Enhancing Experiential Learning for Pharmacy Students through simulated activities

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Introduction

Experiential learning is a core component of pharmacy workforce development, particularly as the pharmacist role expands to include enhanced clinical responsibilities and independent prescribing within the Foundation Training Year. Early placement exposure is therefore critical to developing competent future practitioners. Consistent feedback from acute, specialist, and primary care settings across NHS Greater Glasgow and Clyde highlighted persistent gaps in students core communication skills. This project aimed to address this need through the development and implementation of a structured, placement aligned communication skills intervention.

Aim

To design, implement, and evaluate a simulated communication training intervention to enhance undergraduate pharmacy students' preparedness and confidence in conducting patient counselling and medication history taking during experiential learning placements.

Method

A series of focus meetings were held to define the core content of a communication training intervention for undergraduate pharmacy students. The intervention content was informed by placement site feedback and aligned with university competency frameworks outlining expected student capabilities [1]. **Communication** was identified as a key development area, with two priority placement tasks: **patient counselling** and **medication history taking**, selected to support targeted skill development.

Training was delivered as a one day, in-house session to eight cohorts of second year students from both Scottish schools of pharmacy on the first day of their placement across two academic years. The session consisted of simulated learning activities. Four simulation stations were developed and refined iteratively following each cohort: counselling a patient on a new medication, taking a medication history, conducting a medication history with a challenging patient, and prioritising patients within a ward environment. Supporting materials were developed including structured prompts for medication history taking and key medicine information for patient counselling. Each station was facilitated by a post registration pharmacist supported by a trainee pharmacist playing the role of a patient promoting a near peer learning approach.

To support application of learning, a sample timetable was developed for the remainder of the placement week to promote consistency across sites and enable students to practise the tasks introduced during the training session. Site teams were encouraged to identify opportunities for students to conduct patient consultations and apply learning from the training day. Three clinical slots were allocated within the standardised timetable, with a minimum target of completing at least one patient consultation related to the training day tasks during the placement week.

Supervised Learning Events (SLEs) were used to support reflection and end of week discussions between students and facilitators.

Student confidence was self-assessed at three points: before training (Evaluation 1), after the inhouse training session day (Evaluation 2), and at the end of the placement week (Evaluation 3). Facilitators also provided feedback on student preparedness, the feasibility of completing an SLE, and the integration of the training day tasks into the placement week.

Reference:
[1] framework_for_el_placements_in_hospital_august_23.pdf

Results

Over two academic years (2024-2025 and 2025-2026), 150 second year undergraduate pharmacy students participated in the simulated learning activities (Robert Gordon University, n = 76; University of Strathclyde, n = 74). While the pilot was delivered across both academic years, only evaluation data from the second year (2025-2026) are presented below, as the evaluation tools were refined and adapted following learning from the first year of delivery.

Baseline confidence prior to training:

Figure 1 shows students' self-reported confidence levels prior to the in-house training session in the 2025–2026 cohort, comparing students with and without previous pharmacy job experience across four core communication skill areas: patient consultations, medication history taking, patient counselling, and communication with other healthcare professionals. In the 2025–2026 academic year, 66 students completed Evaluation 1, of whom 33 reported having a part-time pharmacy job and 33 did not. Among students with pharmacy employment, 32/33 worked in community pharmacy and 1/33 in hospital pharmacy. Baseline mean confidence levels were broadly similar between the two groups, with only small differences observed across all four communication domains.

Figure 1: Pre-training self-reported mean confidence score (Evaluation 1, n=66) by prior pharmacy job experience. Confidence was rated on a 5-point Likert scale (1 = not confident at all; 5 = very confident).

Changes in confidence across the placement week:

Figure 2 illustrates changes in mean self-reported confidence across the same four work-based communication tasks at three timepoints: before the in-house training session (Evaluation 1), immediately after the training session (Evaluation 2), and at the end of the placement week (Evaluation 3). Students' confidence increased across all four tasks following the in-house training session. By the end of the placement week, confidence in patient consultations, patient counselling, and communication with other healthcare professionals was sustained or further improved. Confidence in medication history taking, while remaining higher than baseline levels, decreased slightly compared with immediately post-training scores.

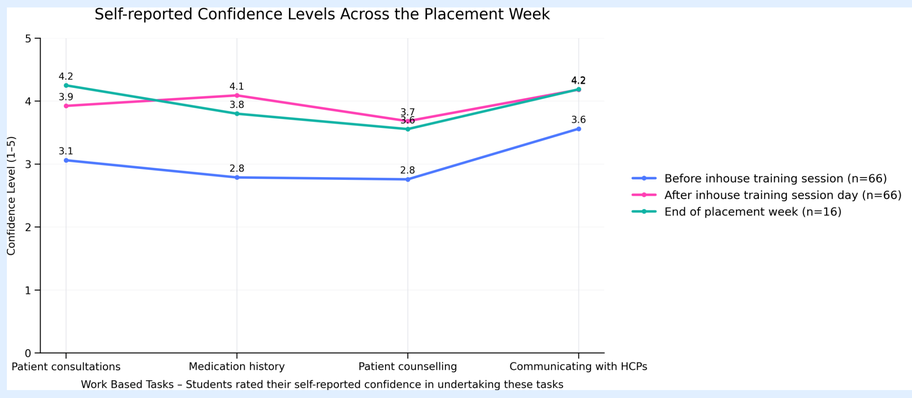

Figure 2: Mean self-reported confidence (1–5) across four work-based communication tasks before training (n = 66, Evaluation 1), after inhouse training day (n = 66, Evaluation 2), and end of placement week (n = 16, Evaluation 3).

Supervisor evaluation feedback (n = 15) indicated that the in-house training session was highly effective, with supervisors rating students as well-prepared and their communication and medication history abilities as good or excellent. While completion of SLEs was generally considered easy to facilitate, placement challenges such as time constraints, staff shortages, and patient complexity highlighted areas for logistical improvement. The workshop also provided opportunities for trainee and post-registration pharmacists to develop leadership, role modelling, and mentorship skills, supporting four-pillar working and near-peer modelling.

Conclusion

This project demonstrates that a targeted, one day communication skills intervention delivered immediately prior to placement can meaningfully enhance pharmacy students' confidence and preparedness for experiential learning. Structured tools and simulated practice supported transfer of learning to clinical settings. While limitations include self reported outcomes and a smaller post-placement sample, the findings suggest that brief, focused interventions can address recognised skills gaps and support early development of core competencies essential for future clinical practice.

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