

RESEARCH LETTER

A 'minimal core curriculum' for Family Medicine in undergraduate medical education: A European Delphi survey among EURACT representatives

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Abstract

Background: Family Medicine/General Practice (FM/GP) has not developed in a similar way worldwide. In countries that are not primary care oriented, the discipline of FM/GP may be less developed because this is not a career option for medical graduates. In such a situation, FM/GP will not be regarded as a required clinical experience during medical school. **Objectives:** To define the 'minimal requirements' or 'minimal core content' for a clerkship in FM/GP of very short duration, i.e. a basic curriculum for a clinical rotation in FM/GP, taking into account that in some European countries the time allocated for this rotation may not exceed one week. **Method:** The Delphi method was used. The study group was composed of 40 family physicians and medical educators who act as national representatives of all European countries—plus Israel—in the Council of the European Academy of Teachers in General Practice and Family Medicine (EURACT). The representatives are elected among the EURACT members in their country. **Results:** After three Delphi rounds we obtained a consensual list of 15 themes regarded by the respondents as the most important to be included in a minimal core curriculum for FM/GP in undergraduate medical education.

Conclusion: This list may be useful for teachers and institutions that are about to introduce GP/FM as a new topic in their medical faculty, having only limited time available for the course. They will be able to focus on topics chosen by a European expert panel as being the most important in such a situation.

Key words: *Delphi process, core curriculum, Family Medicine, General Practice, Europe*

Introduction

Disciplines are born out of necessity. Family Medicine/General Practice (FM/GP), as an academic discipline, was born from the necessity to deal with the fragmentation of patient care created by specialization and sub-specialization (1). However, despite the start of FM/GP as an academic discipline over half

a century ago, it has not developed in a similar way worldwide. In countries not primary care oriented, the discipline of FM/GP may be less developed because this is not a career option. The reasons influencing a career choice either towards or away from primary care include institutional, legislative and market pressures (2–4).

In countries where FM/GP is less a career option, it will not be regarded as a required clinical experience during medical school. Even in countries where a FM/GP clerkship (undergraduate rotation) has been implemented, there is no standardization in terms of time, length and content of this rotation, which may vary remarkably between medical schools inside one country and between countries.

For this reason, the Basic Medical Education Committee of the European Academy of Teachers in General Practice and Family Medicine (EURACT) (5) has undertaken the task of defining a basic curriculum for a clinical rotation in FM/GP, taking into account that in some of the European countries the time allocated to this rotation may not exceed one week. This complements EURACT's checklist for organizing a clerkship/attachment in FM/GP (6).

Similar efforts were undertaken elsewhere. Owing to differences in curriculum between medical schools in the US, the Society of Teachers in Family Medicine took on the task to create a national core family medicine clerkship curriculum (7). This gave birth to the Family Medicine Clerkship Core Content Curriculum. The Family Medicine Curriculum Resource Project undertook another very extensive project for the development of a common curriculum for undergraduate training in family medicine in the US (8). In Israel, a Delphi study was performed with the objective of developing a national-scale proposal of teaching objectives for the GP/FM clerkship in medical school (9). Other articles suggesting objectives and curricular changes have been published on the theme, mostly by various advisory panels (10–12).

It is obvious that the objectives delineated in these studies cannot be reached if the length of the clerkship is only one week. Therefore, it is important to look for the 'minimal requirements' or 'minimal core content' for a clerkship of very short duration, and this has been the objective of the present study.

Methods

Study design

The Delphi method was used. The Delphi method is a survey technique that enables anonymous, systematic refinement of expert opinion with the aim of arriving at a combined or consensual position (13). This technique offers several benefits that includes the use of an expert panel, controlled anonymous feedback, with less pressure on panel members to conform than in a committee, and an easy, inexpensive access to a large number of experts who may be geographically distant (using e-mail) (14–16).

Participants were approached via e-mail with the following question: 'If you had a limited time to deliver a Family Medicine/General Practice clerkship (clinical rotation during medical school studies), which are the 15 issues you suggest as a must to teach during this rotation?' This initial round was used to generate a basic list. The aim of the two subsequent rounds was to clarify, refine, and facilitate the emergence of consensus. The process started in November 2009 and it was completed in April 2010.

Participants (respondent group)

The study group involved in medical education was composed of 40 family physicians, who act as national representatives of all European countries—plus Israel—in the Council of EURACT. The representatives are elected among the EURACT members in their country. EURACT was launched in March, 1992 as the European educational wing and network organization of Wonca (World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians). EURACT's overall aim is 'to foster and maintain high standards of care in European general practice by promoting general practice as a discipline by learning and teaching'. It gives structured support to organizations and individuals at all levels of teaching: undergraduate specific training, continual medical education and higher professional education in general practice.

Results

The first questionnaire was sent to all 40 Council members. 24 members responded (60% response rate). The first-round participants proposed a total of 360 suggestions. The researchers refined this list by grouping similar answers into themes and deleting repetitions. A list of 87 themes was generated in this way.

In the second round, all Council members were asked to choose the 15 most important themes from the list of 87, and 27 (68%) responded. In this new list, 14 themes received the 14 leading places and three themes shared the same ranking in position 15 (Table I).

In a third and final round, all Council members were asked to choose the theme for position 15. In this round, 20 participants (50%) answered, and theme number 15 was selected for position 15 (Table I).

The researchers did not collect reasons for non-responding. Reminders were sent to non-respondents. However, this did not much improve the response rate.

Table I. The final 15 themes emerging from the Delphi process^a.

Rank	Votes	Themes
1	26	Introduction to FM/GP as a specific medical discipline. Principles of Family Medicine: Continuity, comprehensiveness, coordination of care.
2	21	Holistic approach. Bio-psycho-social model
3	20	Management of diseases at early, undifferentiated stage. Dealing with uncertainty.
4	17	Communication skills: with patient, with patient's relatives, and with 'difficult' patients.
5	17	Management of multiple health problems, identifying priorities.
6	17	Decision making based on prevalence and incidence of target.
7	17	Prevention and health promotion, patient education.
8	16	Patient-centeredness.
9	16	Consulting skills—stages of a consultation.
10	15	Chronic care, management of chronic diseases and health problems, diabetes/hypertension/chronic ischaemic heart disease/obesity
11	14	The family as a source of disease and resource of care; family context; genograms; family life cycle.
12	13	The specific characteristics of healthcare in FM: All ages, male and female, curative care, prophylactic care, emergencies.
13	12	Community orientation; community centred care; community needs assessment.
14	12	Most common presenting symptoms in family practice.
15	10	Interface of primary and secondary care: Referrals, gate keeping, advocacy ^b .

^aResults of the second Delphi round, which included 27 participants, voting the top 15 themes that should be included.

^bThis topic ranked equal (10 votes) to 'Top-10/15 illnesses—diagnosis, treatment, follow-up' and 'home visits'. In the third and final Delphi round, (20 participants) 'interface ... advocacy' received a higher priority.

Discussion

The main outcome of this study is the generation, by consensus, of a list of 15 themes seen by the respondents as the most important topics to be included in a minimal core curriculum for FM/GP in undergraduate medical education. We think this list will be useful to teachers and institutions, which are about to introduce FM/GP as a new topic in their medical faculty. They will be able to focus on topics chosen by a European expert panel as being the most important in such a situation.

Methodological comments

Council members of EURACT were chosen as the research group as they are recognized academics and teachers in their countries, selected to be representatives in this organization's council. Representatives responding to the invitation, came from countries where GP/FM has a strong position (e.g. UK, the Netherlands and Denmark) as well as from countries where this is not the case (e.g. Moldova and Serbia).

Implications

Earlier efforts of defining an undergraduate FM/GP curriculum have either not taken into account the time allocated for the curriculum (9) or were planning for clerkships of eight weeks (12) up to four months (7,8). It is not surprising that these recommendations differ from ours in being far more comprehensive. The Israeli list contains as many as 51 teaching objectives, and interestingly, six of our first

eight themes are among the top 12 on their list (9). The North-American curriculum recommendations go into substantial detail regarding each theme—e.g. 'Establish effective physician-patient relationships' continues into six further learning goals attributing to the achievement of this important skill (12).

It is increasingly becoming evident that a strong primary health care is cost-beneficial and even improves quality of life in the population (17). Ensuring that a substantial part of graduating doctors go into primary care, would be desirable. This in turn requires that FM/GP strongly influence the medical schools' curriculum, which is not yet the situation in all European countries or around the world. However, in medical schools FM/GP contributes to the development of knowledge, skills and attitudes that ideally should be integrated in the practice of any clinician in any specialty, e.g. patient centeredness, holistic approach (bio-psycho-social model) (18–20), communication and consultation skills, etc. Interestingly, most of these topics are ranked quite high by experts participating in the present study—among the highest 10 most important themes.

In light of the data here presented, EURACT strongly suggest that medical schools across Europe include primary care rotations in their undergraduate studies. Although four weeks (at least) have shown to be an ideal length for this rotation, we are aware of the fact that some will be shorter. The Basic Medical Education Committee of EURACT emphasizes that it is very challenging to present even the most basic principles of the discipline of FM/GP in one week, though in countries where FM/GP is poorly developed, this may be the case.

Conclusion

We hope that our 'minimal core curriculum' will be useful for institutions developing a new primary care programme with only a short time available, and can serve as a basis for the teaching of our discipline.

Declaration of interest: The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

References

- Gutierrez C, Scheid P. The history of family medicine and its impact in us health care delivery. American Association of Family Physicians Website. Available at <http://www.aafpfoundation.org/online/etc/medialib/found/documents/programs/chfm/foundationgutierrezpaper.Par.0001.File.tmp/foundation-gutierrezpaper.pdf> (accessed 3 April 2011).
- Tandeter H, Granek-Catarivas M. Choosing primary care? Influences of medical school curricula on career pathways. *Israel Med Assoc J.* 2001;3:969–72.
- Rabadán FE, López-Torres Hidalgo J. Changes in knowledge and attitudes toward family medicine after completing a primary care course. *Fam Med.* 2010;42:35–40.
- Henderson E, Berlin A, Fuller J. Attitude of medical students towards general practice and general practitioners. *Br J Gen Pract.* 2002;52:359–63.
- <http://www.euract.org> (accessed 3 April 2011).
- Wilm S, editor. Checklist for attachment program organisers. EURACT, Leuven 2005. http://www.euract.org/index.php?folder_id=19 (accessed 3 April 2011).
- Chumley H. The family medicine clerkship core content curriculum. *Ann Fam Med.* 2009;7:281–2.
- O'Brien-Gonzales A, Chessman AW, Sheets KJ. Family medicine clerkship curriculum: Competencies and resources. *Fam Med.* 2007;39:43–6.
- Milman U, Alperin M, Reis S, Van-Ralte R, Hermoni D. Determining teaching objectives for the family medicine clerkship in medical school; an Israeli national Delphi survey. *Israel Med Assoc J.* 2001;3:978–81.
- Inui TS, Williams WT Jr, Goode L, Anderson RJ, Bhak KN, Forsyth JD, et al. Sustaining the development of primary care in academic medicine. *Acad Med* 1998;72:245–57.
- Robbins AS, Cope DW, Campbell L, Vivell S. Expert rating of primary care goals and objectives. *J Gen Intern Med.* 1995;10:429–35.
- The Society of Teachers of Family Medicine (STFM) working committee to develop curricular guidelines for a third-year family medicine clerkship. National curricular guidelines for third-year family medicine clerkship. *Acad Med.* 1991; 66:534–9.
- Helmer O. Convergence of expert consensus through feedback. Los Angeles: Rand Corporation; 1964. p. 2973.
- Bowles N. The Delphi technique. *Nursing Standard* 1999; 13:32–6.
- Thompson M. Considering the implication of variations within Delphi research. *Fam Pract.* 2009;26:420–4.
- Keeney S, Hasson F, McKenna HP. A critical review of the Delphi technique as a research methodology for nursing. *Int J Nurs Stud.* 2001;38:195–200.
- World Health Organization 2008. The World Health Report 2008—primary health care (now more than ever). WHO Press, Geneva, Switzerland. Available at http://www.who.int/whr/2008/whr08_en.pdf (accessed 3 April 2011).
- Soler JK, Carelli F, Lionis C, Yaman H. The wind of change: After the European definition—orienting undergraduate medical education towards general practice/family medicine. *Eur J Gen Pract.* 2007;13:248–51.
- General Medical Council. Tomorrow's doctors: recommendations on undergraduate medical education. London: GMC; 1993.
- Astin JA, Sierpina VS, Forys K, Clarridge B. Integration of the biopsychosocial model: Perspectives of medical students and residents. *Acad Med.* 2008;83:20–7.