BJCP British Journal of Clinical Pharmacology

DOI:10.1111/j.1365-2125.2011.04133.x

A cross sectional survey of the views of newly registered pharmacists in Great Britain on their potential prescribing role: a cautious approach

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All authors contributed to stages of study protocol development, data collection and analysis and preparation and approval of the manuscript.

Keywords
competence, pharmacist, prescribing, questionnaire, survey, training needs

Received
17 June 2011

Accepted
14 October 2011

Accepted Article Published Online
28 October 2011

WHAT IS ALREADY KNOWN ABOUT THIS SUBJECT

- Pharmacists, along with certain other health professionals, may train and practice as supplementary or independent prescribers. The implementation and sustainability of pharmacist prescribing services throughout Britain will require a sizeable workforce. However, a survey of GB pharmacists highlighted that only a minority has taken any action to investigate prescribing training. Newly registered pharmacists may be keen to explore extended clinical roles and their engagement is likely to be key to the future success of this initiative.

WHAT THIS STUDY ADDS

- Newly registered pharmacists are cautious in their approach to taking on prescribing training and roles. While almost all expressed interest in prescribing training, they acknowledged training needs in clinical examination, patient monitoring and medico-legal aspects of prescribing. Longitudinal research on a cohort of newly registered pharmacist prescribers is warranted, aiming to identify later prescribing training actions and subsequent impact on patient care.

AIM

To investigate newly registered pharmacists' awareness of pharmacist prescribing and views on potential future roles as prescribers.

METHODS

A mailed questionnaire was sent to all 1658 pharmacists joining the Pharmacist Register in 2009.

RESULTS

The response rate was 25.2% ($n = 418$). While most (86.4%) expressed interest in prescribing training, they acknowledged training needs in clinical examination, patient monitoring and medico-legal aspects of prescribing. Two thirds of respondents (66.3%) thought the current requirement of being registered as a pharmacist for 2 years prior to commencing prescribing training was appropriate.

CONCLUSION

Newly registered pharmacists are cautious in their approach to taking on prescribing training and roles.

Introduction

Pharmacists, along with certain other health professionals, may train and practice as supplementary or independent prescribers. The anticipated outcomes of non-medical prescribing centre around enhancing patient care, providing safer and quicker access to medicines, making best use of health professionals' skills and reducing the workload of the medical team [1]. Responsibilities and frameworks for non-medical prescribing have been described elsewhere [2, 3].

Training programmes for pharmacist prescribers in Great Britain (GB) are defined and accredited by the General Pharmaceutical Council (GPhC). The independent prescribing course (encompassing supplementary prescribing) is equivalent to 26 days university-based education, with an additional minimum 12 day period of learning in practice under the supervision of a doctor. Pharmacists enroling for training must have at least 2 years post-qualification experience in a patient-facing role, have identified patient clinical needs warranting pharmacist prescribing and must be supported by their employing organization. Course content includes consultation and decision making, influences on and psychology of prescribing, prescribing in a team context, applied therapeutics, evidence-based practice and clinical governance, legal, policy, professional and ethical aspects and prescribing in the public health context [4]. Competency frameworks for pharmacist prescribers have also been published by the National Prescribing Centre in the UK [5].

Published research has focused on the experiences of pharmacist prescribers [6, 7], doctors and patients who have experienced the service [7–10] and the general public [11]. Whilst acknowledging small sample sizes and recruitment and response biases, findings have been largely positive. The implementation and sustainability of pharmacist prescribing services throughout Britain will require a sizeable workforce. However a cross sectional survey of a large sample of GB pharmacists highlighted that only a minority have taken any action to investigate prescribing training. The majority of respondents had given little thought to undertaking prescribing training [12] and to date only around 2200 pharmacists in GB (approximately 5%) have trained as prescribers.

Pharmacists in GB complete a 4 year Master of Pharmacy degree followed by a 1 year pre-registration programme [13]. Newly registered pharmacists may be keen to explore extended clinical roles. Given the apparent disinterest of most of the profession in prescribing, their engagement is likely to be key to the future success of this initiative.

This is the first study to focus on newly registered pharmacists in GB and aimed to investigate their awareness of pharmacist prescribing and views on potential future roles as prescribers.

Method

A pre-piloted questionnaire was mailed to all 1658 pharmacists joining the Pharmacist Register in August 2009 (names and addresses were obtained from the professional body). Three reminders were sent to the entire sample at 2–4 weekly intervals.

The questionnaire had five sections incorporating open and closed questions and focusing on awareness and understanding of the legislation and scope of non-medical prescribing, five point Likert scales measuring attitudes towards implementation of pharmacist prescribing, participants' perceptions of their competence in prescribing, their prescribing training needs and demographics. Attitudinal items were modified from previously published research [6, 12]. Data were analyzed using SPSS for Windows version 17.0 (SPSS Inc). Chi-squared was used to test for association between setting of pre-registration training and views on aspects of pharmacist prescribing training. P values <0.05 were considered significant. Responses to open comments were analyzed thematically.

The study was reviewed by the ethical review panel of the School of Pharmacy and Life Sciences, Robert Gordon University. The North of Scotland Research Ethics Committee advised that submission for NHS ethics approval was not required. Return of the questionnaire was considered an indicator of consent to participate.

Results

The response rate was 25.2% (n = 418). Two thirds of respondents (67.3%) were female. Similar percentages had completed their pre-registration year in a community pharmacy setting (65.3%), were currently working in community pharmacy (71.0%) and were based in England (74%).

The majority (79.5%) were aware of the term non-medical prescribing, largely through higher education institutions and articles published in the Pharmaceutical Journal. A small minority (4.6%) correctly answered all six questions relating to aspects of legislation and scope of non-medical prescribing.

Almost all (86.4%) expressed interest in training as an independent prescriber. Two thirds of respondents (66.3%) thought that the requirement to be registered as a pharmacist for 2 years prior to commencing prescribing training was appropriate. Key themes identified were the need to increase confidence through experience, particularly relating to contact with patients and other healthcare providers, to demonstrate competence as a pharmacist prior to embarking on prescribing training and to develop further clinical skills. One third of respondents (33.7%) disagreed that they should have to wait 2 years with comments centreing on adequacy of their clinical knowledge following undergraduate and pre-registration training.

Table 1

Responses to aspects of training needs (%, $n = 418$)

To practise as an independent prescriber, I require further training in . . .	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
Communication skills	9.7	25.5	7.7	42.8	12.6
Clinical examination	64.1	32.2	1.5	0.7	0.5
Patient monitoring	35.6	47.5	4.7	9.9	0.7
Patient record keeping	12.4	39.6	10.1	31.2	5.7
Prescribing audit	20.3	45.5	16.6	14.9	1.7
Medico-legal aspects of prescribing	38.6	46.8	6.9	5.4	0.7

Table 2

Responses to attitudinal statements relating to pharmacist prescribing implementation (%, $n = 418$)

	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
Practising as a pharmacist prescriber would improve my care of patients	40.8	41.1	10.6	6.9	0.5
I already have access to all of the patient information I need to practise as a prescriber	5.4	12.9	18.6	44.1	18.6
A prescribing role would enhance my professional standing	50.7	40.3	5.9	1.7	0.5
My pharmacy setting is adequately equipped to ensure patient privacy	26.2	37.1	18.3	14.6	2.7
I would be happy to become a pharmacist prescriber	43.6	36.1	15.3	4.2	0.2
I feel confident in my ability to function as a prescriber	23.3	32.4	25.0	17.1	1.7
I feel it is my professional duty to become a pharmacist prescriber	12.6	22.8	23.8	34.2	6.2
Pharmacist prescribing improves access to healthcare for patients	40.1	49.8	7.4	1.7	0.2

Those completing pre-registration training within secondary care were more likely to disagree that they should have to wait 2 years ($P < 0.001$).

Almost two thirds of respondents (60.6%) did not support completion and accreditation of the university-based element of prescribing training as part of undergraduate study. Key reasons cited were the current expectations and demands within the undergraduate curriculum and the need for post-registration experience to allow contextualization of prescribing. Some noted that more emphasis on prescribing training should be included within the pre-registration year.

A large majority acknowledged prescribing related training needs, with only 4.7% claiming competence to assume a prescribing role. Aspects of training needs are given in Table 1, highlighting clinical examination, patient monitoring and medico-legal aspects of prescribing. During pre-registration training, few (7.2%) had attended any courses or educational events relating to non-medical prescribing and fewer than one third (30.4%) had received any experimental training with a non-medical prescriber. Those completing pre-registration within secondary care were more likely to have received training from a non-medical prescriber ($P < 0.01$). Respondents demonstrated little awareness of the pharmacist independent prescribing training course with fewer than half able to comment on aspects such as content, level of difficulty and duration.

Responses to attitudinal statements relating to pharmacist prescribing implementation are provided in Table 2. Of note, almost all felt that a prescribing role would improve patient care, would enhance their professional standing but also acknowledged issues of access to patient information and that prescribing would require major changes to their practice.

Discussion

Respondents expressed caution towards taking on a prescribing role, with most agreeing/strongly agreeing that they should have at least 2 years experience as a pharmacist prior to engaging in prescribing training. Very few were fully aware of the legislation and scope of non-medical prescribing but most agreed/strongly agreed that prescribing would enhance patient care and improve their professional standing.

While this research has generated original and important findings, the low response rate is a limitation and hence results may not be generalizable to all newly registered pharmacists in Great Britain. However, respondent demographics largely matched those of pharmacists qualifying in 2008, although the proportion working in the hospital sector was slightly higher than expected [14].

Notwithstanding the GPhC requirement for 2 years experience as a pharmacist prior to commencing prescribing training, it would seem appropriate for all pharmacy graduates to have studied non-medical prescribing legislation, scope and frameworks as part of their undergraduate course. Our findings highlight a need to review the coverage of non-medical prescribing within the undergraduate pharmacy curriculum, particularly in areas of medico-legal aspects of prescribing, patient monitoring and clinical examination. This is in line with the revised standards for the initial education and training of pharmacists, recently disseminated by GPhC, which require that graduates know how to identify and employ appropriate diagnostic or physiological testing techniques in order to inform clinical decision making [15]. There also appears to be a need to review the extent and nature of patient contact and development of clinical and consultation skills within both the undergraduate curriculum and the pre-registration year. These are some of the issues considered in an English discussion paper outlining proposals for reform of pharmacist undergraduate education and pre-registration training [16].

Deficiencies in prescribing training of other health professionals have been highlighted. Survey data of Foundation Year 1 doctors at a teaching hospital in Scotland identified that undergraduate and postgraduate training in clinical pharmacology and therapeutics was considered by them to be insufficient to promote rational and safe use of medicines [17]. In an attempt to meet some of these learning needs, the British Pharmacological Society has recently launched *e-Prescribe*, which aims to provide e-learning materials to help medical students (and students from other healthcare professions) develop a firm grounding in the principles of basic and clinical pharmacology and hence promote safe and effective prescribing [18]. This is one of many initiatives available to develop and improve prescribing skills.

Respondents in this study expressed more positive attitudes towards pharmacist prescribing than those reported by Stewart *et al*. in a study of pharmacists in GB who were not prescribers [12]. While attitudes may be encouraging, it important to support these individuals in their careers with a clear policy direction for pharmacist prescribing. Several authors have, however, noted the lack of any clear strategic framework to support service implementation [19, 20]. Such strategies are urgently needed and should provide focus on targeted prescribing to obtain defined clinical outcomes.

Longitudinal research on a cohort of newly registered pharmacist prescribers is warranted, aiming to identify later prescribing training actions and subsequent impact on patient care. In general there is a lack of robust research investigating the impact of pharmacist prescribing on clinical, economic and humanistic outcomes.

In conclusion, this study has identified that newly registered pharmacists are cautious in their approach to taking on prescribing training and roles.

Competing Interests

There are no competing interests to declare.

This study was funded by the School of Pharmacy & Life Sciences, Robert Gordon University. We wish to acknowledge the support of the Royal Pharmaceutical Society and all questionnaire respondents.

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