Becoming a doctor: how simulated practice can legitimise medical students' participation in clinical practice.

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Summary

Using phenomenological techniques, this study explores the learning that occurs in final year undergraduate medical and nursing students after an interprofessional full-patient simulation course. Legitimate peripheral participation is used as a lens through which to interpret some of the findings of this study. Quotes from student interviews and focus groups are used to illuminate and illustrate the critical thinking that goes on in this exploration. The key finding of this paper is that through simulation, medical students on clinical placements may be able to shift their position from observers to legitimate peripheral participants, situating themselves more centrally within a clinical practice environment. This can empower them to gain more from their clinical placements through their increased understanding of the roles they are observing, and with new confidence and knowledge to contribute.

Main submission

This study employs phenomenological techniques[1] to explore the learning that goes on in and after an interprofessional full-patient simulation course for final year undergraduate medical and nursing students. Full-patient simulation involves using highly sophisticated mannequins in real or recreated clinical settings, to practice treating patients without posing any risk to patient safety[2]. It provides a safe learning environment that lends itself well to interprofessional learning with a chance for post-experience debriefing of both the technical and non-technical skills[3]. However little work has been done to investigate the learning that occurs during these interactions, and how does it affect the students' on-going behaviour[4].

Phenomenology is a qualitative approach to inquiry that seeks to gather the views of a number of individuals about a phenomenon and then to describe the common lived experiences of those participants about the phenomenon. Phenomenology, seeks to gather the views of a number of individuals about a phenomenon enabling the researcher to reduce the multiple individual experiences down to a description of the very essence of the experience[5].

Legitimate peripheral participation, a theoretical construct developed by Lave and Wenger[6] to explain how members of a community of practice are slowly and purposefully drawn into a practice, can provide a useful lens through which to interpret some of the finding from this phenomenological study into medical student learning.

The full-patient simulated learning setting gives medical students the opportunity to act as a doctor, in a multi-professional team. Having put themselves in the position of the doctor, they then have a new perspective of observing and understanding clinical practice when they return to the clinical environment as medical students. By participating in a simulated clinical care situation, albeit in a peripheral way (with no live patient's care at stake), students articulate a new understanding of their clinical training. Their experience of being a medical student in a clinical setting has shifted from being solely a passive observer of clinical practice,

to being a participant in clinical practice. This enhances the experience of clinical practice and the potential wisdom that they can gain from the setting. Culturally, it can be argued, they now sit in a more informed, and therefore empowering, position. The following two examples illustrate, from the students' perspective, the impact of the simulation experience on their position within the community of practice. (F1 = first year qualified doctor)

UG15 *Yes, I think it's because I had a really good (simulation) experience and I learnt from it. I went back to the ward, and I, kind of, was remembering it so I was like, actually, do you know what? Yes, I can see, that's why I was looking at the nurses, I was looking at the F1, and the nursing interaction as well. And we had one where we had a deteriorating patient, and the other F1s, the other student wasn't there. And I offered to help, obviously, you know, to help, and I saw how it worked. I saw how the nurses worked, and I thought it was really good. I guess you don't realise it until you've been put into that situation.*

UG01 *I actually sort of think that even if you are not able to participate in all clinical activities, it's important to think about what you would do in those situations.*

The following example helps to highlight how the simulation-based training is helping to fill a gap in their current teaching and so facilitating them on their journey to becoming a junior doctor.

UG30 *(Teamwork is) completely lacking (in core teaching) and completely lacking because, in examinations, you're only really examined by yourself. So, in terms of the training, it seems to be teaching towards not doing it. It doesn't seem to be fully organised in using a team-based, sort of, approach. And as a student, even though you theoretically, in some ways, part of the team, you're not really part of the clinical staff, so you can just easily not get that level of experience that you get... Because you're not running, let's say, an ALS type of protocol as a student so...*
LT *So, you're saying, you're, kind of, on the edge of the team, rather than in the middle of the team, as a student.*
UG30 *Yes. I mean, you're never the person running, say, something like a cardiac arrest protocol and I think, which is something you can do in a simulation.*

Further themes that emerged from this work, and which build on the notion of simulation being a means of drawing medical students closer to what it means to become a junior doctor, include:

- How they observe the doctor-nurse interactions, working out how they are working together
- A change in approach to their observations by starting to think 'what would I do if I was in that situation' and therefore thinking like a doctor
- A new engagement in learning even when not the centre of the activity as they realise there is more to be gained from watching other students perform than they realised.
- A wider perspective of the clinical picture, observing not just the doctors but all the different members of the healthcare team
- An increased involvement in direct patient care secondary to a new found confidence in their clinical acumen.

- A greater understanding of what the nurses can add so more likely to engage them in conversation.

These and other themes are explored in significantly more detail in the final paper. The potential implications of this study are that simulation-based learning can play an important role in the education of undergraduate doctors and aids their becoming a member of a clinical care team as a junior doctor. Through simulation, they may be able to shift their position from observers to legitimate peripheral participants, situating themselves more centrally within a clinical practice environment. This can empower them to gain more from their clinical placements through their increased understanding of the roles they are observing, and with new confidence and knowledge to contribute.

(994 words)

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