



LUND UNIVERSITY

Student-centred GP ambassadors: Perceptions of experienced clinical tutors in general practice undergraduate training

Von Below, Bernhard; Haffling, Ann-Christin; Brorsson, Annika; Mattsson, Bengt; Wahlqvist, Mats

Published in:
Scandinavian Journal of Primary Health Care

DOI:
[10.3109/02813432.2015.1041826](https://doi.org/10.3109/02813432.2015.1041826)

2015

[Link to publication](#)

Citation for published version (APA):

Von Below, B., Haffling, A.-C., Brorsson, A., Mattsson, B., & Wahlqvist, M. (2015). Student-centred GP ambassadors: Perceptions of experienced clinical tutors in general practice undergraduate training. *Scandinavian Journal of Primary Health Care*, 33(2), 142-149. <https://doi.org/10.3109/02813432.2015.1041826>

Total number of authors:
5

General rights

Unless other specific re-use rights are stated the following general rights apply:
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00



Student-centred GP ambassadors: Perceptions of experienced clinical tutors in general practice undergraduate training

Bernhard Von Below, Ann-Christin Haffling, Annika Brorsson, Bengt Mattsson & Mats Wahlqvist

To cite this article: Bernhard Von Below, Ann-Christin Haffling, Annika Brorsson, Bengt Mattsson & Mats Wahlqvist (2015) Student-centred GP ambassadors: Perceptions of experienced clinical tutors in general practice undergraduate training, *Scandinavian Journal of Primary Health Care*, 33:2, 142-149, DOI: [10.3109/02813432.2015.1041826](https://doi.org/10.3109/02813432.2015.1041826)

To link to this article: <http://dx.doi.org/10.3109/02813432.2015.1041826>



© 2015 The Author(s).



Published online: 09 Jul 2015.



Submit your article to this journal [↗](#)



Article views: 189



View related articles [↗](#)



View Crossmark data [↗](#)



ORIGINAL ARTICLE

Student-centred GP ambassadors: Perceptions of experienced clinical tutors in general practice undergraduate training

BERNHARD VON BELOW^{1,3}, ANN-CHRISTIN HAFFLING², ANNIKA BRORSSON²,
BENGT MATTSSON¹ & MATS WAHLQVIST¹

¹Department of Public Health and Community Medicine/Primary Health Care, The Sahlgrenska Academy at University of Gothenburg, Gothenburg, Sweden, ²Department of Clinical Sciences, General Practice/Family Medicine, Lund University, Malmö, Sweden, ³Research and Development Unit, Primary Health Care, Southern Älvsborg county, Borås, Sweden

Abstract

Objective. To explore experienced general practitioner (GP) tutor perceptions of a skilled GP tutor of medical students. **Design.** Interview study based on focus groups. **Setting.** Twenty GPs experienced in tutoring medical students at primary health care centres in two Swedish regions were interviewed. **Method.** Four focus-group interviews were analysed using qualitative content analysis. **Subjects.** Twenty GP tutors, median age 50, specifically selected according to age, gender, and location participated in two focus groups in Gothenburg and Malmö, respectively. **Main outcome measures.** Meaning units in the texts were extracted, coded and condensed into categories and themes. **Results.** Three main themes emerged: “Professional as GP and ambassador to general practice”, “Committed and student-centred educator”, and “Coordinator of the learning environment”. **Conclusion.** Experienced GP tutors describe their skills as a clinical tutor as complex and diversified. A strong professional identity within general practice is vital and GP tutors describe themselves as ambassadors to general practice, essential to the process of recruiting a new generation of general practitioners. Leaders of clinical education and health care planners must understand the complexity in a clinical tutor’s assignment and provide adequate support, time, and resources in order to facilitate a sustainable tutorship and a good learning environment, which could also improve the necessary recruitment of future GPs.

Key Words: *Clinical clerkship, education, general practice, general practitioners, medical, preceptorship, students, Sweden, undergraduate*

Introduction

The clinical tutor plays an important role in undergraduate medical education. This includes encouraging students to learn from their encounters with patients and personnel [1–3] and enhancing the transition to a clinical environment and clerkship [4].

Efforts to make the health care system more efficient have led to shorter hospital treatments and tighter time schedules for hospital physicians. A trend of sub-specialization in medicine has also taken place, resulting in many brief clinical attachments. Due to these changes, the role of general practice in undergraduate medical education expanded in Europe at the end of the 1980s. At medical schools, clinical

attachments in the community were considered more and more valuable. Thus, the generalist clinical tutor plays an increasingly important role [5–7] and attachments in the community have been shown to have a positive impact on student learning [8].

Earlier research

Central concepts in modern medical education include a learner-centred perspective and learning in context, along with workplace learning in clinical courses [9,10]. Previous studies of student learning experiences in primary care attachments have focused on student learning opportunities through patient

Correspondence: Bernhard von Below, MD, Department of Public Health and Community Medicine/Primary Health Care, The Sahlgrenska Academy at University of Gothenburg, PO Box 454, SE-405 30 Gothenburg, Sweden, E-mail: bernhard.vonbelow@vgregion.se

© 2015 The Author(s). Published by Taylor & Francis. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

(Received 2 January 2014; accepted 16 February 2015)

ISSN 0281-3432 print/ISSN 1502-7724 online
DOI: 10.3109/02813432.2015.1041826



Taylor & Francis
Taylor & Francis Group

- General practitioners (GPs) are crucial as clinical tutors in current undergraduate medical education.
- Experienced GPs' main perceptions of a skilled clinical tutor were: professional as GP and ambassador to general practice; committed and student-centred educator; and coordinator of the learning environment.
- A skilled GP tutor was seen as an ambassador to general practice, essential to the process of recruiting a new generation of GPs.

encounters [11,12]. The role of the tutor is then to facilitate students' learning. However, clinical tutors often face difficulties in combining tutoring with clinical practice [6,13–15].

Many studies performed from a student perspective highlight the importance of clinical tutors in an outpatient setting. However, despite the pivotal role of the clinical tutor, analyses from their perspective are scarce [16–18]. Information from tutors themselves is an important but rather unused source of knowledge for characterizing and understanding the GP tutor's special skills and clinical work. Therefore, we strove to find out how experienced tutors perceived a skilled clinical tutor in general practice.

Context

Students in the undergraduate medical curriculum in Sweden spent a number of weeks in a primary health care centre (PHCC) for general practice training during their final semesters. In Gothenburg, students visited a PHCC for nearly two weeks. In Lund/Malmö, the clerkship was nearly four weeks. For every PHCC, at both universities, one GP was selected as primary tutor. The tutors supervised students and organized and prepared the attachment prior to the student's arrival. The GP tutor was formally responsible for the patient's care. Students were active and managed some of the patients relatively independently, under the tutor's supervision. The undergraduate curriculum was similar at both universities, and students were equally exposed to primary care earlier in the curriculum [6,19].

Methods of recruiting GP tutors in Sweden differ geographically and have also changed over time. Until some years ago, it was often a voluntary assignment for interested GPs. It is now generally compulsory for health care centres to arrange clinical settings for medical students. However, a lack of GPs in several regions in Sweden still makes recruiting of experienced GPs and skilled tutors difficult. Often GP

trainees or less experienced colleagues are recruited as tutors. All tutors must attend a training course before their first tutorship, arranged by the university. Tutors are also offered continued tutor training at seminars. However, these are not compulsory. There is no formal assessment of tutors but feedback from students is regularly gained and analysed.

Course leaders in both Lund/Malmö and Gothenburg met regularly and exchanged educational experiences. Discussions were held on how to arrange optimal supervision during the student's stay at the PHCC. Training and preparing tutors was considered central. However, we needed more knowledge than "common sense". According to our tutors, what abilities and features characterize a skilled tutor in general practice?

The aim of this study was to analyse experienced GP tutors' perceptions of a skilled clinical GP tutor.

Material and methods

Description of informants and data collection

Data were collected in a qualitative study based on focus groups. Focus groups provide a possibility for extracting experience-based knowledge from discussions in these groups [20,21]. GPs with at least two periods as active tutors of medical students at their PHCC during the last three years, and still active as tutors, were asked to participate. The sample was chosen for diversity of age, gender, and location (rural and suburban). Twenty tutors (11 women, nine men, aged 40–62, median age 50) were interviewed. Focus groups were formed in Gothenburg and Malmö. There were 4–6 participants in each group. Each focus group session lasted 60 to 80 minutes and was lead crosswise by two of the authors, both GPs and lecturers. In order to minimize influencing participants, AB, a lecturer at Lund/Malmö University, interviewed participants in Gothenburg, and BM, a lecturer at Gothenburg University, interviewed participants from Malmö. Focus-group leaders were experienced in small-group tutoring and group dynamics. The interviews were recorded and transcribed verbatim.

The initial questions in the focus groups were "What abilities characterize a skilled GP tutor?" and "How do you, as an experienced GP tutor, manage a student's clerkship at the primary health care centre?". These primary questions were followed up by exploring other issues in the field of interest, and group discussions were gradually deepened through more targeted questions. Follow-up questions such as "Tell me more about that...?" were used but otherwise no specific interview guide was used. Participants were encouraged to participate and illustrate

their views through practical examples. New material emerged gradually in the group interviews. Initially, four focus groups were planned. In the last focus group, when repetition was observed in the group discussion, we considered that sufficient saturation was achieved and data collection was closed. The scientific method implied a step-wise analysis and recruitment procedure, and the final number of focus groups was a result of a process to achieve data sufficient to elucidate the aim. No contradictory material emerged; the perception of key qualities of a tutor was surprisingly uniform.

In interpretation, the theoretical frame of reference adopted by the authors was a learner-centred perspective in tutoring and adult learning [1] along with a generalist perspective on medicine.

Data analysis

Qualitative content analysis was applied to analyse interview texts. Content analysis is often used in qualitative educational research and was found suitable for our research question [22]. Analysis included the following steps: (i) The text was read for an overview of the material. (ii) Units of meaning in the text were extracted and coded. (iii) Units of meaning were condensed to categories. (iv) Based on categories, themes were created. (v) Finally, these were compared with the original text to ensure their rooting in the material. All authors read the material for an overview. Three authors (BM, ACH, BvB) performed individual initial analyses. The analysis was made step-wise following each focus group. Several meetings were held and results revised, with all authors involved in the formation of categories and themes. Furthermore, results were supported in presentations in seminars and at a national research conference.

Ethical issues

Before the onset of the study, ethical issues concerning the design of the study were considered. Participation was voluntary in the focus groups. For confidentiality, no names were marked during transcription. According to Swedish legislation on ethical vetting of research involving people, approval by a regional ethical board was not required. The potential negative influence on subjects from participating in the focus groups was judged as negligible. No negative experiences were reported during or after the interviews.

Results

Three main themes emerged during the analysis: “Professional as GP and ambassador to general

practice”; “Committed and student-centred educator”, and “Coordinator of the learning environment” (Figure 1).

A. Professional as GP and ambassador to general practice

This theme consisted of three categories. A central category was the importance of having *achieved a strong professional identity* as a GP. Knowledge of the patient spectrum in primary health care, the importance of continuity, and coping with unpredictability and versatility were regarded as essential, as was the experience of cooperation with other professionals. It was essential to have an ability to manage the situation as a GP with little access to technical investigational methods compared with doctors at hospitals. This professional attitude was the cornerstone of their tutorship, as these GPs said:

To cope with all this versatility and unpredictability and then convey the ability to do so, that’s what’s most exciting...

and

One advantage we have as general practitioners is the possibility of contacting the patient afterwards. We do not really know, we are not always certain about the diagnosis since we don’t have access to MRI in all cases. On the other

<u>Categories</u>	<u>Themes</u>
<i>Achieved a strong professional identity</i>	
<i>Clinical experience of general practice</i>	<i>Professional as GP and ambassador to general practice</i>
<i>Ambassador to general practice</i>	
<hr/>	
<i>Commitment and inspiration</i>	
<i>Responsibility for students</i>	<i>Committed and student-centred educator</i>
<i>Student-centred approach</i>	
<i>Competence in providing feedback</i>	
<i>Balancing needs of patients and students</i>	
<hr/>	
<i>Administrative overview</i>	
<i>Structuring skills</i>	<i>Coordinator of the learning environment</i>
<i>Introducing students</i>	
<i>Providing a place for students</i>	

Figure 1. Categories and themes in the analysis.

hand we can call patients a few days later and ask how they feel. We have better access to the patients' situation than the hospital physicians.

Having *clinical experience of general practice*, and remaining active as a general practitioner meeting patients, was regarded as important. Tutoring was facilitated if the GP tutor already had a doctor-patient relation with the patient the student was going to handle. Intimate knowledge of consultation skills – including the experience that attending patients are more than their diagnoses – was important in the triad, where patient, student, and tutor converged:

I don't usually select patients but let students meet the patients as they come. "A throat" is never just "a throat" but so much more.

and

It's not always a question of what they've told the nurse or the information in the appointment notes, but can be something quite different on arrival. I'm not looking so much for medical conditions because I think that every patient is different and not always as one preconceives them....

Yet another category emerged, an *ambassador to general practice*. It represents an ambition to introduce students to general practice, to highlight the core values of this discipline, and to promote the student's choice of this speciality. One reason was the awareness of future increasing difficulties in recruiting GPs, and an ambition to save the speciality:

I think one should have some concerns and considerations about our specialty because the future seems somewhat uncertain.... Things are going in the wrong direction somehow. I don't see many possibilities for recruiting good general practitioners ... and now so many are going into retirement. I'm pretty keen on trying to influence, if possible, to get them to become general practitioners.

B. Committed and student-centred educator

This theme consisted of five categories. Informants expressed their task as tutor as interesting and exciting and described *commitment and inspiration*. A reason for commitment was the pleasure and stimulation of meeting young students and gaining new perspectives on the work of the GPs:

It adds a lot of young, fresh minds unfettered by old habits.... Then I think how the students are

a part of it, preventing you from stagnating completely....

Meeting students also inspired tutors to seek new knowledge:

They raise unexpected questions as well, causing reflection and rechecking of references.

Informants also expressed stimulation by students noticing their professional activities:

You see your work through their eyes.... It's enriching, just gaining a new perspective is somehow exciting.

A central task as a tutor was to provide students with inspiration for their coming work as doctors. There was awareness that commitment and enthusiasm from tutors made students more affirmative towards the speciality of general practice:

One conveys enthusiasm best if there is joy in work....

Educational skills and teaching attitudes were prominent in the analysis.

Tutors expressed an ambition to take *responsibility for the students* with a supportive and caring attitude, as described by this GP:

I always present the student as a future colleague, not as an aspirant or medical student. I believe they then feel slightly more adult, which perhaps increases their self-confidence.

Tutors strove to establish relationships with the students during clerkship introduction. This ambition was expressed by this GP:

You develop a relationship with the student, a working partnership; you get to know each other.

By interviewing the students on the day of their arrival, tutors tried to assess the students' present skills and learning needs. Then, tutors could plan the clerkship and thus support students' development. Informants expressed how a tutor should have a *student-centred approach*, aware of the fact that both students and tutors can learn from consultations. Tutors may also share previous difficulties and mistakes with students to illustrate how complex a consultation can be, and that obtaining these skills is a continual process:

So you open up and share your difficulties and imperfections.... Reaching this level is difficult and takes time....

Competence in providing feedback was regarded as a central educational skill. During the focus-group sessions participants expressed the complexity of providing feedback. Tutors were aware of the risk of negative feedback being taken personally:

A good adviser can clearly demonstrate how he or she distinguishes between a person and their actions, thus avoiding negative criticism being interpreted as personal....

Tutors used various methods of providing feedback, such as sitting-in on consultations and analysis of student videos. Many tutors described their personal ways of providing feedback, like this GP:

I found a model ... where I then asked: how do you think the patient felt?. I almost always ask if they could do it again, would they do it differently....

Balancing needs of patients and students was important. Informants expressed a fear that patient needs could sometimes interfere with students, and that patients might hesitate to express problems during the consultation. The tutor's earlier experiences of the patient might interfere with a student's consultations, as expressed here:

The student asks the patient something, and when the patient answers they turn to me.... I usually position myself in the room so that the patient can't look at me....

On the other hand, informants sometimes noticed that students gained new information from the tutor's former patients:

Sometimes the students obtain something that one perhaps hadn't thought of, giving the meeting a new dimension.

C. Coordinator of the learning environment

This theme comprised four categories. Informants expressed how competent tutors should also have sufficient *administrative overview*. The student's attachment period should be prepared, practically as well as mentally. Tutors had to set aside time for tutoring. Courses and vacations, as well as normal physician duties as a GP, needed to be reduced during this period. The importance of these preparations was expressed as:

I feel one must be well prepared.

and

Yes, I undertake this planning very carefully.

Structuring skills was important. Tutors had to organize schedules for the students including visits to PHCC staff members, such as nurses and physiotherapists.

Schedules also included GP colleagues who could serve as resources in tutoring. However, this required preparation well in advance of the attachment period:

To avoid frustration [from too heavy a workload] and to limit other activities ... we planned our schedule in advance ... and cancelled telephone consultations for the physicians.

Introducing students at the beginning of the attachment period was crucial. A presentation of the students to colleagues and staff was necessary, as well as information and support of colleagues and staff if they were to partake in tutoring:

I try to think through the actual arrival ... so that they don't just show up with the staff looking completely lost....

Providing a place for the students at the health centre was important. Students needed their own space for work and reflection. To offer a separate place strengthened the feeling of legitimacy at the clinic:

There should be some place where they can read medical journals ... and dictate in peace and quiet.

By means of these measures the student's and tutor's work was enhanced.

Discussion

Principal findings

Findings revealed that participating GP tutors found the task of a clinical tutor complex and diversified. Three themes emerged: "Professional as GP and ambassador to general practice", "Committed and student-centred educator", and "Coordinator of the learning environment".

Method discussion

Researchers followed guidelines for qualitative research methodology [21–23] by maintaining open minds during focus-group sessions and analyses. In order to avoid bias in the interviews, focus groups were led by one of the authors, who was previously unknown to the participants; this author was a lecturer at a different institution than where participants were tutors. In addition, focus-group leaders had

long experience of small-group learning and of group dynamics. Since the focus-group leaders were also authors of the article, we discussed thoroughly the importance of maintaining open minds and awareness of preconceptions.

In the last focus group, repetition occurred in the group discussion and we therefore considered that sufficient saturation was achieved and data collection was closed. To strengthen credibility, all authors read the transcriptions several times and participated in the analysis. Meetings and discussions among authors confirmed that codes appeared logical and consistent. Further discussions resulted in revised categories and themes. Furthermore, results were supported in presentations in seminars and at a national research conference.

A limitation of this study concerns selection of informants. Informants in this study were selected from two regions in Sweden, showing diversity in age, gender, and geographical origin, factors that increase the transferability of the results to other tutors. However, all participants were experienced GP tutors and the study presents their perceptions of a skilled clinical GP tutor. Thus, transferability to other groups of clinical tutors may be questionable. Still, we consider the results are relevant to many clinical tutors in medical education, in general practice in particular, but also to other clerkships and contexts.

Comments on results

A strong professional identity within general practice and being an active clinician emerged as key abilities of a skilled tutor. Informants described an ambition to enhance student views of general practitioners, with an aim of recruiting future colleagues to the speciality. Thus, they acted as ambassadors to general practice. This ambition was also found in another study of GP tutors' experiences [24]. However, it has not been shown that tutors' ambitions to recruit future GPs have a clear impact on students' choice of speciality. Choice of speciality is a complex process [25–27].

Being a committed and student-centred educator was a main theme. Earlier research supports the importance of a student-centred approach by tutors to stimulate students and create a feeling of security in clinical surroundings. These views are common among tutors in a variety of settings [13,28]. Tutors in this study did not actually have much time to form relationships with students; however, they wanted to provide support by planning a personal discussion at their first meeting. They also sought to assess the student's current skills and learning needs. However, a more formal assessment at the introduction might have strengthened the possibilities to identify the student's learning needs at the PHCC.

Our GP tutors were aware of the importance of feedback but also the difficulties of providing it. They utilized several feedback techniques due to having attended different courses and seminars at the two universities. Tutors used both sit-ins and videos as instruments for feedback. When examining earlier research, the importance and complexity of feedback is well documented and several methods are described [29]. Tutors generally need more training in providing feedback, which should be included in tutor preparatory courses.

The tutor's sense of responsibility towards the student as an individual is interesting. Informants expressed an ambition to "take care" of their students. As competent GPs they are patient-centred in the consultation process, which reflected a corresponding student-centred view towards their students. These findings correspond well with our earlier research, where tutors of medical students were ambitious and eager to provide today's students with what the tutors themselves missed as medical students [19,24,30].

An ability to coordinate clinical clerkship and the learning environment was regarded as important. Sometimes tutors stated that the lack of these skills could be compensated by long clinical experience. This is interesting and might indicate an uncritical view of the GP's individual tutoring abilities by not acknowledging organizational factors, a view characterized by perhaps high self-confidence based on extensive clinical experience.

However, a good tutorial education should always be regarded as crucial.

The question arises as to whether the three themes have the same importance, or whether one can be singled out as more central. In Figure 2, the three

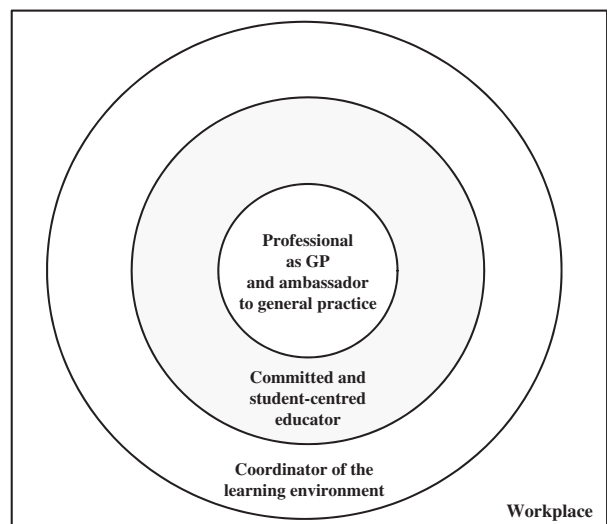


Figure 2. Informant views of key abilities of a skilled clinical GP tutor.

main themes are presented in a model emerging from the focus-group discussions and the analytical process. As a whole, the workplace sets the limits for tutoring. Within that framework, three main themes form the dimensions of a skilled clinical tutor. Most important is the core skill: Professional as GP and ambassador to general practice. Having achieved extensive clinical experience as a GP and being an active clinician were considered key abilities that could compensate for deficits in coordinating and organizing the attachment. This point of view was voiced repeatedly during focus-group sessions. Commitment and student-centredness as an educator were also considered necessary abilities of a skilled tutor.

Conclusion

Exploring GP tutors' perceptions of a skilled tutor displayed complex abilities. GP tutors have lofty ambitions concerning general practice and act as ambassadors for this discipline. Thus, they are crucial in the process of recruiting a new generation of general practitioners.

For leaders of medical education and health care planners, it is vital to understand the complexity in a clinical tutor's assignment and to provide training and adequate support to tutors. If clinical tutors are well prepared, students learning processes will gain, in a parallel process. When planning the GP's tutorial preparatory training and support, this should be emphasized in order to facilitate a sustainable tutorship and a good learning environment. This might also improve the necessary recruitment of future GPs.

Future research

Future research can be enhanced by these results and should focus on outcomes in tutor education in order to optimize the medical student's clerkship in general practice settings. Studying tutor satisfaction highlights factors enhancing sustainable tutorship. Considering the major changes currently taking place in health care systems in Europe, it is important to study the impact of these changes on clinical tutors and workplace education in the medical curriculum, both at primary health care centres and in hospitals.

Acknowledgements

The authors would like to thank the participating clinical tutors who made this study possible. Financial support was obtained from the Göteborg Medical Society and the Medical Care Executive Board of the Västra Götaland Region in Sweden.

Declaration of interest

There are no conflicts of interest in connection with the paper. The authors alone are responsible for the content and writing of the paper.

References

- [1] Lauvås P, Handal G, Nilsson B. *Handledning och praktisk yrkest teori* [Supervision and theory of professional practice]. Lund: Studentlitteratur; 2001.
- [2] Newble D, Cannon R. *A handbook for medical teachers*. Dordrecht: Kluwer Academic; 2001.
- [3] Newble DI, Entwistle NJ. Learning styles and approaches: Implications for medical education. *Med Educ* 1986;20:162–75.
- [4] Shacklady J, Holmes E, Mason G, Davies I, Dornan T. Maturity and medical students' ease of transition into the clinical environment. *Med Teach* 2009;31:621–6.
- [5] General Medical Council. *Tomorrow's doctors: Outcomes and standards for undergraduate medical education*. London: General Medical Council; 2009.
- [6] Haffling A-C. *Medical students in general practice: Students' learning experiences and perspectives from supervisors and patients*. Malmö: Department of Clinical Science, Malmö, Lund University; 2011.
- [7] Howie JG. Academic general practice: Reflections on a 60-year journey. *Br J Gen Pract* 2010;60:620–3.
- [8] Rosenthal J, Stephenson A. *General practice: The future teaching environment – a report on undergraduate primary care education in London*. *Br J Gen Pract* 2010;60:144.
- [9] Dornan T, Boshuizen H, King N, Scherpbier A. Experience-based learning: A model linking the processes and outcomes of medical students' workplace learning. *Med Educ* 2007;41:84–91.
- [10] Wooliscroft J. Medical student clinical education. In: Norman G, Van der Vleuten C, Newble D, editors. *International handbook of research in medical education*. Dordrecht: Kluwer Academic; 2002. p 365–80.
- [11] O'Sullivan M, Martin J, Murray E. Students' perceptions of the relative advantages and disadvantages of community-based and hospital-based teaching: A qualitative study. *Med Educ* 2000;34:648–55.
- [12] Thistlethwaite JE. Introducing community-based teaching of third year medical students: Outcomes of a pilot project one year later and implications for managing change. *Educ Health (Abingdon)* 2000;13:53–62.
- [13] Huggett KN, Warrier R, Maio A. Early learner perceptions of the attributes of effective preceptors. *Adv Health Sci Educ Theory Pract* 2008;13:649–58.
- [14] Leinster SJ. Workplace-based assessment as an educational tool: Guide supplement 31.2 – viewpoint. *Med Teach* 2009;31:1032.
- [15] Norcini J, Burch V. Workplace-based assessment as an educational tool: AMEE Guide No. 31. *Med Teach* 2007;29:855–71.
- [16] Hartley S, Macfarlane F, Gantley M, Murray E. Influence on general practitioners of teaching undergraduates: Qualitative study of London general practitioner teachers. *BMJ* 1999;319:1168–71.
- [17] Howe A. Teaching in practice: A qualitative factor analysis of community-based teaching. *Med Educ* 2000;34:762–8.
- [18] Silén C, Kiessling A, Spaak J, Henriksson P. The experience of physician supervisors with clerkship students: A qualitative study. *Int J Med Educ* 2011;2:56–63.
- [19] Von Below B, Hellquist G, Rödger S, Gunnarsson R, Björkelund C, Wahlqvist M. Medical students' and facilitators'

- experiences of an Early Professional Contact course: Active and motivated students, strained facilitators. *BMC Med Educ* 2008;8:56. doi: 10.1186/1472-6920-8-56.
- [20] Morgan DL, Bottorff JL. Advancing our craft: Focus group methods and practice. *Qual Health Res* 2010 ;20:579–81.
- [21] Powell RA, Single HM. Focus groups. *Int J Qual Health Care* 1996;8:499–504.
- [22] Graneheim UH, Lundman B. Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today* 2004; 24:105–12.
- [23] Malterud K, Midenstrand M. Kvalitativa metoder i medicinsk forskning: en introduktion [Qualitative methods in medical research: an introduction]. Lund: Studentlitteratur; 2009.
- [24] Von Below B, Rodjer S, Wahlqvist M, Billhult A. “I couldn’t do this with opposition from my colleagues”: A qualitative study of physicians’ experiences as clinical tutors. *BMC Med Educ* 2011;11:79.
- [25] Bunker J, Shadbolt N. Choosing general practice as a career: The influences of education and training. *Aust Fam Physician* 2009;38:341–4.
- [26] Kiobassa K, Miksch A, Hermann K, Loh A, Szecsenyi J, Joos S, et al. Becoming a general practitioner: Which factors have most impact on career choice of medical students? *BMC Fam Pract* 2011;12:25.
- [27] Wesnes SL, Aasland O, Baerheim A. Career choice and place of graduation among physicians in Norway. *Scand J Prim Health Care* 2012;30:35–40.
- [28] Mann KV, Holmes DB, Hayes VM, Burge FI, Viscount PW. Community family medicine teachers’ perceptions of their teaching role. *Med Educ* 2001;35:278–85.
- [29] Norcini J. The power of feedback. *Med Educ* 2010;44: 16–17.
- [30] Kleizen K, Mattsson B. Motives and experiences of the competent supervisor in general practice: A qualitative study. *Open Med Educ J* 2010;3:18–22.