“Can you take a student this morning?”: maximising effective teaching by Practice Nurses

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Abstract

Objectives.

Little is known about the contribution that nurses make to medical student learning. This study set out to explore the nature of practice nurse teaching during the general practice clerkship and to explore ways in which the teacher and learner (the practice nurse and the medical student) can be best supported to maximise learning.

Method.

Mixed focus groups were conducted with general practitioner educational supervisors and practice nurses. Further focus groups were conducted with students on completing a clerkship.

Results.

There is wide variation in the delivery, organisation and expectations of practice nurse teaching. While there is some evidence of a passive learning experience the learning dynamic and the student-nurse relationships are regarded highly.

Conclusions.

Time spent with practice nurses is an important part of the clerkship in general practice. The nature of the practice nurse-medical student relationship is different to the educational supervisor-medical student relationship and can be built upon to maximise learning during the clerkship. The experience for the

practice nurse, the medical student, and the supervisor can be enhanced through formal preparation for delivering teaching

Key words: primary care; medical student teaching; practice nurses

OVERVIEW

What is already known on this subject

Medical students on general practice clerkships spend time learning with practice nurses. This has resource implications but offers important insight into aspects of primary care.

What this study adds

There is a lack of clarity around why, what and how nurses should be teaching students

Despite being experienced in chronic disease management practice nurses do not feel empowered to challenge students' knowledge.

There is clearly a role for practice nurses in medical student education which could be enhanced by better preparation and more effective planning.

Suggestions for further research

Future research might include and exploration of the impact of practice nurses on the developing professional habits of medical student.

INTRODUCTION

The location and nature of clinical teaching reflects changes in medical education but also in the context of health care delivery.[1, 2, 3, 4] Medical students are taught on clinical placement and in skills centres by nurses, they are facilitated in classroom learning by nurses, and newly qualified doctors are frequently instructed by nurses. [5, 6] There has been an increasing informal involvement of practice nurses in medical student clerkships in general practice largely as a result of nurses' increasing role in chronic disease management.

This development of practice nurse teaching has resource implications and increases workload.[7,8] Community-based clinical teachers may feel pressure to maintain the quality of clinical services at the expense of quality teaching.[9] However, teaching in general practice is linked positively with the quality of clinical services,[10,11] and also satisfaction of practice nurses[7] and team morale.[8] Community-based teaching offers valuable insight for students into aspects of team-working[12] and comprehensive healthcare[7], including an appreciation of the complexity of patient care.[13]

On entering medical school students have negative perceptions of the academic ability, status in society and professional competence of nurses.[14] However, in the early years of the curriculum students' positive evaluation of teaching by nurses endorses their role as inter-professional educators.[5] Thereafter spending several weeks with a general practitioner during the clinical clerkship exposes students to consulting room practice and also to teamwork and the

complementary roles of the doctors and nurses, enhancing professional socialisation[14,15] and potentially paving the way for future collaborative working practices.

Our experience suggests that clinical teaching by practice nurses during the general practice clerkship is often done without briefing and training, and without additional funding or support similar to general practice teaching in some areas 10 years ago.[8] This study aims to examine the nature of practice nurse teaching and the factors that influence the learning experience for students. The study also aims to explore how practice nurses and medical students can be best supported to maximise learning.

METHODS

Medical students (students) at Glasgow University are allocated to a 5-week general practice clerkship on a one-to-one basis with a general practitioner educational supervisor (supervisor) as part of a two-year rotation through clinical specialities. From our experience, most teaching by nurses is undertaken by practice nurses. However, it is recognised that students have exposure to a wide range of nurses during the clerkship.[7]

Data collection

At the end of each of four blocks of clerkships from January to May 2007, supervisors (n=84) and practice nurses (nurses) were invited by letter to take part in a focus group and complete a short questionnaire. Supervisors were asked to identify nurses involved in teaching and pass on the letter. All invitations included an outline of the study and emphasised that participation was voluntary. A reminder was sent after two weeks.

Students attending clerkships in the first three blocks of the study period (n=84) were informed of the study by the researchers (PS and AO'N) during a campus based teaching session on the last day of each block. They were then invited to participate in a focus group to be conducted immediately thereafter (in order to maximise student involvement) and requested to complete a short questionnaire.

Questionnaires were designed to inform the development of topic guides and collect data on prior 'teacher' training of nurses and number of nurse-student sessions. Other data on learning outcomes from nurse teaching are out with the scope of this paper.

Each focus group was facilitated by two of the researchers using topic guides. (Appendix 1) The focus groups were audio-taped and transcribed verbatim. Transcripts were analysed using Framework analysis,[15] a systematic approach to data handling which employs distinct though interconnected stages thereby making the analysis process more explicit. The transcripts were read and re-read independently by the researchers (AON and PS for students; PS and PC for professionals). A thematic framework was constructed based on analytical themes arising from data and applied to each focus group. This initial analysis was then discussed and compared to ensure credibility of the findings and codes were attached to the main themes.[16] In this way, the researchers' perspectives could be considered: PS, an academic general practitioner and course organiser four years previously, also has prior experience as a supervisor; PC a senior academic who coordinates undergraduate educational activities in general practice; AO, a senior academic nurse, involved in undergraduate and postgraduate nurse education. Key themes with headings and subheadings were then used to create charts collecting quotes across the focus groups which were then further analysed comparing and contrasting responses.

Ethics approval was obtained from the Faculty ethics committee. Students were assured that inclusion or otherwise in the study would not impact on their progress. Full informed consent was obtained from participants at the focus group. Tacit consent was reflected in the return of the questionnaires.

RESULTS

Fifteen supervisors and 16 nurses initially agreed to be involved in mixed professional focus groups. Non-attendance (e.g. unsuitable time, other commitments) resulted in 6 supervisors and 8 nurses attending 2 focus groups. Thirteen medical students participated in 3 focus groups. 55 nurses, 49 (57%) supervisors, and 80 (95%) students returned questionnaires.

Prior teaching/'teacher' training experience of nurses is presented in Table 1.

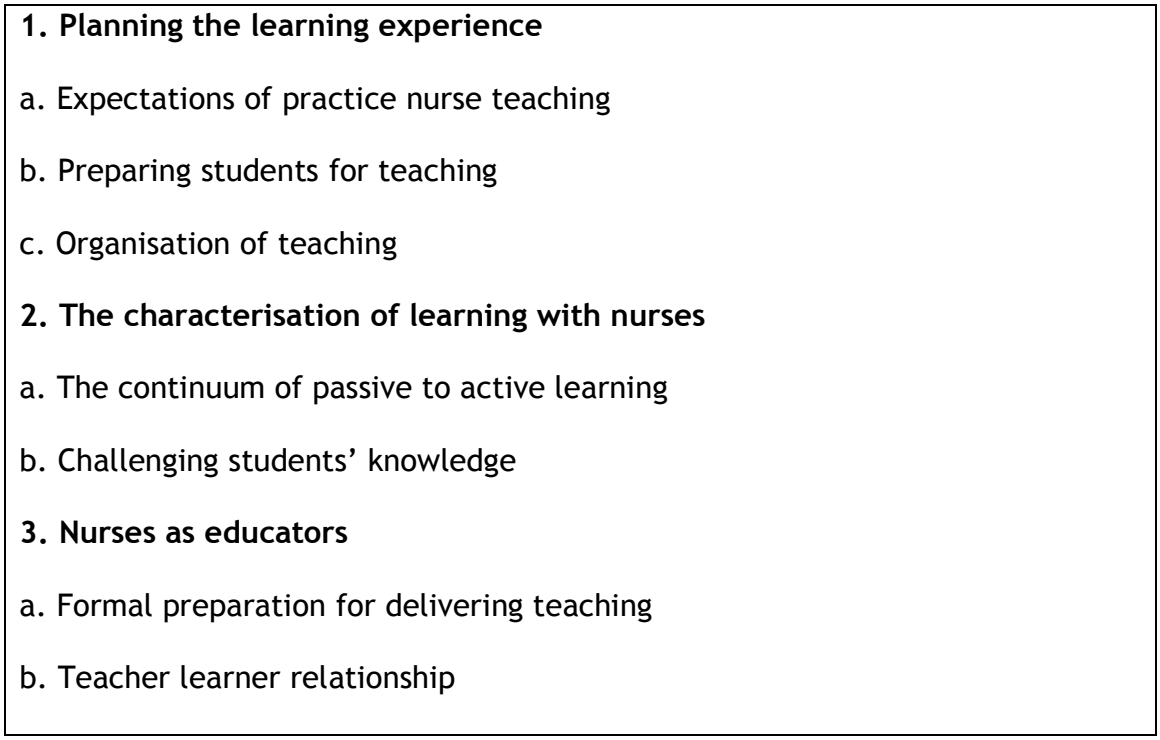
Students reported an average of 2.5 sessions with the nurse during the clerkship (range of 0 to 5) with 5 (6%) students reporting no involvement.

Table 1 Teaching/'teacher' training experience of practice nurses involved with students

Teaching experience	**Practice Nurses** (n=55)
Formal preparation for delivering teaching	21 (38%)
module within a further education accredited qualification	11 (20%)
Session(s) in Continuing Professional Development	10 (18%)
Training undergraduate or postgraduate nurse or health care assistant in past 2 years	51 (93%)
Teaching foundation year doctors / registrars in past 2 years	23 (42%)

The themes emerging from the focus groups are shown in Figure 1 and are supported by exemplary quotes. (FG 1 to 3 were student focus groups, where F and M represent Female and Male student, FG 4 and 5 were mixed professional groups, where ES and PN represent Educational Supervisor and Practice Nurse respectively).

Figure 1



1. Planning the student learning experience

a. Expectations of practice nurse teaching

Some supervisors had broad objectives, for example the role of the practice nurse, whereas others presented a checklist of specific skills the student could learn from the nurse. However, there were many instances when nurses expressed uncertainty about expected learning outcomes of teaching sessions. A minority of supervisors did not expect the nurse to teach at all - the student was simply there to observe. However, there appeared to be little discussion between supervisor and nurse around these issues resulting in confusion and demoralisation at times.

"There might be a perception in some areas that practice nurses don't have an awful lot to offer to students … when that is the set up within a place, it's very difficult [for a nurse to say to a student] 'what are your objectives?'" FG4 PN3

b. Preparing students for teaching

When they first arrived at the practice some students were not clear why, and what, they should learn with the nurse; they received little in the way of preparation. However, participants spoke about the benefit to students of briefing at the start of the clerkship and how *"you can broaden their approach, certainly in their list of objectives" (FG5 ES2)* by clarifying the scope of experience possible with the nurse. Participants reflected that it would be useful to involve the nurse in helping to shape the students' learning objectives.

Students may have only a few sessions with the nurse during the clerkship and were sometimes ill-prepared to make the most of the experience:

"I should have been more confident about saying, you know, I want to do this…. (she) wasn't obviously used to incorporating me into her consultations". FG1 F3

c. Organisation of teaching

Some nurses had students at short notice and therefore had no opportunity to organise teaching:

> *"I usually get a knock on my door at 9 'o' clock to say, 'can you take a student this morning?', generally because there's no room anywhere else". FG4 PN3*

Others described a more systematic approach that included *"cherry-picking cases from the computerised appointment system" (FG4 ES2)*. Other practices adopted a mixed approach that was ad hoc as well as structured.

Protected time for teaching and involvement in planning teaching was an issue for some nurses:

> *"I don't get time to prepare, and that is a big issue so I find that I'm on the hoof with them, and they are invited at the beginning of the session if there is anything that I say you don't agree with, please feel free to contribute…. FG4 PN3*

Others felt that they could accommodate students and maximise learning opportunities in routine 15 minute appointment slots.

Some students described how nurse surgeries were timetabled into their schedule thus allowing them to revise material and identify learning needs in advance. This also meant that nurses were expecting them. Other students

were given information about the clinics run by nurses allowing them to be more proactive in organising their learning.

2. The characterisation of learning with nurses

a. The continuum of passive to active learning

The students and nurse described a spectrum of learning experiences that ranged from passive to active encounters. However, the majority of students described learning with the nurse as a passive experience. They shadowed the nurse: *"I wouldn't have thought about it as teaching, I just felt like I was shadowing and if I wanted to know something I would ask her, it's different dynamic to that with the doctor, who's trying to gauge where you're at, and telling you stuff, that you need to know" FG1 F1*

Many students made a clear distinction between learning from nurses and being taught by supervisors who were challenging of students' knowledge base. While some students enjoyed this non threatening learning style, others were more proactive; asking questions of the nurse or discussing their learning needs at the outset of the session, resulting in a more valuable learning experience.

A small number of students described a more interactive learning experience with the nurse that began with a discussion about their learning objectives. As well as demonstrating procedures or guidelines, these nurses were much more likely to question and challenge the student. Students were given the opportunity to apply the knowledge they had learned through repeated

practice of procedures and by making management decisions using guidelines. One student described the nurse organising a session specifically to meet the students learning needs.

b. Challenging students' knowledge

Nurses seemed to rarely challenge students' knowledge:

> *"It's very, very rare to get asked a question by a nurse whereas doctors are sort of interrogating you…" FG1 M2*

They did not have reference points for gauging what knowledge students should have attained at any stage in the clinical rotation:

> *"Just setting a specific goal was quite useful for her because she didn't really have any expectations of our knowledge so knowing what we were looking for was helpful to her". FG1 M1*

Some felt that they weren't in a position to teach students more academic aspects of medicine, but they had strengths in communication skills, and understanding patients' family and social interactions rather than in anatomy and physiology of disease. They were concerned that they had little to teach medical students whom they perceived as being more knowledgeable.

3. Nurses as educators

a) Formal preparation for delivering teaching

Although nurses had experience of teaching they often had no formal training in how to teach and recognised that they were not familiar with current educational methods. One nurse described the impact of being on a postgraduate course:

> *"I've started to challenge a bit more …it's changed my perspective on education" FG4 PN4*

The benefit of undertaking formal preparation for teaching was recognised by others:

> *"I think the best thing that they got out of it, the nurses and our practice manager was that they actually do know a lot, it was kind of a confidence thing" FG5 ES1*

b) Teacher learner relationship

The students described being made to feel *"part of the team"* (*FG3 M1),* being treated as equals, and having their opinions valued by nurses. One student suggested that this relationship was in part because nurses were *"not part of the assessment"* and thus the student felt *"more at ease and then when I do things I do them a lot better"* (FG3 M2). Nurses had knowledge and skills that students recognised they could learn from within a relationship that could be mutually beneficial.

"I got the impression I might know a little more about pathology and certain conditions but the nurse would know a lot more about other aspects of management so, it was, it was just a bit more balanced like, you could both take something from each other". FG3 M1

This encouraged a feeling of mutual respect as this nurse expressed:

"I think their communication skills inter-professionally are an awful lot better and they tend to have a lot more respect, they see us as equals, whereas that was not the way before with the training. I think the training has made a vast difference to their attitude to nurses".

FG4 PN3

DISCUSSION

The heterogeneous nature of the professional focus groups was considered important to stimulate discussion and generate ideas. However, the possibility of traditional hierarchies influencing both the dynamics within the group and the resulting data was a concern.[17] The groups were co-facilitated by a doctor and a nurse who emphasised that contributions from all participants were equally valued.

Although as many nurses as supervisors offered to participate in focus groups, the response rate to the invitation may have been influenced by having to rely on the supervisors to pass on letters, highlighting the fact that we have no means of direct communication with nurses. Others have postulated that nurse participation in studies using similar means of contact is dependent not only on their level of interest but on the organisational abilities and motivation of the supervisor.

The dynamic of student learning with the nurse was non-threatening and inclusive. Mutual respect was a strong theme for both nurses and students. This can be a unique experience for students even at this advanced stage in the curriculum. And yet it was within this context that students most commonly described learning with the nurse as passive where they were seldom challenged. This was in contrast to a minority of students who described

exemplary teaching experiences. A number of factors which contributed to the teaching approach adopted by nurses are discussed below.

Organisation at practice level

While some students enjoyed the undemanding approach adopted by some nurses, others felt that being with the nurse was a positive learning experience that could be made more effective. Involving the nurse more actively in setting objectives for the clerkship was seen as a mechanism for engaging them more in teaching activities. A more structured formalised approach to nurse teaching would enhance the student experience. Some of the organisational issues that influenced the teaching style of nurses were: lack of guidance about what was appropriate to teach students and at what level; nurses were not routinely given information about the curriculum, therefore difficult to gauge their expectations of student knowledge; last minute, ad hoc arrangements for student learning with the nurse that contrasted with examples of much more strategic, collaborative and integrated approaches; lack of opportunity to prepare adequately was compounded for some nurses by inadequate provision for protected time for teaching; and expectations of the learning experience limited the potential for learning with a timetabled entry of 'sit-in' with nurse.

Training to teach

The lack of confidence of some nurses as teachers was evident in the concern expressed about meeting students' educational needs, which they perceived to be 'academic'. There was wide variation in the frequency with which nurses were allocated teaching sessions and therefore in the level of teaching experience nurses can accrue. Although most nurses in this study had experience of teaching student nurses or postgraduate doctors only a minority had received training in how to teach. This study illustrates how undertaking further education can have a profound impact on community nurses' confidence and approaches to teaching. The need to 'teach the teachers' is well recognised in relation to medical staff, and with the increasing contribution of nurses, there may be no justification for not training nurses to teach.[18]

With the development of specialist nurse practitioners, nurses are becoming more involved in teaching students in hospitals during clinical clerkships[19] as well as fulfilling a more traditional (and often unacknowledged) role of supporting and instructing junior doctors.[20,21] Their expertise is also used in such settings as clinical skills laboratories.[22] There is therefore a wider responsibility of medical schools to consider means of ensuring adequate training of nursing personnel who are regularly engaged in medical student teaching. This should take into account different styles of learning and

teaching experienced by nurses so that by more closely aligning nurse teaching with medical schools more effective student learning would result.

Organisation of general practice teaching

The role of the nurse in teaching students was not defined at a practice level and as a result led to a wide variation in the experiences of students. However, there was little recognition of the need to encourage and support supervisors in negotiating with nurses their contribution to placement learning. This was compounded by a lack of direct communication with nurses by course organisers.[7] There is potential to de-value the contribution of nurses at a time when they have a greater contribution to make to the education of students than in the past. Addressing the issue of clarity of role and improving communication between course organisers, supervisors and nurses about expectations of nurse teaching will acknowledge the added value for students of nurses' teaching. The implications of additional workload for nurses must be addressed but with adequate support teaching could be a rewarding experience for nurses.[6]

Practice nurse teaching should be regarded in the wider context of Interprofessional Education (IPE)[23] as a means of developing the necessary skills to work in cooperation with other professionals in the delivery of increasingly complex health care needs.[24,25] Despite GMC recommendations[26] there is a lack of opportunities for IPE in the undergraduate curriculum: it is complex to

deliver and as yet there is no convincing evidence to support IPE as a means of enhancing team work and communication.[27] Many of the studies of IPE involve the evaluation of instruction in particular and specific skills often with large cohorts of students, and with staff working outside of their professional territory. These features contrast with this study which demonstrates that it may be possible to explore some of the principles of IPE through nurse teaching of students in the community: the development of respect between individuals, understanding roles of others, sharing knowledge and skills in a 1-to-1 relationship with the nurse undertaking clinical duties. With increasing demand for undergraduate teaching to take place in the community[1] the nurse is potentially a valuable resource to bridge the gap between a largely uniprofessional education which predominates in the undergraduate curriculum and team working in their professional lives.

FUTURE CONSIDERATIONS

Students' learning from nurses could be made more satisfactory if it was better coordinated and planned. Nurses need to be supported by medical schools as well as by teaching departments of general practice and briefed on the curriculum and the expectations of student learning in practice. The findings of this study point to teaching departments providing training for practice nurses on the curriculum and on a 'training teachers to teach' programme, and in supporting educational supervisors to develop the role of the practice nurse in teaching. Furthermore, at practice level the practice nurse should be involved

in developing student objectives, and consideration should be given to extra time in nurse clinics for teaching.

The nurses and medical students described a collaborative learning experience as a feature of working together. Future work might explore the impact of nurse teaching and learning on the developing professional habits of students. Support and resource for the development of this teaching role is both necessary and timely.

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