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**EMBEDDING VIRTUAL CLINICAL EXPERIENCE
IN UNDERGRADUATE PHARMACY EDUCATION:
AN OBSERVED SIMULATION-BASED MODEL TO
ENHANCE PRIMARY CARE EXPOSURE**

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Introduction: Recent reforms in undergraduate pharmacy education [1] mandate increased clinical exposure in primary care to support the development of prescribing competencies and consultation skills. However, capacity constraints in community care, driven by workforce shortages and service pressures challenge traditional placement models [2]. Observed simulation-based education offers a scalable and innovative solution. This pilot project explored the design and implementation of a virtual clinical experience (VCE) for third-year pharmacy students, using simulation to deliver standardised, high-fidelity, experiential learning. The aim was to implement and evaluate a hybrid

simulation model that addresses placement shortages, reduces clinician burden, enhances student engagement, and supports interprofessional education.

Methods: Seventy-four third-year pharmacy students from the University of Brighton participated in a pilot VCE day comprising simulated GP consultations delivered via livestream. The day was structured into:

1. Prebriefing with defined learning outcomes
2. Live observation of two distinct GP-patient consultations with simulated patients
3. Facilitated debriefing sessions utilising experiential and social learning theories.

Half way through the day students were divided into subgroups with assigned observer roles focusing on clinical, communication, and patient-centred care dimensions. Supplementary workshops and a digital health session introduced prescribing workflows and electronic health records.

The simulation design was informed by Kolb's Experiential Learning Cycle and Bandura's Social Learning Theory, promoting active observational learning. With the midway changes, debriefing was adapted to deepen engagement. Directed observer roles transformed passive observation into purposeful participation, fostering critical thinking, reflective practice, and peer discussion [3].

Results: 84% of students reported increased confidence in consultation skills and rated 4.5/5 for enjoyment; Qualitative feedback highlighted the value of real-time observation and communication strategies. Educators rated the day 4.8/5; 100% agreed objectives were met. Identified challenges included time management and AV logistics; key improvements suggested included extended debriefs and clearer observer instructions from the start.

Discussion: VCE provides a scalable, immersive solution for clinical learning in pharmacy education, addressing placement limitations while supporting high-quality, standardised experiences. The model's success supports future iterations incorporating longitudinal simulated patient journeys to encompass the continuity of patient care in primary care. Expansion to other institutions and disciplines is feasible, promoting sustainability, and collaboration in simulation-based learning.

Future evaluations will explore the integration of learner-designed cases and interprofessional simulations across multiple institutions. This will assess long-term retention of consultation skills and model scalability, contributing to national pharmacy education reform.

Ethics Statement: As the submitting author, I can confirm that all relevant ethical standards of research and dissemination have been met. Additionally, I can confirm that the necessary ethical approval has been obtained, where applicable

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