

## Influence on general practitioners of teaching undergraduates: qualitative study of London general practitioner teachers

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### Abstract

**Objective** To examine the perceived effect of teaching clinical skills and associated teacher training programmes on general practitioners' morale and clinical practice.

**Design** Qualitative semistructured interview study.

**Setting** General practices throughout north London.

**Subjects** 30 general practitioners who taught clinical skills were asked about the effect of teaching and teacher training on their morale, confidence in clinical and teaching skills, and clinical practice.

**Results** The main theme was a positive effect on morale. Within teacher training this was attributed to developing peer and professional support; improved teaching skills; and revision of clinical knowledge and skills. Within teaching this was attributed to a broadening of horizons; contact with enthusiastic students; increased time with patients; improved clinical practice; improved teaching skills; and an improved image of the practice. Problems with teaching were due to external factors such as lack of time and space and anxieties about adequacy of clinical cover while teaching.

**Conclusions** Teaching clinical skills can have a positive effect on the morale of general practitioner teachers as a result of contact with students and peers, as long as logistic and funding issues are adequately dealt with.

### Introduction

The past decade has seen a revolution in the delivery of undergraduate medical education. Medical schools nationally<sup>1 2</sup> and internationally<sup>3 4</sup> are increasing the amount of community teaching, most of which is done by the increasing number of general practitioner teachers.<sup>5-8</sup> General practitioner teachers have developed from their original role as teachers of behavioural science and general practice<sup>9</sup> into teachers of clinical skills, with excellent access to a wide range of patients.<sup>10 11</sup>

This development has occurred at a difficult time in general practice. Changes within the profession have led to increased workload and low morale,<sup>12</sup> with falling recruitment to general practice and difficulty in filling once oversubscribed vocational training

schemes.<sup>13 14</sup> Low morale among established general practitioners has been associated with the increase in early retirement and difficulties in recruitment.<sup>15 16</sup>

Many of the changes within general practice have had particular impact in London, and concern about primary care services led to the creation of London Initiative Zone Educational Incentives. The aims of these incentives were to refresh, recruit, and retain general practitioners within inner city practices.<sup>17</sup> One of the projects funded was the community based medical education in North Thames (CeMENT) project. This collaborative project promoted community based teaching of clinical skills at north London medical schools.<sup>6</sup>

There are concerns about the impact on general practice of a sustained and substantial increase in community based teaching.<sup>18</sup> Little information is available on the effects of teaching or teacher training on general practitioners' morale, clinical skills, and clinical practice. If beneficial changes can be shown, undergraduate teaching in general practice may have an important role not only in the undergraduate curriculum but also in postgraduate continuing medical education.

### Participants and methods

#### The CeMENT project

The CeMENT project was set up in 1994. It involved all of the north London medical schools, with a total annual intake of about 800 medical students. At the time of this study in 1997, 233 general practitioners were actively involved in CeMENT teaching; 37 836 student sessions (one student session = one student for one half day) had been held in the community; and student evaluations of the project were positive across all sites.<sup>6 19</sup>

Teacher training courses were a key feature of CeMENT. They aimed to enhance teaching ability and refresh clinical skills. All courses had input from general practitioners and educationalists, were learner centred, involved collaboration with hospital clinicians, and were adapted to the needs of each school.

#### Undergraduate teaching programmes

Traditionally general practitioner teachers have used the apprenticeship model, in which students observe

### Common features of CeMENT teaching programmes

- General practitioner teachers
- Teach clinical method
- Small groups of medical students
- Take place in protected time (that is, no clinical commitment)
- Take place in the general practitioner teacher's practice
- Involve volunteer patients drawn from the practice list

the general practitioner during routine clinical work. In CeMENT teaching general practitioners teach in paid protected time—not during clinical work. CeMENT teaching focuses on teaching clinical method—that is, history taking, examination skills, and the management of problems. Collaborative teaching programmes specific to each school include internal medicine,<sup>19</sup> dermatology, clinical introductory courses, obstetrics and gynaecology, otorhinolaryngology, paediatrics, rheumatology, and cardiology.<sup>6</sup> Courses vary in length from 3 half days in the community during a 1 week otorhinolaryngology rotation to a 5 week full time internal medicine attachment. All programmes share some common features. After the CeMENT project all of the projects have continued using funding from the medical schools and the service increment for teaching (SIFT).

### Study population and sample

The sample was designed to achieve the maximum range of views and experiences of teachers. On the basis of the researchers' experiences in recruitment, training, and teaching a sampling framework was constructed that included practices from inside and outside the London Initiative Zone; experienced and inexperienced teachers; small and large practices; an ethnic mix of teachers of both sexes; a geographical and socioeconomic mix of practice population; and practices with positive and negative attitudes to teaching.

Teachers selected were contacted initially by the medical school CeMENT teaching coordinators to inform them about the study and to seek their collaboration with the interview process. Thirty one active CeMENT teachers were contacted, and all agreed to participate. The interviewer (FM) then arranged and conducted 30 interviews. One teacher was not interviewed as a suitable time could not be arranged.

### The interview

A semistructured interview was designed to cover all the issues that might be affected by either teacher training or teaching. Themes explored in the interview included the positive and negative effects of teacher training and teaching on teachers' morale, confidence in teaching, confidence in clinical practice, and delivery of service. These issues were selected from the researchers' experience; a literature review; discussion with participating teachers; and input from others involved with community based teaching nationally.

An independent, non-medical researcher with wide experience in health services research (FM) inter-

viewed teachers to encourage frankness in their assessment of teaching. Piloting did not result in any changes as the interview adequately covered all topics of interest for the participants. The interview took place in the teachers' surgeries.

### Data analysis

Interviews were audiotaped, and field notes were made by the interviewer. All replies were recorded on a Microsoft Access database and an analytical framework derived from the data with the method of constant comparison.<sup>20, 21</sup> Two authors (FM and SLH) independently analysed the data. There were no notable discrepancies in their conclusions.

### Results

The unifying theme that emerged from respondents' experience of teaching and training was a boost to their morale. The data are presented in terms of the two dimensions of teaching and training. Respondents mentioned several issues that were perceived as uniformly negative for morale and that hindered successful teaching. These issues are presented separately as organisational problems. (An extended version of the results can be found on the *BMJ* website.)

### Effects of teacher training

*Support and feedback from peers*—Teacher training boosted morale because of networking with peers and sharing problems. Teachers who had suffered from isolation within general practice and teaching developed a peer group of fellow teachers with whom they could develop a new identity as general practitioner teachers.

*Developing clinical skills*—Anxiety about the adequacy of clinical skills was common. Teachers thought that “short cuts” in their clinical examination of patients were not appropriate for students to learn. Performing examinations and discussing clinical problems with other teachers and hospital specialists allowed participants to compare, contrast, and improve skills. Improvements in clinical knowledge, skills, and clinical practice led to an improvement in morale and were most often cited in neurology and otorhinolaryngology, which had been targeted by several of the training programmes. Seven teachers reported no changes.

### The effects of training for teaching

“It has improved this [morale]—the sessions prevent isolation” (GP 26)

“Getting together with peer group—challenges of students can be shared” (GP 12)

“I was worried about whether I was up to date—would I teach the right material. The sessions reassured me. It helped calibrate me” (GP 21)

“It has renewed and refreshed my clinical skills—I now examine patients without cutting corners” (GP 23)

“Learned more about obstetrics—feedback from the hospital consultants has helped” (GP 4)

“I felt much more confident—this is the first time that I have had real training for teaching, although I am an experienced teacher” (GP 27)

*Developing teaching skills*—Teachers who were not postgraduate trainers were insecure about teaching skills. Training reassured teachers that it was appropriate for them to teach, allowed them to calibrate their skills against those of their peer group, and gave them additional skills to deal with students. The improvement in skills noted was empowering and improved morale. Some experienced teachers noted that they did not gain much from the sessions, but they recognised the usefulness for others.

### Effects of teaching

*Broadening horizons*—The experience of teaching added variety to the week, and teachers felt they were involved in an activity that transcended usual practice routine. Isolation was reduced by the presence of keen students, with increased morale for the whole practice.

*Contact with students*—Positive feedback from students was important for teachers' morale, and sessions that were not well attended or were poorly received led to anxiety.

*Contact with patients*—Longer contact with selected patients during teaching was positive for teachers, and patients were thought to benefit from this in addition to a thorough clinical review, learning more about their condition, and revealing new personal information to students.

*Improving clinical practice*—A renewed enthusiasm for clinical work was attributed to three factors: the contact with enthusiastic students; an increase in time spent with patients; and greater confidence in clinical skills and knowledge. Changes in clinical skills and practice were reported as a result of teaching and were attributed to increased reading and reflection on practice; information from students; challenging questions from students; and more time with patients. Changes in practice included being more methodical in clinical examination; specific changes in patient management; developing a clinical subspecialty role within the practice; and disseminating information through the practice.

#### The effects of teaching

"There is a whole world outside general practice and other options for a GP...has sustained me" (GP 28)

"It is fun—students keep you young, stimulated and they are non-cynical. Renews my enthusiasm for medicine" (GP 9)

"Student questions (unknowingly perceptive) have changed my approach to managing diabetes in antenatal patients" (GP 6)

"Explaining issues to students helps me re-evaluate my practice" (GP 29)

"I am more methodical, less generalised, neater at note taking, more rigorous, and can justify what I am doing" (GP 8)

"I see more patients with ENT and dermatology problems—my partners refer them to me" (GP 20)

"It has helped me to be more selective with my referrals" (GP 4)

"When I am teaching I am only available for dire emergencies—it is hard to balance conflicting priorities for a single handed GP" (GP 15)

"[Problems are] patient fatigue. Finding suitable patients. It is important to manage the doctor-patient relationship" (GP 7)

*Improving teaching skills*—Teaching led to improvements in confidence and morale as the preparation time for sessions reduced and teachers felt able to cope with challenging students.

*Improving the image of the practice*—The image of the practice was positively affected by teaching, influencing practice staff and general practitioner colleagues. Some practices invested in their premises to provide extra teaching facilities and most bought extra equipment, ranging from textbooks to improved information technology links.

### Organisational problems

Time pressures led to anxiety for teachers because of loss of clinical time due to teaching and preparation. Assistants or locums were employed by some practices to do clinical work but this caused concern. Some premises lacked space, and in group practices some partners were not supportive. Six teachers found that funding for teaching was inadequate, although most concluded that it was cost neutral.

Finding appropriate patients was time consuming, and patient fatigue and effects on the doctor-patient relationship were mentioned by experienced teachers. Many teachers had hoped that teaching would result in better communication with hospital specialists from teaching. This was realised in some cases, particularly when teachers had both clinical and teaching contact with a hospital. Many thought that relationships were unchanged on the clinical front but were disappointed by insufficient feedback about their teaching, possibly indicating a search for affirmation of the teachers role.

## Discussion

### Methodological considerations

This qualitative study shows that the teachers sampled perceived benefits from being involved in undergraduate education. We explicitly looked for negative effects of teaching on doctors and their practices and found very few despite using an independent researcher to facilitate disclosure of negative feelings. The sample interviewed, however, was a specific group of general practitioners who had agreed successively to attending a teacher training course, teaching students in their practices, and then being interviewed.

There was a striking homogeneity of responses, despite planned sampling for maximum variability. Length of teaching experience, being a postgraduate trainer, time since qualification, sex, practice characteristics, location (urban or suburban), or medical school did not affect the results. The study took place within a well organised and well funded project and may represent a best case scenario. Similar positive attitudes towards teaching among general practitioners, however, have been found in previous studies,<sup>19 22 23</sup> suggesting that our results may be transferable to other groups of general practitioners.

### Changes in clinical practice

The isolated nature of general practice means that general practitioners' clinical skills are not displayed to their colleagues. Deterioration of clinical skills is feared, and both calibration of skills with a peer group and perceived improvement boosted morale. Changes

## Key messages

- The increase in community based teaching of clinical skills requires an increase in the number of general practitioner teachers
- Little evidence is available about the effect of teaching of clinical skills and teacher training on general practitioner teachers and practices
- General practitioner teachers reported an increase in morale, improvements in clinical skills, and changes in clinical practice and in practice infrastructure as a result of teaching and training
- General practitioner teachers reported problems because of pressure on time, lack of space, problems recruiting patients, and unsupportive practice partners
- Positive effects on morale and clinical practice may be important for sustainable teaching and continuing medical education

in clinical practice seemed to be due to reflection prompted by new information, echoing Kolb's "learning cycle,"<sup>24</sup> where experience prompts reflection, leading to generalisation (hypothesis formation) and testing. Further studies are needed to quantify these changes, which may have important implications for the role of teaching in continuing medical education.

The opportunity for improving communication between hospital specialists and general practitioners did not fully emerge, remaining one of the challenges facing those who develop community based teaching.

### Sustainability of teaching

To sustain teaching of clinical skills general practitioner teachers need help to overcome external (workload and infrastructure related) and internal (confidence related) restraints to teaching.<sup>22</sup> Within CeMENT, innovative solutions to service provision problems such as employing additional medical staff were assisted by the reimbursement for teaching, while issues of confidence were covered by training courses. Teaching of skills in the community and the provision of relevant training are recent innovations that may have increased enthusiasm, although no differences were found between well established and new teachers. The increase in morale attributed to teaching may prove important for the sustainability of teaching of clinical skills and for the current recruitment problems within general practice.

### Conclusion

Community based teaching of clinical skills can have a positive impact on general practitioners, improving morale, confidence in clinical skills, and clinical practice. These positive outcomes rely on providing good quality teacher training to novice teachers, ongoing support and networking opportunities to all teachers, adequate funding to permit teachers to reduce their clinical commitments, and the commitment of all the doctors within a practice to teaching.

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