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A qualitative study of UK pharmacy pre-registration graduates' views and reflections on pharmacist prescribing.

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## **Abstract**

### Background

Pre-registration pharmacy graduates are a key group in relation to developing and implementing innovations in practice.

### Objective

To explore the views and reflections on pharmacist prescribing of UK pre-registration pharmacy graduates.

### Method

Semi-structured telephone interviews with a sample (n = 12) of preregistration pharmacy graduates.

### Key findings

Most reported a desire to train as prescribers, largely for reasons of professional development, but acknowledged the need first to develop as pharmacists. They perceived the lack of organisational strategy, pharmacist prescribers' self-confidence and additional workload to be barriers and were aware of the value of interprofessional relationships as potential facilitators to pharmacist prescribing.

### Conclusion

While participants were supportive of pharmacist prescribing, they highlighted the need first to gain experience as pharmacists and were acutely aware of barriers to prescribing implementation.

## **Keywords**

Pharmacist prescribing; pharmacy pre-registration graduates; views and reflections; education; training.

## **Introduction**

Pharmacist prescribing is embedded in legislative frameworks in several countries, including the United Kingdom (UK). Pharmacists in the UK with 2 years' patient facing experience may train and practise as supplementary prescribers, prescribing in accordance with a clinical management plan agreed with a doctor or dentist and the patient, or as independent prescribers with the same prescribing authority as doctors.[1] Research indicates that prescribing has positively impacted patient care,[2,3] satisfaction[4] and interprofessional working.[3]

Uptake of prescribing by pharmacists is however limited: in 2013, just over 5% of UK pharmacists were registered prescribers.[5] Research highlights an apparent lack of interest in training[6] and newly qualified pharmacists are cautious about assuming prescribing roles.[7] To date there has been no prescribing-related research on recent pharmacy graduates undertaking their 1 year of supervised training prior to registering as pharmacists with the General Pharmaceutical Council (GPhC). These individuals have current education and training around innovations in practice and their perspectives on future developments are highly relevant. The research aim was to explore pharmacy graduates' views and reflections on pharmacist prescribing.

## **Method**

Qualitative, semi-structured telephone interviews were conducted with a sample of graduates from Robert Gordon University (RGU), UK, who had studied a Master's level pharmacist prescribing module; the transferable skills and

knowledge gained added to students' breadth of learning in the Master of Pharmacy degree but did not lead to a qualification in pharmacist prescribing. All final year students (n = 118) were contacted at the end of the academic year inviting participation. Those expressing interest returned a demographic questionnaire and consent form, providing an email address at which they could be contacted later. The interview schedule topics are given in Box 1.

Box 1: Interview schedule topics, all within the context of pre-registration experience.

- Exposure to non-medical prescribing during pre-registration training
- Future plans, motivation and concerns around training and practising themselves as pharmacist prescribers
- Reflections on their MPharm course as preparation for prescribing
- Perceptions of barriers and facilitators to pharmacist prescribing

Interviews were conducted 4 months into the preregistration year, to allow reflection on pharmacist prescribing within the context of participants' practice during this period. Interviews were digitally recorded, transcribed *verbatim* and analysed by one author (TM) using a thematic content analysis approach. One transcript was analysed by the second author (DS) for quality assurance. The study was approved by the Ethical Review Panel, School of Pharmacy and Life Sciences, RGU; the local NHS Research Ethics Service advised that no submission for NHS ethics was required.

## Results

Twenty-three students initially expressed an interest in participating; 95 did not. When these 23 students were contacted 4 months into their pre-registration year, 13 agreed to be interviewed; one was subsequently non-contactable. Seven participants were female; seven worked in community pharmacy and five in hospital; 10 were working in Scotland, one in England and one in Northern Ireland.

Exposure to pharmacist prescribing varied and in some cases was almost non-existent, with the only exposure being through dispensing of prescriptions written by pharmacist prescribers. While most hoped to train as prescribers, citing professional development and job satisfaction as key motivators, they were in no hurry, expressing the desire first to gain experience as pharmacists, 'It's just I need to build up that confidence and experience in what I'm doing because it is such a trustworthy job . . .' (Male, large multiple community pharmacy, Scotland). Some reported concerns around their own prescribing competence, notably their lack of diagnostic skills, and most would be more comfortable practising as supplementary prescribers, at least initially. Only two expressed reservations about implementation of pharmacist prescribing, both in the hospital setting, 'I'm not overly sure that hospital is where non-medical prescribing would take place as much . . . because there's always medical staff there . . .' (Male, hospital pharmacy, England). All reported that their MPharm course had encouraged them to consider prescribing training and some expressed frustration over the lack of recognition by the GPhC of their undergraduate prescribing module as contributing towards pharmacist-prescribing status. All highlighted concerns over pharmacist prescribers not currently prescribing, describing their awareness of contributory issues around lack of organisational strategy despite encouragement for pharmacists to enrol for training, lack of self-confidence among very experienced pharmacists and additional workloads. While several discussed issues of professional rivalry, '. . .very much depends on the speciality

and how comfortable the doctors are, to let you prescribe. So people aren't stepping on their toes. . . .' (Female, hospital pharmacy, Scotland), others stated that physicians' attitudes could facilitate team working and clarity over respective roles, and emphasised the value placed on trust, '. . . it was a really good relationship between [the pharmacist] and the doctors and, you know a lot of trust and things. And I think that's probably pretty important' (Female, hospital pharmacy, Scotland).

## **Discussion**

Pre-registration graduates are a key group in relation to developing and implementing innovation in pharmacy practice and hence their perspectives are of particular significance. Most reported a desire to train as prescribers, largely for reasons of professional development, but acknowledged the need first to develop as pharmacists. They perceived the lack of organisational strategy, prescribers' self-confidence and additional workload as barriers to pharmacist prescribing and were highly aware of the value of interprofessional relationships and trust between pharmacist prescribers and doctors.

To our knowledge, this is the first study to research the perspectives of pre-registration graduates. However, we acknowledge limitations of the low response rate, small sample and potential for non-saturation of themes, and the potential lack of transferability of findings to other countries. While most participants described some experience with pharmacist prescribers, this appeared largely passive with little active involvement, in line with survey findings of newly registered pharmacists.[7] The expressed desire to gain experience as pharmacists before training as prescribers is reassuring, highlighting reflection and self-awareness. The combination of knowledge accumulated over time and reflection promotes more effective learning; this is particularly relevant when assuming new, challenging roles.[8] Pharmacist undergraduate education and pre-registration training in England have been reviewed[9] and discussions are

ongoing about a possible 5-year integrated programme leading to graduation and registration. It is anticipated that this would promote contextualisation of learning in a more clinically focused way; the programme would include some elements of prescribing training and facilitate progress to independent prescriber status.

'Prescription for excellence: a vision and action plan', recently launched by the Scottish Government, clearly articulates a strategic direction for pharmacist prescribing, deemed a core role for all pharmacists in delivering patient-centred pharmaceutical care.[10] It states that, 'all patients, regardless of their age and setting of care should receive high quality pharmaceutical care from clinical pharmacist independent prescribers'. There is therefore an urgent need to ensure that there is capacity within the pharmacy workforce to deliver this target, with implications for education and training at all levels.

While this study may inform developments in pharmacy education and training, more research is clearly needed. A longitudinal study of pre-registration graduates might establish whether early enthusiasm translates into prescribing training and practice.

## **Conclusion**

Pharmacy graduates were keen to train as prescribers while acknowledging the need first to gain practice experience. They viewed prescribing as an appropriate role but were acutely aware of barriers around organisational strategy.

## **Declarations**

Conflicts of interest

The authors declared that there are no conflicts of interest.

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#### Authors' contributions

TM was involved in study conception, design, data generation, analysis and manuscript preparation. DS was involved in study conception, design, analysis and manuscript preparation. All authors state that they had complete access to the study data that support the publication.

### References

1. Stewart D *et al.* Educating nonmedical prescribers. *Brit J Clin Pharmacol* 2012; 74: 662–667.
2. Bruhn H *et al.* Pharmacist-led management of chronic pain in primary care: results from a randomised controlled exploratory trial. *BMJ Open* 2013; 3.
3. Latter S *et al.* *Evaluation of Nurse and Pharmacist Independent Prescribing*. London: Department of Health, 2010.
4. Stewart DC *et al.* Pharmacist prescribing in primary care: the views of patients across Great Britain who had experienced the service. *Int J Pharm Pract* 2011; 19: 328–332.
5. Phelps A *et al.* *GPhC Registrant Survey 2013*. London, UK: General Pharmaceutical Council, 2014.
6. Stewart D *et al.* Pharmacist supplementary prescribing training: a study of pharmacists' perceptions and planned participation. *Int J Pharm Pract* 2007; 15: 319–325.
7. McIntosh T *et al.* A cross sectional survey of the views of newly registered pharmacists in Great Britain on their potential prescribing role: a cautious approach. *Brit J Clin Pharmacol* 2012; 73: 656–660.



8. Black PE, Plowright D. How postgraduate pharmacy students develop professional understanding: reconceptualising deep, reflective learning. *Pharm Educ* 2008; 8: 29–35.
9. Modernising Pharmacy Careers Board. *Review of pharmacist undergraduate education and pre-registration training and proposals for reform*. Medical Education England; 2011.
10. Scottish Government. *Prescription for Excellence: A Vision and Action Plan*. Edinburgh, UK: Scottish Government, 2013.