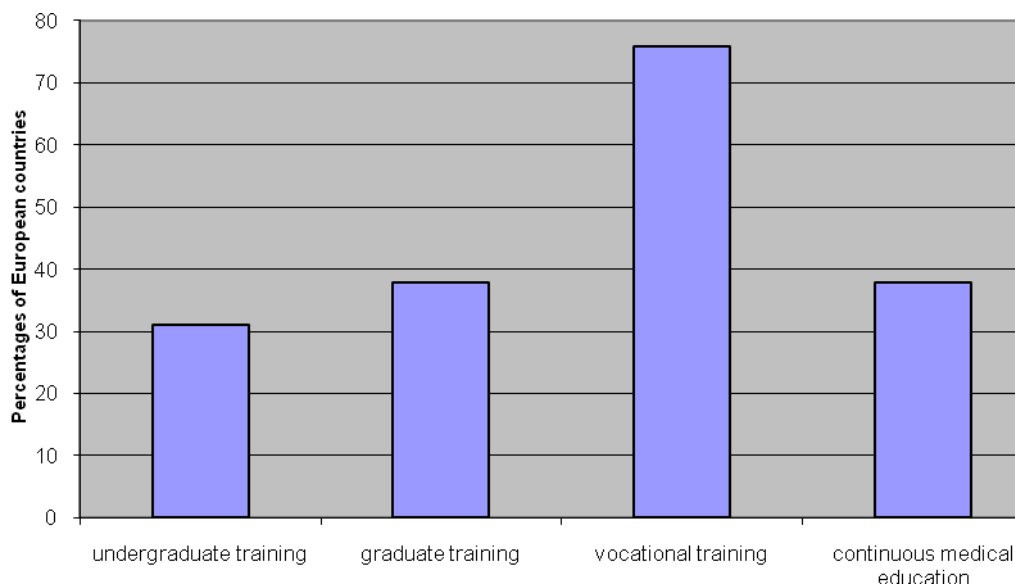
Graph 10: The inclusion of the topic on learning how to use the electronic medical records to support quality in European countries at different levels of education



Graph 11: The inclusion of the topic on learning to implement guidelines in European countries at different levels of education



Graph 12: The inclusion of the topic on using a Plan-Do-Check-Act-strategy for quality projects in European countries at different levels of education



Graph 13: The inclusion of the topic on learning to work patient-centred in European countries at different levels of education



Graph 14: The inclusion of the topic on learning to work with practice population in European countries at different levels of education



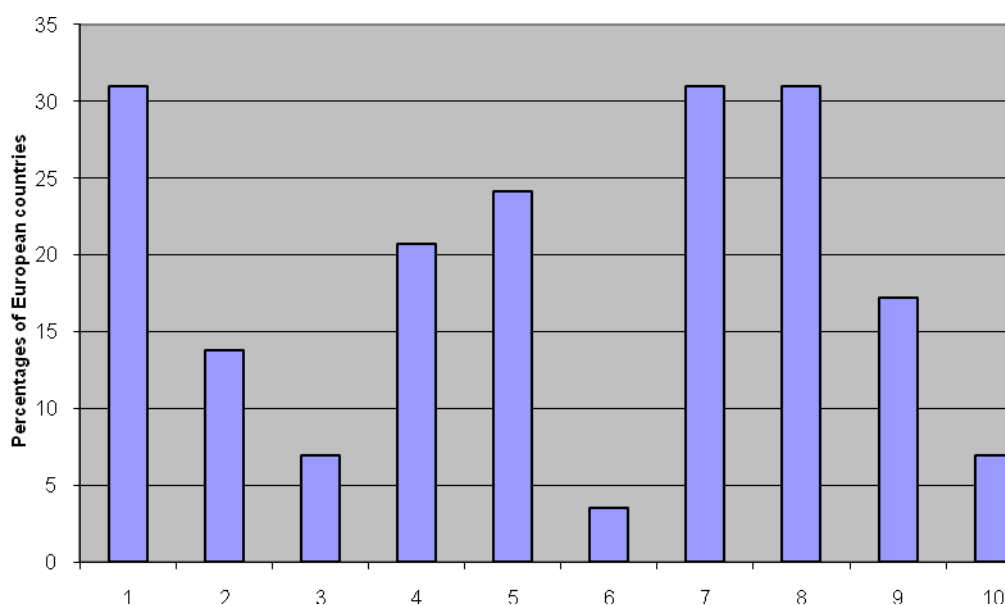
Graph 15: The inclusion of the topic on learning to work in a team in European countries at different levels of education



Graph 16: The inclusion of the topic on learning how to take leadership of doctors as a motor for quality improvement in European countries at different levels of education

2.2.3 Quality improvement in undergraduate, post graduate training and specialist training

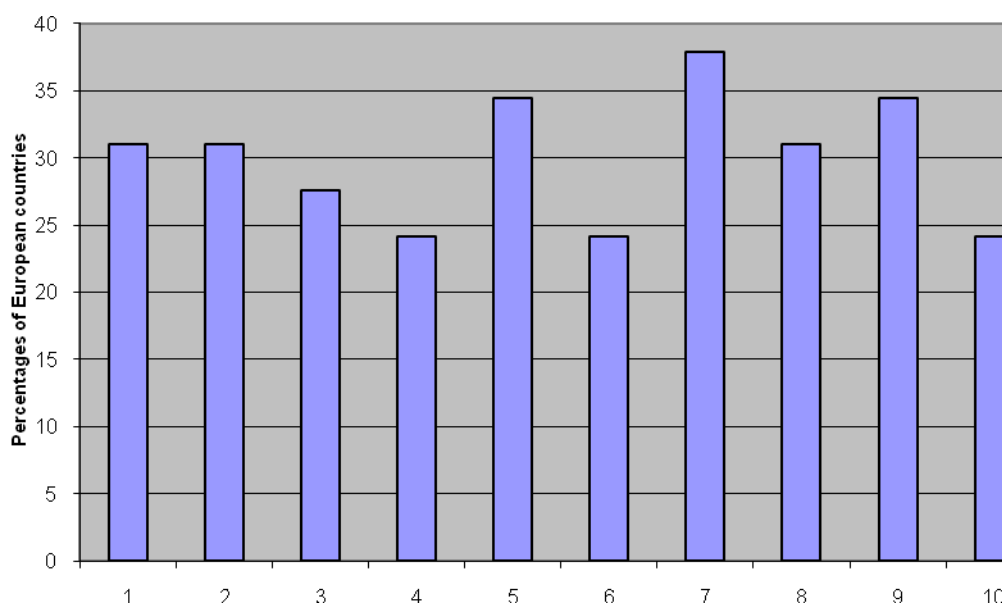
The inclusion of individual quality improvement topics at undergraduate level of education was different for different topics: dealing with critical incidents or medical mistakes, learning to work patient-centred and learning to work with practice population were most included and using a Plan-Do-Check-Act-strategy for quality projects was least included (Graph 17).



Graph 17: The inclusion of individual quality improvement topics at undergraduate level in European countries

Legend: 1 – dealing with critical incidents or medical mistakes, 2 – measuring practice performance and competence, 3 – learning to use information, 4 – learning how to use the electronic medical records to support quality, 5 – learning to implement guidelines, 6 – using a Plan-Do-Check-Act-strategy for quality projects, 7 – learning to work patient-centred, 8 – learning to work with practice population, 9 – learning to work in a team, 10 – learning how to take leadership of doctors as a motor for quality improvement

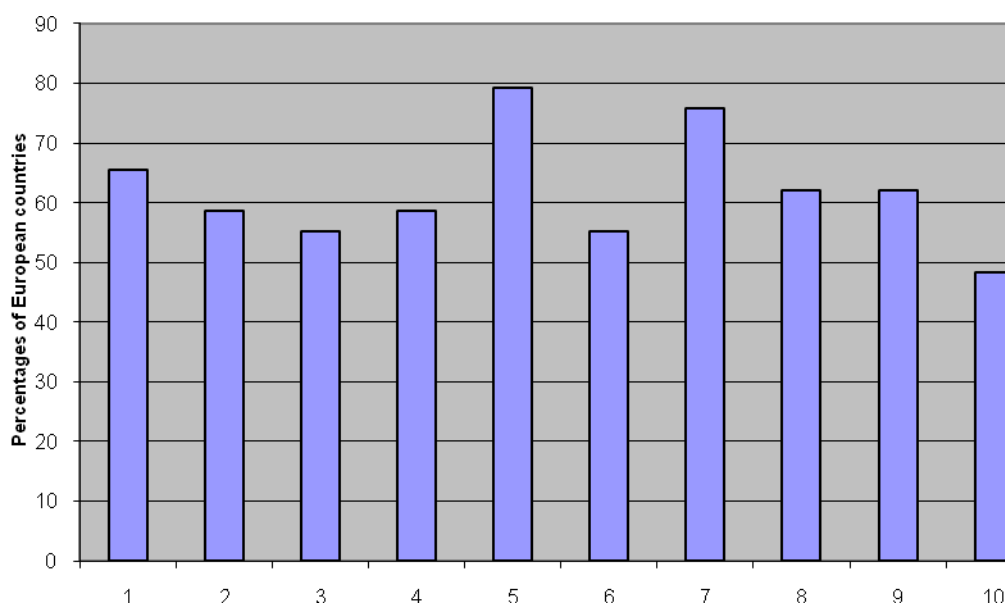
The inclusion of individual quality improvement topics at graduate level of education was different for different topics: learning to work patient-centred was most included and learning how to use the electronic medical records to support quality and using a Plan-Do-Check-Act-strategy for quality projects were least included (Graph 18).



Graph 18: The inclusion of individual quality improvement topics at graduate level in European countries

Legend: 1 – dealing with critical incidents or medical mistakes, 2 – measuring practice performance and competence, 3 – learning to use information, 4 – learning how to use the electronic medical records to support quality, 5 – learning to implement guidelines, 6 – using a Plan-Do-Check-Act-strategy for quality projects, 7 – learning to work patient-centred, 8 – learning to work with practice population, 9 – learning to work in a team, 10 – learning how to take leadership of doctors as a motor for quality improvement

The inclusion of individual quality improvement topics in vocational training was different for different topics: learning to implement guidelines was most included and learning how to take leadership of doctors as a motor for quality improvement was least included (Graph 19).

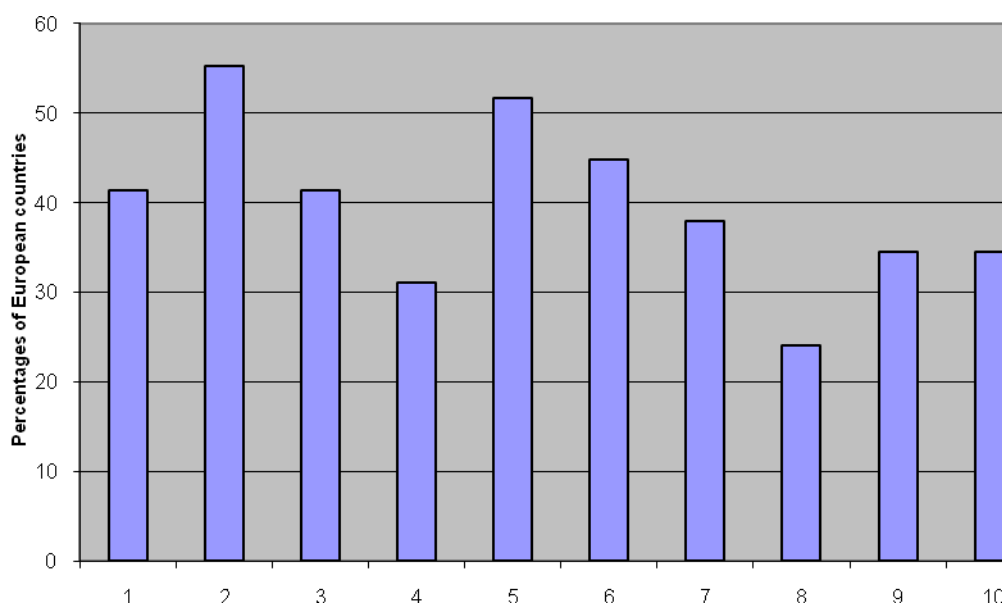


Graph 19: The inclusion of individual quality improvement topics at vocational training level in European countries

Legend: 1 – dealing with critical incidents or medical mistakes, 2 – measuring practice performance and competence, 3 – learning to use information, 4 – learning how to use the electronic medical records to support quality, 5 – learning to implement guidelines, 6 – using a Plan-Do-Check-Act-strategy for quality projects, 7 – learning to work patient-centred, 8 – learning to work with practice population, 9 – learning to work in a team, 10 – learning how to take leadership of doctors as a motor for quality improvement

2.2.4 Quality improvement in continuous medical education

The inclusion of individual quality improvement topics in continuous medical education varied for different topics: measuring practice performance and competence was most often included and learning to work with practice population was least included (Graph 20).

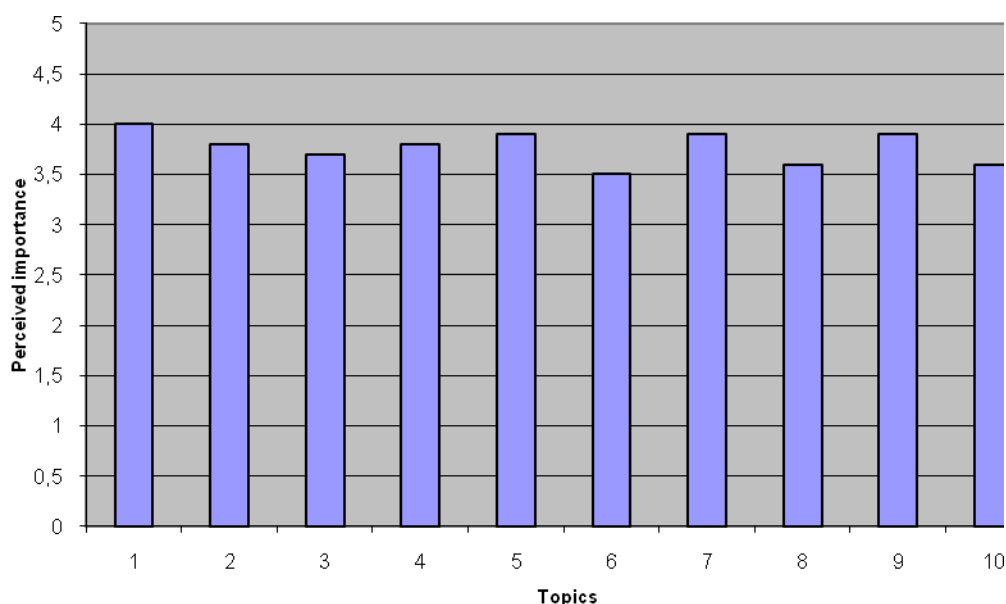


Graph 20: The inclusion of individual quality improvement topics at continuous medical education level in European countries

Legend: 1 – dealing with critical incidents or medical mistakes, 2 – measuring practice performance and competence, 3 – learning to use information, 4 – learning how to use the electronic medical records to support quality, 5 – learning to implement guidelines, 6 – using a Plan-Do-Check-Act-strategy for quality projects, 7 – learning to work patient-centred, 8 – learning to work with practice population, 9 – learning to work in a team, 10 – learning how to take leadership of doctors as a motor for quality improvement

2.2.5 Perceived importance of quality improvement topics

According to the opinions of all participants in this survey (Teachers), the most important quality improvement topic for training and education was dealing with critical incidents or medical mistakes and the least important was using a Plan-Do-Check-Act-strategy for quality projects (Graph 21).



Graph 21: Perceived importance of quality topics (on a scale from 1 to 5 points) for training and education

Legend: 1 – dealing with critical incidents or medical mistakes, 2 – measuring practice performance and competence, 3 – learning to use information, 4 – learning how to use the electronic medical records to support quality, 5 – learning to implement guidelines, 6 – using a Plan-Do-Check-Act-strategy for quality projects, 7 – learning to work patient-centred, 8 – learning to work with practice population, 9 – learning to work in a team, 10 – learning how to take leadership of doctors as a motor for quality improvement

2.3 Discussion

This study provided a first insight into teaching quality at different education's levels in European countries. Since no data about this topic has been available until now, this study also provides valuable data, which are a good starting point for further research in this field.

The study included most European countries. It also included different profiles; from students to academic professors. Respondents answered on behalf of various organisations. More than half of respondents reported their role in quality improvement. All of the above enables us to generalise the results to European countries.

Teaching quality is included in at least half of the European countries. This result is a bit worrying since quality assurance and quality improvement is a daily part of family doctors' work and should as such also be a part of the core curriculum. This study also showed that chosen quality topics were included mostly in vocational training and also in CME. Since quality assurance and quality improvement, as stated before, is an important part of family doctors' work, at least some of those topics should be included in each European country's curriculum for vocational training and also for CME. On other levels of education (undergraduate and graduate), they were included only in (on average) 30% of the countries. This is a disappointingly low percentage. During their medical studies, students should become familiar with basics of quality in medicine, with quality assurance and quality improvement. This should be done in a systematic way, beginning at the undergraduate level.

All chosen topics are included in at least some of the European countries on at least one education level. But, many differences exist according to the inclusion of individual topics. A common pattern, seen from our study, is that some important topics are not included in the curriculum as often as they should be. A crucial example is a Plan-Do-Check-Act-strategy, which is one of the most important strategies for quality improvement. In our opinion, it should be a part of each medical curriculum, particularly in vocational training and in CME. Low presence of some topics (including Plan-Do-Check-Act-strategy) corresponds to perceived importance of those topics. It seems that participants in our study were not aware of the high practical importance of some chosen topics. This is worrying because many of our respondents are responsible for organising, providing and drawing up of the curriculum. Also,

it is crucial that teachers recognise the importance of those topics if they want to transfer this knowledge to the students in order that it can be implemented.

Since this was a web-based survey in which participants could answer subjectively, it is possible that it does not accurately reflect the actual state in the field of QI education in Europe. An unknown response rate, the fact that the number of participants varies considerably among different European countries and that some of the European countries did not participate in the study, could have provided biased results. A more systematic and objective approach is needed to establish a better overview. However, this study showed that there is a strong case for improving the teaching of quality improvement in healthcare in Europe.

3 A comprehensive framework for teaching quality in medical training and in CME

To answer the research questions of this workpackage, a two-step approach was used: first an analysis of existing frameworks was made, secondly additional information was collected, gathering expert opinions and organising workshops.

3.1 Analysis of the existing frameworks

What do comprehensive models for quality improvement expect from GPs/FDs and how does it affect Continuous Medical Education?

In the last twenty years, in the USA and in Europe several major publications and models for quality improvement in health care were developed. As a consequence, recommendations for the medical curriculum and for CME were revisited in some areas and took into account this new additional skills and knowledge.

In the USA, a discussion started in 2001 after the publication of the report “Crossing the quality chasm: a new health system for the 21st century“. In this report, six major aspects of Quality in care were formulated: Patient safety, Effectiveness, Patient Centeredness, Timeliness, Efficiency and Equity.

In line with the report, the recommendations for medical education such as the Canadian Canmeds roles framework (2005) and in the USA, the Accreditation Council for Graduate Medical eEducation (ACGME) (2007) defined their curriculum for teaching quality.

The Canmeds described six competencies: Medical expert, Communicator, Collaborator, Manager, Health advocate, Scholar and Professional.

The ACGME also designed six main competencies for medical students. Students should be experts in Patient care, Medical knowledge, Practice based learning and improvement, Interpersonal and communication skills, Professionalism and System based Practice.

“Students should demonstrate the ability to investigate and evaluate their care of patients. To appraise and assimilate scientific evidence and to continuously improve patient

care based on constant self evaluation and lifelong learning. Residents are expected to develop skills and habits to meet the following goals: Leadership, Keep records, Accountability, Have awareness to the larger context, Identify system errors...”.

In addition to the medical curriculum, continuous education for health professionals was also the scope of evaluation. In the publications “Health professions education: a bridge to quality” 5 core competencies for health professionals were identified: Being able to provide patient centred care, work in interprofessional teams, employ evidence based practice, apply quality improvement and utilise informatics.

Still in the USA, The Institute of Medicine (IOM) published a report in 2009 entitled “Redesigning Continuing Education (CE) in the health profession”. Broad messages in this report were:

- There are major flaws in the way CE is conducted, financed, regulated and evaluated.
- The science underpinning CE is fragmented and underdeveloped.
- Continuing education efforts should bring health professionals from various disciplines together in carefully tailored learning environments.
- A new comprehensive vision of professional development is needed to replace the culture that now envelops continuing education in health care.
- Establishing a national interprofessional CE institute is a promising way to foster improvements in CE for health professionals.

The report state: “Requirements, based on credit hours rather than outcomes, are not conducive to teaching and maintaining these core competencies” and there is a strong recommendation to evolve from Continuous Education into Continuous Professional Development.

Continuous professional development is a concept already used for more than a decade in European countries. In 2002, EURACT and EQuiP published a Policy Document entitled “Continuing Professional Development Integration of Formal CME and Quality Improvement Initiatives”. This document was developed by experts from EURACT and EQuiP. “Recent large-scale review work demonstrates that didactic CME lectures don’t lead to changes in

performance. Broadly defined interventions using practice-enabling or reinforcing strategies are needed. These strategies consistently improve physician performance and in some instances, health care outcomes. Inspiring new approaches to continuing medical education focus on active learning emphasising needs' assessment and learners' experiences.”

“What are the characteristics of effective integration between CME and Quality Development initiatives?” “Which actions support implementation of integrated interventions between CME and Quality Development?” We asked experts from 6 European countries these two questions. This document reflects their opinion and the discussion in both EURACT and EQuIP.

We continue quoting because this vision is fundamental for the development of this Leonardo da Vinci project: “The basic aim of this document is to give recommendations on the characteristics and conditions needed for effective integration of formal CME and elements of QI. As a result of our evaluation of integration of formal CME and Quality Improvement initiatives we will identify characteristics and conditions needed for implementation. These recommendations intend to outline an evolving model of Continuing Professional Development, combining QI interventions and more traditional forms of CME.”

“Basic elements of integration of elements of QI in CPD are:

- Patient and community priorities concerning health care should be central to CPD activities.
- Integration requires a continuous process.
- Continuing education should be based on the learners daily work practices.
- The goals are set by the GP/FD or the practice
Planning professional development can start from perceived needs in individual practices; the goals are set by the physician or the practice team setting up a personal or practice professional development plan. All members of the Primary Health Care team should work together. Quality assurance offers various methods to detect, define and analyse these needs.
- Refocus CPD on the local professional environment

There is a need to refocus CPD on the local professional environment as the proper main arena for QI and formal CME. QI should be combined with current local CME systems.

- In Quality Improvement Initiatives the place for formal CME should be defined and linked.”

The document concludes:

“A doctor's desire to be more competent in delivery of health care is the most important motivating factor for continuous learning and change. It is a prerequisite for achieving any improvements. Every doctor has a personal responsibility to participate in continuing professional development programmes, consisting of both formal CME and QI procedures. Continuing Professional Development requires a planned integration of formal CME and QI initiatives. This will set the conditions to facilitate improvement in the process of day-to-day medical care.”

At the end of the report, we can find an interesting addendum which brings us back to the first question: Integration of Formal CME and Quality Improvement Initiatives – In Addendum 2 “Consequences for Basic Medical Education (BME) and Vocational training (VT).

Changes towards a more CPD-oriented policy will require basic changes in basic medical education (BME) and Vocational Training (VT), not only for the subject of general practice/family medicine, but also for other subjects. The current international norm is a tendency to teach QI and EBM only in the time reserved for general practice/family medicine, whereas most of the topics mentioned below could belong to other disciplines in BME as well. All the elements have to be learnt as early as possible, but some of the topics are particularly suitable for vocational training:

1. Preparation for life-long learning.
2. Skills for team-learning and multidisciplinary learning.
3. Basics of Quality Assurance (QA)

- Basic Principles and definitions: What is quality, what is the place of QA in daily practice, terminology; basic philosophy of QA: the Plan-Do-Check-Act cycle or quality cycle.
- Basic Procedures and skills: peer review, practice visits, clinical internal or external audit, patient evaluation; feedback procedures etc.
- Quality indicators: definition, characteristics.
- Procedures and techniques to define and outline a quality problem or adverse incident.
- Value of guidelines, and how to implement guidelines.
- Skills to self-assess one's own work: clinical incident analysis; structured case discussion; chart audit: clinical audit; video assessment of communication skills etc.
- Skills to measure, analyse and interpret data
- Skills to plan actions for improvement and to evaluate the outcome
- QA management skills: change management, time management, leadership, annual report and planning QA, working as a team.

4. Working with a learning agenda (discover your own needs, evaluate your learning progress, record it in an individual portfolio).

Again in Europe in 2009 within the context of primary care, the Bellagio model for improving chronic care was developed and published. The model is based on the previous work done: The crossing the chasm report, the chronic care model and enriched by experiences from six different European countries. The Bellagio model puts forward 9 essential features for qualitative (chronic) care: Leadership, Public trust (accountability and transparency), Population oriented management, Vertical and horizontal integration, Networking of professionals, Infrastructure (EBM, IT, disease management, self management of patients), Payment mix, Standardized measurement and an Active program of change (teaching change management, PDSA...)

Are we able to (re)define a set of skills for European GPs/FDs which should be taught in medical training and in continuous professional development, based on these recommendations?

3.2 Expert opinion and workshops: Defining Learning Outcomes and Indicators for measuring teaching of quality improvement

Experts in the EQuIP working group were brought together and over the course of several working group sessions a list of topics emerged which the group felt should be introduced in teaching and in the CPD curricula.

In the EQuIP meeting in Bucharest in 2008 a brain storming session was organised, using a nominal group technique, and after clustering the authors came up with a first list of possible key topics for teaching (QI).

In 2009 the EQuIP working group met in Bled, Slovenia and continued the discussion: participants received a short list of questions teasing out the stages of learning about QI: What do GPs/FDs know about QI? What are GP/FD trainees taught about QI? What do GP/FD trainees know about QI before they begin GP/FD training? What are medical students taught about QI?

Consequently, a discussion was organised to identify the desired competencies that a course in QI could teach in terms of knowledge, skills and attitudes. It was felt at that point that designing the curriculum and producing its content would not be the function of EQuIP; that would be up to the individual institution. However, EQuIP expertise has a unique role in Europe to develop the Learning Outcomes that guide the topics that should be covered under the categories of knowledge, skills and attitudes.

Knowledge:

On successful completion of GP/FD training, GP/FD trainees should be able to describe:

- 1) Definition of QI (simple for medical students, more complex for GP/FD trainees)
- 2) Basic principles (measurement, theory, feedback, audit, risk management, patient safety)
- 3) Methods & tools e.g. skills, critical incident investigation

- 4) Ethics/legislation
- 5) National organisations/programmes involved in QI
- 6) Sources of QI Information e.g. guidelines, EBM
- 7) Role of Information technology ITC in QI
- 8) Patient role in QI

Skills:

On successful completion of GP/FD training, the trainee should be able to:

- 1) Assess own performance in the practice e.g. (a) clinical review; (b) interpersonal skills for example patient satisfaction questionnaire.
- 2) Interpret feedback from others on performance
- 3) Develop / design / implement an improvement plan
- 4) Critically evaluate literature
- 5) Create a strategy to incorporate new knowledge & procedures into practice
- 6) Manage to work and communicate effectively in a multidisciplinary team
- 7) Create a system for patient safety
- 8) Analyse critical incidents
- 9) Involve patients in QI
- 10) Participate in quality circles/peer review groups

Attitudes:

- 1) Awareness of knowledge gaps
- 2) Commitment to lifelong learning in QI/CME (CPD)
- 3) Commitment to continuous QI

In the EQuiP meeting in London in 2010, the working group continued and from the above skills list developed an indicator list to measure implementation of these skills in the actual curricula. A 10-topic list was put forward. When the list was piloted, we became clear that topics could be interpreted differently by respondents. So, to diminish variation a short explanation of what was understood by the topic was added to the survey on the website.

1. Dealing with faults (critical incidents).
2. Measuring practice performances (bench marking feedback and audit).
3. Assessing the quality of electronic medical records of patients.
4. Implementing (EBM) guidelines.
5. Using the Plan-Do-Check-Act strategy for quality projects.
6. Patient centred working (starting from patient experience, reflecting on practice performances).
7. Working with the practice population.
8. Working in a team (in the practice, in a network and in the community).
9. Leadership of doctors as a motor for QI.
10. Teaching the theoretical framework behind QI.

To continue testing and evaluating the above topic list and learning outcomes, a workshop proposal was submitted to the Wonca Europe conference in Malaga (2010) (abstract 98) and accepted. The workshop (7th of October 2010) was led by Piet Vanden Bussche, with the help of Zalika Klemenc-Ketis and Chantal Emaus.

The workshop began with a brief discussion on the definition on quality and continued with describing the brainstorming about the possible topics in a quality curriculum. This was followed by the presentation on the consensus of teaching quality group of EQuIP about the topics that should be taught in European countries and by the presentation of the results of the European survey. The workshop ended with a brief summary. The participants were the attendees of WONCA Europe Annual conference. Characteristics of the respondents were different from the traditional expert group of EQuIP. There were 16 participants, 6 of which were actively involved in teaching about quality improvement. Others were qualified general practitioners/family doctors.

The participants agreed on the following topics, which should be taught in quality improvement in European general practice/family medicine: the definition of quality, safe practice, accessibility, continuity of care, effectiveness, doctor's health, benefits and risks of quality, health system functioning, audit, goals and limits of medicine, culture of quality and culture of improvement, circle of improvement, measuring of quality, dealing with uncertainty, the role of the health system in realising quality.

At the end of the workshop, the participants stressed that in teaching about quality it is very important to show that when thinking about quality and working with quality tools, it is very important to know the strengths but also the limitations and the risks and the disadvantages of these tools, The importance in teaching and certainly in promoting quality, the teachers are the most important role models and they should be aware of this, The basics of defining quality and how important the role of stakeholders should be a part of curriculum.

Since the participants in the Malaga workshop were different profiles, mainly qualified family doctors and teacher of family medicine, this drew an excellent group to fulfil the aims of the workshop. Additional quality topics were introduced, mainly from the participants' practical point of view, which adds an invaluable contribution to the topics from European teaching quality survey. Since the curriculum should be based also on practical needs of family doctors, these topics should be seriously considered when developing medical curriculum in European countries.

3.3 Conclusions

Quality improvement has to be an essential part of the medical curriculum and the traditional emphasis on teaching medical knowledge about illnesses should be broadened. Knowledge of safety, quality improvement and quality management should be introduced.

Lifelong learning for health professionals is done by continuous professional development rather than continuous medical education.

It should be based on practice needs and use problem based learning techniques, starting from the experiences of the physician and focus on practice performance.

WONCA Europe should agree on a recommendation for learning outcomes and support Universities and professional bodies (national colleges) to implement this in a systematic way into their own curricula.

4 Conclusions

There are several theoretical frameworks or comprehensive models that try to describe what is expected from general practitioners/family doctors in the field of quality improvement. Some of them describe health system design (i.e. crossing the quality chasm model, Bellagio model) and others deal with teaching quality improvement in CME/CPD (i.e. Canmeds, ACGME, IOM “health profession education, EURACT/EQuiP policy document).

The European definition of Family Medicine, a document created by WONCA in 2005, describes the importance quality assurance. In 2011, EQuIP has made a submission to Wonca Europe recommending that Continuous Quality Improvement is included as one of the family doctors’ core competencies.

The EURACT educational agenda from 2005, which is based on the European definition of Family Medicine, recognised quality assurance to be an important and essential part of medical education. Nevertheless, the real situation in Europe on teaching quality is different. There are countries within Europe that do not have this topic as a part of their curricula. Also, there is a non-systematic inclusion of QI in curricula of European countries and there is no consensus even between experts in QI and experts in teaching about which QI topics should be included, how and what is the relative importance of these topics.

Based on the literature review, cross-sectional survey and professional opinions of QI and teaching experts, the teaching on quality improvement should be an obligatory part of medical education at all levels of education. It should be included in all parts and aspects of medical education, rather than as a separate part. The proposed content of education should be divided according to learning outcomes:

1. Knowledge:
 - a. Definition of QI (simple for medical students, more complex for GP/FD trainees)
 - b. Basics (measurement, theory, feedback, audit, risk management, patient safety)
 - c. Methods and tools e.g. skills, critical incident investigation
 - d. Ethics/legislation
 - e. National organisations/programmes
 - f. Sources of Information e.g. guidelines, EBM

- g. ITC
 - h. Patient role in QI
 - i. Doctors health
 - j. Dealing with uncertainty
 - k. Doctors and leadership
2. Skills:
- a. Assess own performance in the practice e.g. (a) clinical review; (b) interpersonal skills for example patient satisfaction questionnaire
 - b. Interpret feedback from others on performance
 - c. Develop/design/implement an improvement plan
 - d. Critically evaluate literature
 - e. Create a strategy to incorporate new knowledge & procedures into practice
 - f. Manage to work and communicate effectively in a multidisciplinary team
 - g. Create a system for patient safety
 - h. Analyze critical incidents
 - i. Involve patients in QI
 - j. Participate in quality circles/peer review groups
3. Attitudes:
- a. Awareness of knowledge gaps
 - b. Commitment to lifelong learning in QI/CME
 - c. Commitment to continuous QI

At the end, we should stress that the important feature of teaching quality is putting focus on a proactive rather than reactive approach. This means that it is equally important to teach students, residents and doctors how to assure quality of their work in a process of continuous quality improvement and not just teach how to deal with aspects of their work which are of low quality.. The ultimate goal of teaching quality should be to teach doctors that the responsibility to deliver high quality of care is their own professional responsibility.

5 Summary

Introduction

The Leonardo da Vinci project “Innovative lifelong learning of European General Physicians (GPs) in Quality Improvement (QI) supported by information technology aims to improve the existing training programs for both, GPs/FDs and teachers in family medicine (FM) in the field of QI by implementing new innovative didactic tools and methods in existing educational systems in Europe supported by Information/Internet Technology (IT).

Aims

The aim of this report is to give an overview of the current situation of teaching quality in the European medical curriculum and to formulate some general recommendations and a proposal for European curriculum in quality improvement, based on analysis of existing frameworks for quality improvement and teaching quality. Because the European Association for Quality in General Practice/Family Medicine (EQUIP) focuses on primary care, the scope of the report is on general practice/family medicine.

Current situation

In the last decades of the 20th century, we became aware that the results of clinical care not only depend on clinical knowledge and training of doctors but also on other skills such as being able to deal with the permanent flow of new information and changing evidence. There is also growing evidence that a good quality of care is, to a large extent, determined by complex organisational factors in which this care is delivered. This means that the doctor-of-today needs to be able to reflect about the system in which he/she delivers care and to take responsibility for his/hers organisation to deliver quality care.

This shift in the thinking on quality of care has important consequences for medical education programs since this means that students have to be trained in new and additional skills and competencies. Quality of care is being allocated an increasingly important position in the medical agenda. Examples of this are the establishment of performance indicators, accreditation standards and also safety management systems. For the final attainment levels of medical students, moreover, numerous competencies which are needed for continuous improvement of the quality of care are often mentioned but attention to these competencies is not sufficiently integrated in the current training curricula. In most European countries, continuous medical education (CME) has become structured around health education instead of performance improvement. The existing recommendations from EURACT and EQUIP to evolve to systems of Continuous Professional Development based on practice/problem based

learning techniques are not implemented yet. There is still no overall strategy, and the existing actions are largely isolated initiatives from individuals or universities.

According to the results of the EQuiP survey, teaching quality is included in at least half of the European countries. The chosen quality topics are included mostly in vocational training and also in CME/CPD. All chosen topics are included in at least some of the European countries on at least one education level. But, many differences exist according to the inclusion of individual topics. A common pattern, seen from our study is that teaching and teachers emphasise reactive quality initiatives (analysing critical incidents). Proactive quality assurance by introducing self learning systems and project management (an example is a Plan-Do-Check-Act strategy) are less often included in the curriculum and not regarded as a priority.

EQuiP role

Within the EQuIP group, there is a perception that knowledge about quality is not yet taught as standard and preliminary analysis of what is happening in reality shows us that a lot of improvement is necessary and urgent. In 2008 a working group was set up by EQuIP with the aim of achieving consensus on what should be taught (content) and to develop a strategy (what, when, where and how) to assure that quality assurance is integrated in the curriculum of medical students and vocational training. It also wants to support CME and continuous professional development (CPD) on this topic.

Frameworks

In the last twenty years in the USA and in Europe, several major publications and models for quality improvement in health care were developed. Two of them deal with health system design. In the document from 2001 entitled *Crossing the quality chasm: a new health system for the 21st century*, six major aspects of Quality in care were formulated: Patient safety, Effectiveness, Patient Centeredness, Timeliness, Efficiency and Equity. Another framework, called the Bellagio model, puts forward nine essential features for qualitative (chronic) care: Leadership, Public trust (accountability and transparency), Population oriented management, Vertical and horizontal integration, Networking of professionals, Infrastructure (evidence-based medicine (EBM), IT, disease management, self-management of patients), Payment mix, Standardized measurement and an Active program of change.

Some other models deal with teaching QI and CME/CPD. The CanMEDS framework from 2005 describes six competencies: Medical expert, Communicator, Collaborator, Manager, Health advocate, Scholar and Professional. The ACGME framework from 2007 describes six main competencies for medical students: Patient care, Medical knowledge, Practice based learning and improvement, Interpersonal and communication skills, Professionalism and System based Practice.

The Institute of Medicine (IOM) published a report in 2009 entitled Redesigning Continuing Education (CE) in the health profession. In 2002, EURACT and EQuIP published a Policy Document entitled “Continuing Professional Development Integration of Formal CME and Quality Improvement Initiatives”. It states that broadly defined interventions using practice-enabling or reinforcing strategies are needed.

Conclusions and recommendations

The European definition of Family Medicine, a document created by WONCA in 2005, describes the ability of quality assurance as one importance. Also, the EURACT educational agenda from 2005, which is based on the European definition of Family Medicine, recognised quality assurance to be an important and essential part of medical education. Nevertheless, the real situation in Europe about teaching quality is different. There are countries within Europe that do not have this topic as a part of their curricula. Also, there is no systematic inclusion of QI in curricula of European countries and there is no consensus between experts in QI and experts in teaching about which QI topics should be included, how and what is the relative importance of these topics.

Based on the literature review, cross-sectional survey and professional opinions of QI and teaching experts, quality improvement has to be an essential part of the medical curriculum and the traditional emphasis on teaching medical knowledge about illnesses should be broadened. Knowledge of safety, quality improvement and quality management should be introduced. Lifelong learning for health professionals is done by continuous professional development rather than continuous medical education. It should be based on practice needs and use problem based learning techniques, starting from the experiences of the physician and focus on practice performance. It should be included in all parts and aspects of medical education, rather than as a separate part.

The proposed content of education should be divided according to learning outcomes:

1. Knowledge:

- a. Definition of QI (simple for medical students, more complex for GP/FD trainees)
- b. Basics (measurement, theory, feedback, audit, risk management, patient safety)
- c. Methods and tools e.g. skills, critical incident investigation
- d. Ethics/legislation
- e. National organisations/programmes
- f. Sources of Information e.g. guidelines, EBM
- g. ITC
- h. Patient role in QI
- i. Care for your own health
- j. Take the lead in changing quality

2. Skills:

- a. Assess own performance in the practice e.g. (a) clinical review; (b) interpersonal skills for example patient satisfaction questionnaire
- b. Interpret feedback from others on performance
- c. Develop/design/implement an improvement plan
- d. Critically evaluate literature
- e. Create a strategy to incorporate new knowledge & procedures into practice
- f. Manage to work and communicate effectively in a multidisciplinary team
- g. Create a system for patient safety
- h. Analyze critical incidents
- i. Involve patients in QI
- j. Participate in quality circles/peer review groups
- k. Evaluate the equity of his own care and provide just and equal care

3. Attitudes:

- a. Awareness of knowledge gaps
- b. Commitment to lifelong learning in QI/CME
- c. Commitment to continuous QI

The ultimate goal of teaching quality should be to teach doctors that they have an important responsibility to deliver high quality of care and to give them the tools to realize this.

5.1 Summary in Slovenian language

Uvod

Namen projekta Leonardo da Vinci »Inovativno vseživljenjsko učenje evropskih zdravnikov družinske medicine (DM) za izboljšanje kakovosti (IK) s pomočjo informacijske tehnologije« je izboljšati obstoječe programe usposabljanja za zdravnike in učitelje družinske medicine na

področju IK z izvajanjem novih inovativnih didaktičnih orodij in metod v obstoječih izobraževalnih sistemih v Evropi s pomočjo informacijske tehnologije (IT).

Cilji

Cilj tega poročila je zagotoviti pregled trenutne situacije kakovosti poučevanja v učnih načrtih evropskih medicinskih fakultet in oblikovati splošna priporočila ter predlog Evropskega učnega načrta za izboljšanje kakovosti na podlagi analize obstoječih okvirov za izboljšanje kakovosti in kakovost poučevanja. Ker je Evropsko združenje za kakovost v družinski medicini (EQuIP) osredotočeno na primarno oskrbo, to poročilo obsega le področje družinske medicine.

Trenutne razmere

V zadnjih desetletjih prejšnjega stoletja smo spoznali, da izidi klinične oskrbe niso odvisni le od kliničnega znanja in usposobljenosti zdravnikov, ampak tudi od zdravnikovih veščin, kot je na primer sposobnost spremljanja stalnega toka novih informacij in podatkov, ki se stalno spreminjajo. Vedno več je dokazov, da dobro kakovost oskrbe v veliki meri določa organizacija, ki to oskrbo nudi. To pomeni, da mora biti dandanašnji zdravnik ali zdravnica sposoben razmišljati o sistemu, v katerem nudi oskrbo in prevzeti odgovornost organizacije, v kateri dela, za zagotavljanje kakovostne oskrbe.

Ta premik v razmišljanju o kakovosti oskrbe ima pomembne posledice za programe zdravstvenega izobraževanja, saj to pomeni, da je treba študente usposabljanje za nove in dodatne veščine. Kakovost oskrbe dobiva vedno pomembnejše mesto v programih zdravstvenega usposabljanja. Primeri tega so vzpostavitev kazalnikov uspešnosti, standardi akreditacije in sistemov vodenja varnosti. Študenti medicine na najvišjih stopnjah izobraževanja pogosto slišijo o številnih kompetencah, potrebnih za stalno izboljšanje kakovosti oskrbe, vendar pa te kompetence niso predstavljene na strukturiran način in zato nezadostno zastopane v trenutnem učnem načrtu usposabljanja. V večini evropskih držav je

stalno izobraževanje na področju medicine (CME) strukturirano v okviru zdravstvenega izobraževanja namesto izboljšanja uspešnosti. Obstoječa priporočila EURACT-a in EQuIP-a za razvoj v smeri sistemov stalnega poklicnega razvoja (CPD), ki temelji na praksi/tehnika učenja na podlagi ugotovljenih težav v oskrbi, še niso izvedena. Še vedno ni splošnega gibanja ali strategije, obstoječi ukrepi pa so omejeni na ozko usmerjene posamične pobude posameznikov ali univerz.

Na podlagi rezultatov raziskave EQuIP-a je kakovost poučevanja vključena v vsaj polovici evropskih držav. Izbrane teme o kakovosti so vključene zlasti v specialistično izobraževanje in v CME/CPD. Vse izbrane teme so vključene vsaj v nekaterih evropskih državah na vsaj eni ravni izobraževanja. Vendar pa obstajajo mnoge razlike pri vključitvi posameznih tem. V okviru naše raziskave smo ugotovili, da poučevanje in učitelji dajejo poudarek reaktivni kakovosti (analiza pomembnih dogodkov), v učne načrte pa je manj vključeno proaktivno zagotavljanje kakovosti z uvedbo sistemov samoizobraževanja in projektnega vodenja (na primer strategija Načrtuj - Izvedi - Preveri – Ukrepaj (PDCA)), ki običajno ne šteje kot prednostna naloga.

Vloga EQuIP-a

V okviru skupine EQuIP je bilo ugotovljeno, da usposabljanje na temo poznavanja kakovosti še ni povsod uvedeno, predhodna analiza dejanskega stanja pa kaže, da je še veliko prostora za izboljšave, ki so nujne. Leta 2008 je bila v Bukarešti vzpostavljena delovna skupina s ciljem izdelave splošnega stališča o tem, kaj bi bilo treba poučevati (vsebina) in razvoja strategije (kaj, kdaj, kje in kako), ki bo omogočila vključitev zagotavljanja kakovosti v učni načrt študentov medicine in v poklicno izobraževanje. Poleg tega želi podpreti CME in CPD na teh področjih.

Okviri

V zadnjih dvajsetih letih je bilo v ZDA in v Evropi razvitih več publikacij in modelov na temo izboljšanja kakovosti. Dva od teh obravnavata zasnovo zdravstvenega sistema. V dokumentu iz leta 2001 z naslovom »Crossing the quality chasm: a new health system for the 21th

century« je bilo izoblikovanih šest glavnih vidikov kakovosti: varnost bolnikov, uspešnost, osredotočenost na bolnika, pravočasnost, učinkovitost in pravičnost. Drugi tak okvir, imenovan Bellagiov model, izpostavlja devet bistvenih lastnosti za kakovostno (kronično) oskrbo: vodstvo, zaupanje javnosti (odgovornost in preglednost), vodenje usmerjeno v populacijo, vertikalno in horizontalno vključevanje, mreženje strokovnjakov, infrastruktura (medicina na podlagi dokazov – EBM), IT, vodenje bolezni, samooskrba bolnikov), plačila, standardizirane meritve in aktiven program sprememb. Nekateri drugi modeli obravnavajo poučevanje IK in CME/CPD. Okvir CanMEDS iz leta 2005 opisuje šest kompetenc: medicinski strokovnjak, komunikator, sodelavec, vodja, zagovornik zdravja, znanstvenik in profesionallec. Okvir ACGME iz leta 2007 opisuje šest glavnih kompetenc za študente medicine: oskrba bolnikov, medicinsko znanje, praktično učenje in izboljšave, medosebne in komunikacijske veščine, profesionalnost in sistemska praksa. Institute of Medicine (IOM) je leta 2009 objavil poročilo z naslovom »Redesigning Continuing Education (CE) in the health profession«. Leta 2002 sta EURACT in EQuIP objavila Politiko z naslovom »Continuing Professional Development Integration of Formal CME and Quality Improvement Initiatives«. Navaja, da so potrebni široko opredeljeni ukrepi na podlagi strategij, ki krepijo in omogočajo prakso.

Sklepi in priporočila

Dokument Evropska definicija družinske medicine (European definition of Family Medicine), ki ga je leta 2005 pripravila WONCA, opisuje sposobnost zagotavljanja kakovosti kot eno ključnih kompetenc zdravnikov družinske medicine. Izobraževalni program EURACT-a iz leta 2005, ki temelji na dokumentu Evropski definiciji družinske medicine, priznava, da je zagotavljanje kakovosti pomemben in bistven del zdravstvenega izobraževanja. Vendar pa je dejansko stanje v Evropi na področju poučevanja precej drugačno. V Evropi so države, ki te

teme nimajo vključene v svoje učne načrte. Prav tako ni sistematične vključitve IK v učni načrt v evropskih državah oziroma soglasja, celo med strokovnjaki na področju IK in poučevanja, o tem, katere teme bi bilo treba vključiti, kako in kaj je pomen teh tem.

Na podlagi pregleda literature, presečne raziskave in strokovnih mnenj strokovnjakov za IK in poučevanje, mora biti izboljšanje kakovosti sestavni del medicinskega učnega načrta, prav tako pa je treba razširiti tradicionalen poudarek na poučevanju medicinskega znanja o boleznih. Treba je vključiti varnost, izboljšanje kakovosti in upravljanje kakovosti. Vseživljenjsko učenje zdravstvenih delavcev se izvaja v obliki stalnega poklicnega razvoja in ne stalnega medicinskega izobraževanja. Temeljiti mora na praktičnih potrebah in uporabi tehnik učenja, ki temeljijo na praksi in izkušnjah zdravnika ter so osredotočene na praktično delo. Namesto posamezne obravnave bi bilo treba to vključiti v vse dele in vidike medicinskega izobraževanja.

Predlagana vsebina izobraževanja bi morala biti razdeljena glede na rezultate učenja:

1. Znanja:

- a. Opredelitev IK (enostavna za študente medicine, zahtevnejša za splošne zdravnike pripravnike)
- b. Osnove (merjenje, teorija, povratne informacije, revizija, upravljanje tveganj, varnost bolnikov)
- c. Metode in orodja, npr. veščine, kritična preiskava incidentov
- d. Etika/zakonodaja
- e. Nacionalne organizacije/programi
- f. Viri informacij, npr. navodila, EBM
- g. ITK
- h. Vloga bolnika v IK
- i. Skrb za lastno zdravje
- j. Prevzemanje pobude pri spreminjanju kakovosti

2. Veščine:

- a. Ocenjevanje lastne uspešnosti v praksi, npr. (a) klinični pregled; (b) medosebni odnosi, na primer vprašalnik o zadovoljstvu bolnikov
- b. Razlaga povratnih informacij drugih o uspešnosti
- c. Razvoj/zasnova/izvedba načrta izboljšav
- d. Kritično ovrednotenje literature
- e. Priprava strategije za vključitev novih znanj in postopkov v prakso
- f. Upravljanje dela in učinkovita komunikacija v multidisciplinarnih skupinah
- g. Vzpostavitev sistema za varnost bolnikov
- h. Analiza kritičnih incidentov
- i. Vključevanje bolnikov v IK
- j. Sodelovanje v krogih kakovosti/skupinah za medsebojne preglede
- k. Ocenjevanje pravičnosti lastne oskrbe ter zagotavljanje poštene in enakopravne oskrbe.

3. Odnosi:

- a. Zavedanje vrzeli v znanju
- b. Zavezanost k vseživljenjskemu učenju na področju IK/CME
- c. Zavezanost k stalnemu IK

Najpomembnejši cilj kakovosti poučevanja mora biti naučiti zdravnike, da imajo pomembno odgovornost za zagotavljanje visokokakovostne oskrbe in jim dati orodja, s katerimi bo to mogoče doseči.

5.2 Summary in Czech language

Úvod

Projekt Leonardo da Vinci “Celoživotní vzdělávání praktických lékařů (PL) v Evropě v oblasti zvyšování kvality za podpory informačních technologií” si klade za cíl zlepšit existující vzdělávací programy jak pro PL, tak i pro učitele praktického lékařství v oblasti zvyšování kvality pomocí inovačních didaktických pomůcek a metod v existujících edukačních systémech v Evropě za podpory informačních technologií a internetu.

Cíl

Cílem této zprávy je poskytnout přehled o současné kvalitě medicínského vzdělávání v Evropě a formulovat všeobecná doporučení a návrhy pro evropské curriculum v oblasti zvyšování kvality, a to na základě analýzy existujících systémů zvyšování kvality a kvality vzdělávání. Vzhledem k tomu, že Evropská asociace pro kvalitu v praktickém/rodinném lékařství (European Association for Quality in General Practice/Family Medicine (EQuiP) se zaměřuje na primární péči, zaměřuje se tato zpráva na praktické/rodinné lékařství.

Současná situace

V posledních desetiletích 20. století jsme si začali uvědomovat, že výsledky klinické péče nezáleží jen na klinických vědomostech a vzdělání lékařů, ale i na jiných dovednostech jako je schopnost vypořádat se s neustálým přísunem nových informací a měnící se skutečností. Je stále víc než zřejmé, že dobrá kvalita péče je ve velké míře závislá na organizaci, ve které je péče poskytována. To znamená, že dnešní lékař musí být schopen brát v úvahu systém, ve kterém péči poskytuje a musí poskytovat kvalitní péči s vědomím zodpovědnosti za svou organizaci.

Tento posun v myšlení o kvalitě péče má důležité důsledky pro lékařské vzdělávací programy, neboť to znamená, že studenti musí být vzděláváni v nových dovednostech a kompetencích. Kvalita péče zaujímá stále důležitější místo v lékařské agendě. Příkladem je vytvoření indikátorů výkonu, akreditační standardy a také systémy řízení bezpečnosti. Pro dosažení vysoké úrovně studentů medicíny je často zmiňována potřeba čtých kompetencí, které jsou nutné pro neustálé zvyšování kvality péče. Ale těmto kompetencím se současné vzdělávací osnovy dostatečně nevěnují. Ve většině evropských zemí je celoživotní medicínské vzdělávání strukturováno jako zdravotnické vzdělávání, místo toho, aby se zaměřilo na zlepšování výkonu. Existující EURACT a EQuiP doporučení pro vývoj systému celoživotního profesionálního vzdělávání založeného na učebních technikách a vycházejících přímo z problému/praxe však zatím nebyly zavedeny. Stále ještě neexistuje ucelená tendence

nebo strategie a existující aktivity jsou převážně detailní a izolované iniciativy jednotlivců nebo univerzit.

Podle výsledků šetření EQuIP, je téma kvality zahrnuto do výuky přinejmenším v polovině evropských zemí. Vybraná témata kvality jsou obsažena hlavně v odborném vzdělávání a také v celoživotním medicínském a profesionálním vzdělávání. Všechna témata jsou obsažena alespoň v některých evropských zemích na alespoň jedné vzdělávací úrovni. Ale existuje mnoho rozdílů z pohledu zařazení jednotlivých témat. Často vidíme v naší studii, že výuka a vyučující kladou důraz na reaktivní kvalitu (analýza kritických případů). Ale proaktivní zajištění kvality zavedením adaptivních systémů a řízení projektů jsou v osnovách méně zastoupeny a není na ně pohlíženo jako na důležité priority.

Role EQuIP

V rámci skupiny EQuIP existuje dojem, že vědomosti a znalosti o kvalitě nejsou stále ještě všude vyučovány a předběžná analýza toho, co se ve skutečnosti děje, ukazuje, že mnohá zlepšení jsou možná a naléhavá.

V Bukurešti v roce 2008 byla ustanovena pracovní skupina s cílem vypracovat společný pohled na to, co by se mělo přednášet (obsah) a vytvořit strategii (co, kdy, kde a jak) k zajištění integrování kvality do osnov pro studenty medicíny a pro odborné vzdělávání. Je také snaha podporovat celoživotní vzdělávání lékařů a celoživotní profesní vzdělávání v této oblasti.

Systémy

V posledních dvaceti letech vznikla v USA a Evropě řada publikací a modelů na zlepšování kvality ve zdravotní péči. Dva z nich se zabývají designem zdravotnického systému. V dokumentu nazvaném Překročení propasti kvality: nový zdravotnický systém pro 21. století bylo formulováno šest hlavních aspektů kvality péče: bezpečí pacientů, efektivita, zaměření na pacienta, včasnost, výkonnost a spravedlivost. Jiný systém nazvaný Bellagio model,

představuje devět základních rysů kvalitativní (chronické) péče: schopnost vést, důvěra veřejnosti (odpovědnost a transparentnost), řízení orientované na populaci, vertikální a horizontální integrace, zapojení do sítě profesionálů, infrastruktura (evidence-based medicine EBM, IT, management nemoci, samospráva pacientů), mix platba, standardizované měření a aktivní program změny. Některé z dalších modelů pojednávají o výuce zvyšování kvality a o celoživotním vzdělávání lékařů a profesionálů.

CanMEDS systém z roku 2005 popisuje šest kompetencí: medicínský odborník, komunikátor, manažer, obhájce zdravotníků, vědec, a odborník. Systém ACGME z roku 2007 popisuje šest hlavních kompetencí pro studenty medicíny: péče o pacienty, medicínské znalosti, učení a zdokonalování prostřednictvím praxe, interpersonální a komunikační schopnosti, praxe založená na profesionalitě a systému. Institut medicíny (The Institute of Medicine (IOM)) publikoval v roce 2009 zprávu nazvanou Nový návrh celoživotního vzdělávání pro zdravotníky. V roce 2002, EURACT a EQuIP vydaly dokument nazvaný “Integrace formálního celoživotního vzdělávání lékařů a iniciativy zvyšování kvality do celoživotního profesionálního rozvoje”. Konstatuje se v něm, že široce definované intervence využívající praktické a posilující strategie, jsou potřebné.

Závěry a doporučení

Evropská definice praktického/rodinného lékařství, dokument vytvořený WONCA v roce 2005, popisuje schopnost zajištění kvality praktickými lékaři jako jejich hlavní kompetenci. Stejně tak vzdělávací agenda EURACT z roku 2005, která vychází z evropské definice praktického lékařství, chápe zajištění kvality jako důležitou a zásadní část medicínského vzdělávání. Nicméně skutečná situace v Evropě v oblasti výuky kvality je jiná. Existují země v Evropě, které nemají toto téma jako součást svých osnov. Také neexistuje systematické zařazování zvyšování kvality do osnov v evropských zemích a neexistuje dokonce mezi odborníky na zvyšování kvality a odborníky na vzdělávání shoda v tom, která témata zvyšování kvality by měla být zahrnuta a jakou důležitost tato témata mají.

Na základě odborné literatury, šetření a názorů odborníků a přednášejících v oblasti zvyšování kvality, musí být zvyšování kvality zásadní součástí medicínských osnov a tradiční důraz na výuku medicínských znalostí o nemocech musí být rozšířen. Znalosti o bezpečí, zvyšování kvality a řízení kvality musí být zahrnuto. Celoživotní vzdělávání zdravotníků je prováděno nepřetržitým profesionálním rozvojem spíše než neustálým vzděláváním v medicíně. Mělo by vycházet z potřeb praxe a používat učební techniky založené na daném problému, vycházet ze zkušeností lékařů a zaměřovat se na praktické výkony. Mělo by být zahrnuto ve všech aspektech medicínského vzdělávání spíše než jen v jeho oddělených částech. Navrhovaný obsah vzdělávání by měl být rozdělen podle výsledků výuky:

1. Znalosti:

- a. Definice zvyšování kvality (jednoduše pro studenty medicíny, více komplexně pro studenty praktického lékařství)
- b. Základy (měření, teorie, zpětná vazba, audit, řízení rizik, bezpečí pacientů)
- c. Metody a nástroje, např. dovednosti, vyšetření kritických příhod
- d. Etika/legislativa
- e. Národní organizace/programy
- f. Zdroje informací, např. doporučené postupy, Evidence Based Medicine
- g. ITC
- h. Úloha pacientů při zvyšování kvality
- i. Péče o své vlastní zdraví
- j. Převzetí řízení při změně kvality

2. Dovednosti:

- a. Vyhodnotit vlastní výkon v praxi, např. (a) klinický přehled; (b) interpersonální dovednosti, např. dotazník spokojenosti pacientů
- b. Interpretovat zpětnou vazbu od jiných na výkon
- c. Navrhnout/připravit/zavést plán na zlepšení
- d. Kritické hodnocení literatury
- e. Vytvořit strategii na začlenění nových znalostí a postupů do praxe
- f. Být schopen pracovat a komunikovat efektivně v multidisciplinárním týmu
- g. Vytvořit systém pro bezpečí pacientů
- h. Analyzovat kritické příhody
- i. Zapojit pacienty do zvyšování kvality

- j. Účastnit se v kruzích kvality/peer review skupinách
- k. Vyhodnocovat poctivost své vlastní péče a poskytovat správnou a spravedlivou péči

3. Postoje:

- a. Vědomí vlastních nedostatků ve vědomostech
- b. Vědomí potřeby celoživotního vzdělávání v oblasti zvyšování kvality /nepřetržitého vzdělávání v medicíně
- c. Vědomí potřeby neustálého zvyšování kvality

Konečným cílem výuky kvality by mělo být naučit lékaře, že mají důležitou zodpovědnost za poskytování vysoce kvalitní péče a dát jim nástroje k její realizaci.

5.3. Summary in Polish language.

Wstęp

Celem projektu Leonardo da Vinci realizowanego w ramach programu Lifelong learning pn. „Innowacyjne kształcenie ustawiczne europejskiej społeczności lekarzy rodzinnych w zakresie poprawy jakości praktyk lekarskich, z zastosowaniem nowoczesnych technologii informatycznych” (ang. “Innovative lifelong learning of European General Physicians (GPs) in Quality Improvement (QI) supported by information technology”) jest poprawa istniejących **programów nauczania i treści szkoleniowych zarówno dla lekarzy rodzinnych (LR) jak i nauczycieli medycyny rodzinnej w dziedzinie poprawy jakości (ang. *Quality Improvement – QI*) praktyk lekarskich poprzez wdrażanie nowych innowacyjnych narzędzi oraz metod dydaktycznych w istniejące systemy kształcenia ustawicznego w Europie przy wykorzystaniu wsparcia nowoczesnych technologii komputerowych i Internetu.**

Cele

Celem niniejszego raportu jest przegląd aktualnej sytuacji w dziedzinie nauczania tematyki jakościowej na studiach medycznym w Europie i sformułowanie generalnych zaleceń i

wniosków dotyczących europejskiego programu nauczania, w oparciu o analizę istniejących warunków ramowych dla poprawy jakości i nauczania jakości. Ponieważ 'Europejskie Stowarzyszenie na Rzecz Jakości w Praktyce Lekarza Rodzinnego / Medycynie Rodzinnej' (EQuIP) koncentruje się głównie na podstawowej opiece zdrowotnej, zakres sprawozdania obejmuje jedynie opiekę podstawową/medycynę rodzinną.

Obecna sytuacja

Ostatnie lata ubiegłego wieku uświadomiły, że wyniki opieki medycznej nie zależą jedynie od wiedzy klinicznej lekarzy i systemów kształcenia przyszłych doktorów, ale także od ich umiejętności, tj. zdolność radzenia sobie ze stałym napływem informacji czy zmieniającą się wiedzą oraz wynikami z nowych badań naukowych. Istnieje coraz więcej dowodów na to, że wysoka jakość opieki zdrowotnej w dużej mierze zależy od organizacji tejże opieki i sposobu jej dostarczania. Oznacza to, że w dzisiejszych czasach lekarz musi wziąć pod uwagę zarówno sposób funkcjonowania systemu w ramach, którego dostarcza opiekę, jak również przyjąć na siebie odpowiedzialność za organizację własnej praktyki i wysoki poziom jakości świadczonej opieki.

Ta zmiana w myśleniu nt. jakości opieki ma ważne konsekwencje dla medycznych programów kształcenia, ponieważ oznacza, nowe, dodatkowe umiejętności i kwalifikacje w tym zakresie, których nauczanie powinno objąć przyszłych lekarzy. Zagadnienia dotyczące jakości opieki zajmują też coraz ważniejsze miejsce w programach medycznych. Przykładem tego jest ustanowienie wskaźników wydajności, standardów akredytacyjnych, a także systemów zarządzania bezpieczeństwem.

W obecnej chwili programy nauczania zawierają liczne kompetencje z zakresu QI jakie powinien nabyć lekarz rodzinny w trakcie swojej edukacji. W rzeczywistości edukacja w omawianym zakresie nie jest efektywnie realizowana, a zagadnienia poprawy jakości pozostają jedynie wzmiankowane. W większości krajów europejskich, kształcenie ustawiczne (CME, ang. *continuing medical education*) nakierowane jest na poprawę wiedzy oraz umiejętności i to głównie w obszarach medycyny klinicznej, a nie dotyczy poprawy rzeczywistych działań podejmowanych w praktyce przez lekarzy rodzinnych.

Istniejące zalecenia wydane przez EURACT i EQuIP w zakresie rozwoju systemów ustawicznego kształcenia zawodowego (CPD, ang. Continuous Professional Development) bazujące na technikach nauczania w oparciu o problem i praktykę nie zostały jeszcze wdrożone. Nadal nie ma generalnego ruchu lub strategii w tym zakresie, a obecne działania są przeważnie sporadyczne i mają charakter inicjatyw odizolowanych od osób indywidualnych czy jednostek uniwersyteckich.

Zgodnie z wynikami badań prowadzonymi przez EQuIP, kursy poświęcone tematowi poprawy jakości są obecne, w co najmniej połowie krajów europejskich. Wybrane najważniejsze zagadnienia dotyczące nauczania jakości są obecne w głównej mierze w ramach kształcenia zawodowego a także w CME/CPD. Wszystkie wybrane tematy są realizowane w co najmniej kilku europejskich krajach na co najmniej jednym poziomie edukacyjnym. Istnieje jednakże rozbieżność zauważalna w implikacji poszczególnych tematów. Wniosek wynikający z naszych badań, stanowi, że nauczanie i nauczyciele kładą głównie uwagę na doraźne modyfikowanie opieki, natomiast aktywne systemy zapewniania jakości oparte na metodzie »cyklu poprawy jakości« (strategia Plan-Do-Check-Act, pol. Zaplanuj - Wykonaj - Sprawdź - Zadziałaj) nie są postrzegane jako zagadnienia priorytetowe.

Rola EQuIP

W organizacji EQuIP ważne jest przekonaniem, że wiedza na temat nauczania jakości jest niewystarczająca. Analizy dotyczące obecnego stanu rzeczy pokazują nam, że poprawa jakości nauczania jest ważna i możliwa do zrealizowania. W 2008 roku w Bukareszcie powołana została grupa robocza, której celem jest dążenie do określenia wspólnego zdania, co do tego, czego należy uczyć (treść) oraz jak wprowadzać opracowywane strategie (co? gdzie? i w jaki sposób?). Zadaniem grupy jest agitowanie w sprawie poprawy jakości nauczania i włączenie tematów jakościowych w obecne programy nauczania studentów oraz implikowanie ich w systemy szkoleń zawodowych. Grupa ta za cel obrała sobie także wspieranie CME oraz programy CPD.

Matryca

Na przestrzeni ostatnich dwudziestu lat, w USA i w Europie ukazało się kilka ważnych publikacji i modeli traktujących o poprawie jakości opieki zdrowotnej. Dwa z nich dotyczą projektowania systemu opieki zdrowotnej. W dokumencie z 2001 roku zatytułowanym 'Crossing the quality chasm: a new health system for the 21th century' zostało sformułowanych sześć najważniejszych aspektów dotyczących jakości w opiece zdrowotnej: bezpieczeństwo pacjentów, skuteczność, zorientowanie na pacjenta, terminowość, skuteczność oraz sprawiedliwość. Drugi z dokumentów uwzględniający matrycę, zwany także modelem Bellagio omawia dziewięć podstawowych cech jakości opieki zdrowotnej. Są to: przywództwo, zaufanie publiczne (odpowiedzialność i przejrzystość), zarządzanie zorientowane na pacjentów, pozioma i pionowa integracja sektorów, sieć specjalistów, infrastruktura medycyna oparta na dowodach <<EBM – ang. evidence-based medicine>>, IT, zarządzanie chorobą, samokontrola), mieszane finansowanie, standaryzacja pomiarów oraz aktywny program zmian. Część pozostałych modeli zajmuje się nauczaniem QI oraz CME/CPD. W dokumencie CanMEDS z 2005 roku wymienione zostało 6 kompetencji: ekspert medyczny, sprawnie komunikujący się profesjonalista, członek zespołu, rzecznik zdrowia pacjenta, uczony oraz profesjonalista. Dokument ACGME z 2007 roku opisuje sześć głównych kompetencji dla studentów medycyny: opieka nad pacjentem, wiedza medyczna, kształcenie się i rozwój oparty na praktyce, zdolności komunikacyjne i interpersonalne, profesjonalizm oraz praktyka oparta na rozwiązaniach systemowych. Instytut Medycyny (IOM) opublikował w 2009 roku raport pt. „Przeprojektowanie kształcenia ustawicznego (CE) w zawodach związanych z opieką zdrowotną”. EURACT i EQuIP opublikowały w 2002 roku dokument pt. „Ciągły rozwój zawodowy. Integracja formalnego ustawicznego kształcenia medycznego oraz inicjatyw poprawiających jakość”. Zawarte jest w nim stwierdzenie o zapotrzebowaniu na szeroko pojęte interwencje z wykorzystaniem strategii wspierających oraz umożliwiających praktykę.

Konkluzje i zalecenia

„Europejska definicja medycyny rodzinnej” dokument wydany przez WONCA w 2005, wymienia umiejętność zapewnienia jakości jako jedną z kluczowych kompetencji lekarzy rodzinnych. Również wydany przez EURACT program edukacyjny z 2005 r. oparty na

„Europejskiej definicji medycyny rodzinnej”, uznaje zapewnienie jakości za ważny i kluczowy element wykształcenia medycznego. Pomimo tego rzeczywista sytuacja w dziedzinie nauczania jakości w Europie jest inna. W części krajów europejskich omawiana tematyka nie została włączona do programu nauczania. Nie ma nawet porozumienia pomiędzy ekspertami w dziedzinie QI oraz w nauczaniu odnośnie tego, które tematy związane z QI powinny być włączone, jak to zrobić oraz jaka jest waga tych tematów.

W oparciu o przegląd literatury, badania przekrojowe oraz profesjonalne opinie ekspertów QI oraz nauczania można wysnuć wniosek, że poprawa jakości musi być zasadniczym elementem programu nauczania medycznego a tradycyjny nacisk położony na nauczanie wiedzy medycznej o chorobach powinien być zwiększony. Należy wprowadzić nauczanie z dziedzin wiedzy o bezpieczeństwie, zarządzania jakością i jej poprawie. Kształcenie ustawiczne pracowników opieki zdrowotnej odbywa się w większym stopniu przez nieprzerwany rozwój zawodowy niż ciągłą edukację medyczną. Powinno się ono opierać na praktycznym zapotrzebowaniu oraz wykorzystywać techniki nauczania problemowego, wychodząc od doświadczeń lekarza i skupiając się na działaniu w praktyce. Należy je włączyć w każdą dziedzinę i aspekt edukacji medycznej, zamiast traktować ją jak oddzielną część.

Proponowane treści kształcenia powinny być podzielone według wyników nauczania:

4. Wiedza:

- a. Definicja „poprawa jakości” (nieskomplikowana dla studentów medycyny, bardziej złożona dla stażystów medycyny rodzinnej)
- b. Podstawowa wiedza (nt. pomiaru, teorii, opinii zwrotnej, audytu, zarządzania ryzykiem, bezpieczeństwa pacjentów)
- c. Metody i narzędzia np. umiejętności, śledzenie krytycznych incydentów
- d. Etyka / prawo
- e. Krajowe organizacje / programy
- f. Źródła informacji np. wytyczne, EBM
- g. ITC
- h. Rola pacjenta w zakresie poprawy jakości
- i. Troska o własne zdrowie
- j. Odgrywanie wiodącej rolę w procesie zmiany jakości

5. Umiejętności:

- a. Oceny własnych wyników w praktyce np. (a) przegląd kliniczny; (b) umiejętności interpersonalne, na przykład ankieta satysfakcji pacjenta
- b. Interpretowania opinii innych na temat wyników działalności praktyki i wydajności
- c. Opracowania / projektowania / wdrożenia planu poprawy
- d. Krytycznej ocena literatury
- e. Tworzenia strategii wprowadzenia nowych procedur i wiedzy w praktyce
- f. Zarządzanie pracą i skutecznego komunikowania się w interdyscyplinarnym zespole
- g. Tworzenia systemu bezpieczeństwa pacjenta
- h. Analizy zdarzeń krytycznych
- i. Zaangażowania pacjenta w proces poprawy jakości
- j. Udziału w pracach "kół jakości" / „grup rówieśniczo-koleżeńskich" (ang. peer review groups)
- k. Oceny równości dostarczanej opieki i zapewnienia równego i sprawiedliwego dostępu do świadczonych usług

6. Postawa:

- a. Świadomość luk kompetencyjnych i braków wiedzy
- b. Zaangażowanie na rzecz kształcenia ustawicznego w zakresie poprawy jakości/CME
- c. Dążenie do ciągłej poprawy jakości

Ostatecznym celem nauczania problematyki jakości w opiece podstawowej powinno być uczenie lekarzy, tego że to oni odgrywają istotną rolę w zapewnianiu wysokiej jakości opieki oraz zapewnienie im narzędzi niezbędnych do realizacji tego przesłania.

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