"What's another peer?" 6ER-002

Exploring the use of Near Peer teaching of medication history taking in Pharmacy undergraduates in the UK

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Background

A fundamental goal of higher education is to achieve "progressive independence of the learner"¹. Incorporation of opportunity for students to teach and mentor others, also known as 'peer-teaching' is thought to foster independent thought and facilitate selfreflection^{1,2}. Peer learners, particularly those with a close proximity in age to their peer teachers (known as near-peer teaching (NPT)) often hold great appreciation of the knowledge and competence of their peer teachers which can support learning because teaching is at the appropriate pitch⁴. This "cognitive congruence" and associated social parity can support a more relaxed and "safe" learning environment for the peer learner. The peer teacher simultaneously consolidates their own learning while reflecting on and developing a new skill of teaching, which supports their professional development as a (pharmacist) practitioner^{5,6}.

Final year (fourth year) pharmacy students introduced to NPT via a workshop went on to teach second year pharmacy students the skill of taking a medication history (MHx) during experiential learning placement in hospitals in Northern Ireland. Feedback dialogue between peers was scaffolded using structured rubrics.

Ethical approval was achieved from the Faculty of Medicine, Health and Life Sciences, QUB.

Aims

- To teach final year (fourth year) undergraduate (UG) pharmacy students at Queen's University Belfast (QUB) how to teach the skill of Medication History taking (MHx) to second year pharmacy students
- To explore the opinions of second and fourth year pharmacy students at QUB on their experiences of providing and receiving near-peer teaching during their experiential hospital placement.



Interactive workshops (2nd) & (4th) year **MPharm** students

Additional resources on Canvas & Padlet®

2nd & 4th year MPharm students attend EL placements) 2nd & 4th years provide **Feedback** (verbal & Written)

All 2nd & 4th Years invited to a focus group

*Focus group transcribed verbatim & thematic analysis used

Method

All students who had participated in peer teaching (99% of both cohorts) in December 2021, provided feedback on their experience via the placement evaluation form.

All students were also invited to participate in focus groups in February 2022; Ten fourth year students volunteered and eight participated. No second year students volunteered to participate.

A topic guide was developed, piloted and used to guide the discussion during the focus group, which was digitally recorded. The recorded data was transcribed verbatim, and the transcript was analysed using Thematic Analysis⁷.



Results

Second year experiential placement evaluation form;

"What were the best things that you experienced during your second year placement?"

Cognitive & social congruence (see quotes below)

"Being able to interact with the patient fully with a student peer looking over me helped me a lot. I wasn't afraid to ask questions after the patient interaction and knew they would keep me, right and make sure no questions were missed"

"Having the 4th year student there really put me at ease and I was able to ask them questions that maybe I would have been embarrassed to ask the pharmacist as maybe it was a stupid question".

Post Experiential Learning placement focus group (fourth year)

There were 3 main themes and a number of sub-themes;

Themes	Sub-themes		
1. Relationships	a. Trust	b. Role-modelling	c. Valued
2. Affective behaviours	a. Negative	b. Positive	
3. Peer Teaching	a. Preparation	b. Confidence	c. Power

1. Relationships; Trust

Participants believed that the greater the trust relationship, the more "valid" the interaction in relation to feedback;

FP-1: "...the second year...it was their first time doing it [MHx] and we were there once, like, you don't want to be, like, 'you did all this wrong' because obviously for them to be able to go in and do it on their own is so good, like, I can barely go in on my own and do it, even in fourth year...."

2. Affective behaviours; negative and positive

Negative; a number of final year students expressed anxiety about being able to "teach" well;

FP-5: "... I was [more] nervous I was going to say something wrong, say, like, what a drug was used for, just so I didn't confuse them or, like, make them feel like I didn't know what I was talking about..."

Positive; Whereas others felt empowered by the knowledge gap between final and second year, and being able to demonstrate their skills in an area novel to more junior colleagues;

MP-4: "... I felt slightly confident going into it just because I did loads of histories on my placement days before but I was still, like, nervous in case they asked me something I wasn't sure about. But I surprised myself a lot, like, I was able to answer most questions and found myself explaining a lot of stuff, so that definitely made me feel more confident".

3. Peer teaching; power

Participants were aware of the "power imbalance" in the near-peer relationship, and observed that this may have affected the 2nd years' ability to provide reliable, constructive feedback to the final years;

MP-3: "I think they're [2nd years] just going to be very polite to us because they knew we knew they were marking stuff for us as well so, they probably wanted to give us high marks".

Discussion & conclusions

The two student groups had similar knowledge & experiences facilitating effective communication at an appropriate level. This social congruence further fostered a calm learning environment. Participants identified trust as key to a successful interaction between peers.. There was evidence of "meta-cognition" within the final year group, as they described how teaching consolidated their own learning. Final year students were aware of a "power imbalance" in some instances and feared this blunted honest feedback from second year students.

Peer teaching between second and fourth year Pharmacy undergraduates on the skill of medication history taking supported student learning in this area. This is a novel area in undergraduate Pharmacy education and offers potential to support leadership and mentorship as well as teamwork skills in student groups during experiential learning placements.

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