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(ID: 151) Developing the skills of post-registration pharmacy technicians in adult critical care

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Introduction: Pharmacy technicians (PTs) are regulated autonomous professionals with unique skillsets. We need more PTs in critical care (CC) to allow pharmacists to engage in higher clinical practice [1]. There is little post-qualification training available which limits PT development and diversification [2].

NHS England funded delivery of an educational programme to demonstrate a) the demand for PT training; b) capability of PTs to participate in formal post-registration training and; c) feasibility of delivery.

The programme was delivered using a blended approach of digital learning material and class work using Team Based Learning (TBL) over five study days in nine months (3). Sixteen learning outcomes were assessed through classwork, a practice portfolio and written assessments. Subjects covered pharmaceutical care (physiology, biochemistry and therapeutics), audit and improvement, communication, and leadership.

Aim: To evaluate the delivery of a post-registration training programme for CCPTs in a higher education setting.

Methodology: The programme was evaluated using academic performance metrics (median attainment scores) and a longitudinal survey exploring programme delivery and benefit using a standard institutional evaluation proforma. The survey contained 11 questions. Nine asked for evaluation of the content of the programme (learning materials, delivery, suggested improvements). The last two evaluated self-reported confidence and competence using 10-point Likert-type questions. The survey was administered four times over the programme.

A single focus group at programme end invited students to reflect on what they enjoyed, what could be improved and its impact on themselves and their services. As educational evaluation ethical approval was waived. Participation was voluntary. Survey responses were anonymised and the focus group recorded using contemporaneous notes.

Results: 15 PTs from 13 hospitals enrolled. Experience in CC ranged from 1 month to 10 years. 13 PTs completed the programme in full, with two deferrals. Students achieved a median score across the programme of 65.4% (IQR 55–68) with large variation between formal written assessments (case reports, incident reports, audit reports) and their portfolios. TBL produced the most reliable outcomes (Median 65.6, IQR 63–68). The survey response rate was 48.9%. Competence scores improved from 6/10 (range 2–8) to 8/10 (range 7–10). Confidence scores improved from 6.2/10 (range 5–7) to 8.5/10 (range 7–10).

Focus group responses suggested that students welcomed an opportunity to build community with colleagues and learn from them but wanted more in-person contact. The content was appropriate, and blended learning approach welcomed from a work-life balance perspective but there were challenges with technological engagement. Overall students reflected that the programme was career enhancing.

Discussion: This is the first specialist training programme for CCPTs. We have demonstrated that PTs perform well when undertaking post-registration educational development. The programme transformed CC PTs into confident and competent professionals with and the assurance of an academic qualification and they should be developed for more specialities. Variation in attainment suggests additional support with academic skills (writing, critical appraisal and presentation skills) may be required.

Further evaluation over a larger cohort and multiple programme iterations is necessary to fully evaluate the programme. Further study is required to measure the long-term impact on CCPTs, their development and clinical services provision.

Keywords: *Pharmacy technicians, critical care, team-based learning*

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