

Parallel Consulting method: Student and tutor evaluation in General Practice

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Abstract

Context

The parallel consulting method (PCM) is widely used by general practitioners (GPs) for teaching medical students. Studies have described individual aspects of bedside teaching in community settings, including the logistics of using the PCM, but there has been no evaluation of it as a teaching method.

Aims/Research Question

This study aimed to evaluate the PCM and whether it helped students develop consultation, clinical and clinical reasoning skills.

Design

The study was based at the Oxford University Primary Care Department. Penultimate clinical year students (n=63) were recruited to take part in this mixed methods study. Students completed a questionnaire with closed and open-ended questions rating the PCM. A focus group explored questionnaire themes. GP tutors completed a questionnaire about the PCM and the logistics of delivering it. Three tutors took part in semi-structured interviews.

Outcomes

The PCM helped develop students' consulting, and clinical reasoning skills. Teaching was improved when tutors were unrushed and had increased time to provide feedback and teaching. Delivery logistics of the PCM impacted on whether tutors were rushed and found it difficult to teach. Most benefit was derived when students were well briefed with sufficient debriefing time following a consultation.

Conclusion

The following steps are recommended for effective delivery of the PCM teaching model: Ensure tutors are appropriately trained; comprehensively brief the student about how to gain the most out of the learning experience; plan the logistics; ensure appropriate review and debriefing following consultation; review clinical cases after the session teaching on any outstanding aspects.

Keywords

General Practice, undergraduate medical education, parallel consulting, clinical reasoning, consultation skills.

Context

Undergraduate students receive intensive one on one teaching and feedback from their GP tutor. Commonly, GPs select patients for the student to see in an adjacent room first before presenting the patient to the supervising GP, known as the parallel consulting method (PCM). The PCM provides valuable student learning to see unselected patients in quick succession, complete a whole consultation, develop clinical reasoning, diagnostic and management skills, with immediate feedback by an experienced tutor. The significant number of tasks that a tutor needs to balance within each consultation requires considerable skill to ensure high quality patient care whilst assessing the learner's development in these skills (1, 2). This is most relevant when limited consultation time potentially compromises active tutor teaching. Some studies have reported increased consultation time with medical students present (1). Quality of education has to be considered in the context of patient acceptability, which most patients find acceptable with students present (3, 4). The rapid learner turnover in practices makes implementation of a good model of teaching difficult when students are new to the PCM (5).

Research Question

Within the literature there are two studies describing how the PCM works in practice but there is no comment about the educational value and experience when using the PCM in practice (1, 5).

Description

This study evaluated the PCM, primarily from the student perspective and whether it helped them: achieve the course objectives; develop clinical skills; develop clinical reasoning skills. Following the evaluation, a blue-print for using the PCM was developed.

A mixed methods approach with a realist evaluative framework of students and tutors ratings on a questionnaire looked at overall experience, development of knowledge base, and level of interaction and teaching from the tutor. Questionnaire themes were used to explore a deeper understanding of the students' perspective through a focus group of five students. Together with semi-structured interviews with three tutors, this provided a more comprehensive

evaluative study. The study was undertaken as part of the penultimate clinical year general practice rotation at Oxford University Medical School.

Outcomes

Questionnaires were completed by 63/120 (53%) students and 16 (50%) tutors. Eighty four percent (n=53) of students reported adequate patient contact time, (mean of 4.6 patients seen per 3-4.5 hour session).

Students rated the PCM as helping them develop increased independence in consulting, developing clinical and clinical reasoning skills through taking responsibility for patient care, managing a patient as if a real doctor, and documenting in the medical record (Figure 1a). History taking, examination skills, developing differential diagnosis and management plan course objectives were achieved. Student learning was reinforced through preparing beforehand and reflecting after a patient encounter.

The PCM provided a representative general practice case mix (Figure 1b), with more than 73% (n=46) students reporting cases not previously encountered, aiding wider knowledge development.

Tutors were highly rated for their enthusiasm and teaching skills (Figure 1c), providing good opportunities for students to discuss clinical reasoning and management of a patient's case. Students perceived the tutor to be rushed in almost half of interactions likely affecting post case feedback and discussion.

Eighty one percent (n=13) of tutors were enthusiastic when using the PCM, (Figure 2), without a detrimental effect on their surgery (73%). Tutors reported feeling rushed, with 50% finding it hard to teach students. Despite this 81% (n=13) of tutors reported the PCM helped develop clinical reasoning skills.

Qualitative analysis of questionnaire comments and focus groups showed the PCM allowed students to gain independence and improved clinical abilities. Greater tutor clarity about student tasks for each consultation would improve student experience. Appropriate debriefing was essential to encourage further learning. Tutor feedback and student reflection time following a single consultation and the surgery as a whole was highly variable causing different learning experiences.

To ensure maximal learning opportunities tutors found balancing a broad case mix of patients with varying complexity a challenge. However, when students considered learning more broadly than curriculum objectives they reported developing confidence in consultations, becoming more patient centred and holistic, discussing changing behaviour, and negotiating investigative and management plans through shared decision making.

Students reported observation of their tutor helped develop their communication and clinical reasoning skills. Whilst tutor teaching was again reported as excellent, students felt increased opportunities to suggest diagnoses and management plans, and then receive feedback would have increased the learning value of the PCM.

Tutors reported it was the best model they knew for this stage of training encouraging independence in consulting, through case discussion and involvement in shared decision making, although there were significant time pressures within a surgery for completion of all tasks.

Conclusions

The PCM requires clear student briefings as to what is expected in performing consultations to maximise benefit from the PCM, although this did not take place consistently. Whilst, providing a varied patient mix is difficult from a tutor perspective, it is highly valued by students. Enhanced tutor skill in enabling students to present differential diagnoses and management plans coupled with pertinent feedback following consultations is vital for students to develop clinical skills. Attending to both patient and student needs in addition to completing the tasks associated with consultations creates competing demands for tutors (1). Tutors need to create the perception of learning time within each clinical encounter even if the tutor chooses to delay associated teaching until after the clinical session. Table 1 shows the recommendations and blueprint for using the PCM in practice.

Whilst the literature contains evidence about the logistics and patient experience using the PCM (1, 4, 5) this study goes some way to evaluating the method as a teaching tool in practice. If PCM is delivered well, this study demonstrates that it is a good teaching method developing consultation skills, clinical reasoning and other skills associated to progress to being an independent doctor. Despite the challenges around consulting due to Covid-19 this method of teaching remains an excellent option and can be used with both face to face and virtual consultations.

Figure 1:

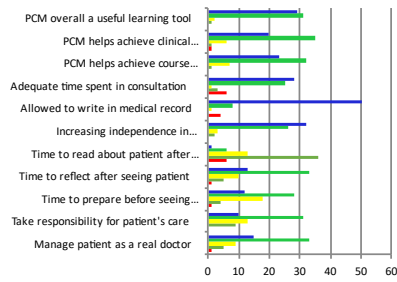


Figure 1a: The overall experience of the parallel consulting teaching method. Data shown is number of students.

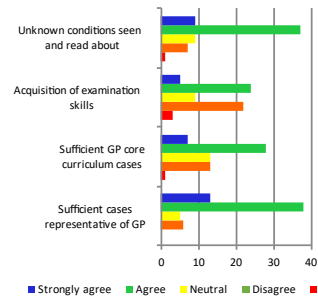


Figure 1b: The PCM as an opportunity to develop knowledge and clinical skills. Data shown is number of students.

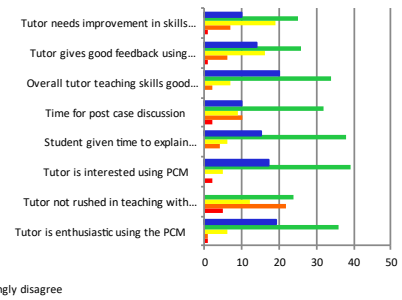


Figure 1c: Level of interaction and teaching from tutors through using the PCM method. Data shown is number of students.

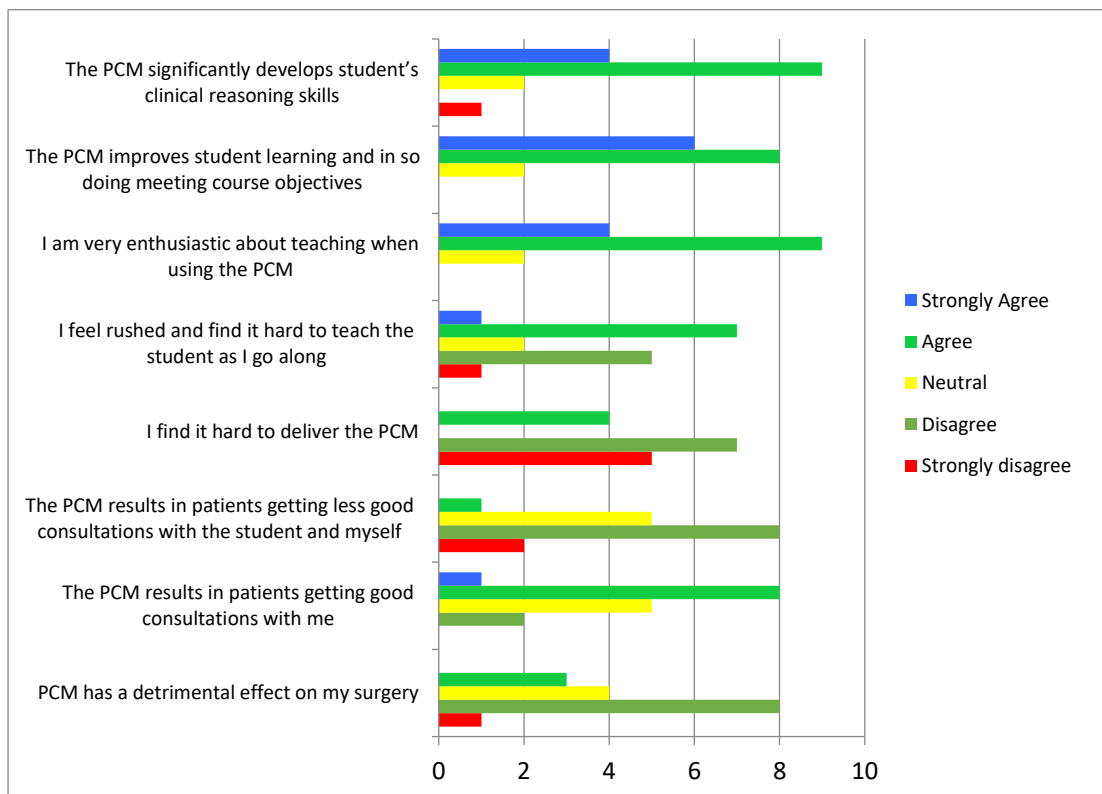


Table 1: A blueprint for using the PCM in practice

<p>1. Ensure appropriately trained tutors are delivering the PCM.</p>	<p>Train all tutors effectively in the method so they are happy using the PCM and enthusiastic when teaching with it.</p>
<p>2. Comprehensively brief the student about how to gain the most out of the learning experience using the PCM.</p>	<p>Brief the student to complete a full consultation ready to present to their tutor. The student could start explaining the diagnosis to the patient unless there is uncertainty or the diagnosis might cause patient distress. In this case the student writes their thoughts down. Remind the student this is a safe environment where they can push themselves and go as far as they can within each consultation.</p> <p>Brief students about higher value learning experiences including case presentation to a medical professional, time management skills, and effective management of patients without unnecessarily bringing them back.</p>
<p>3. Plan the logistics of using the PCM in practice</p>	<p>Ensure a broad case exposure whilst allowing time to reflect on what the student sees. One patient every 30 minutes would accommodate this.</p> <p>Ensure there is synchronization of student and tutor surgery so the tutor is available to review the patient in a timely manner.</p>
<p>4. Ensure appropriate review of the patient and debrief for the student</p>	<p>Ensure a complete presentation by the student, clarify anything with the patient. Consider getting the student to explain the final diagnosis and management plan to the patient.</p> <p>Provide immediate brief teaching on the case of any salient points assuming time allows Further questions or teaching points should be noted for discussion at the end of the clinical session. The student should document the consultation as fully as they can.</p>
<p>5. Review the clinical cases seen in the session with the student and provide teaching on any outstanding aspects.</p>	

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