Interprofessional Student Run Primary Health Care Clinics: Implications for Pharmacy Education in Scotland

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Abstract
Introduction
Interprofessional student run primary health care clinics have been a flagship model of health professional education in Canada for many years. The purpose of this study was to determine if there is support for implementing this educational model in the United Kingdom and to highlight the implications for pharmacy education in Scotland.

Method
A cross-sectional postal survey of 3000 randomly selected citizens of Aberdeen city and shire, Scotland, aged 18 years and over.

Results
Out of the 824 questionnaires that were returned (response rate 27.5%) over half of respondents (62.4%; n=514) would consider accessing healthcare from a student led, walk in service. The range of services they expect to see include general health checks (60%; n=494); help for sexually transmitted diseases (57.5%; n=474); weight management (56.8%; n=468); smoking cessation (54.4%; n=448) and drug misuse services (47.2%; n=387). Concerns raised pertained to student ability; suitability for children and accessibility. Many comments pertained to the improvement of the current system by offering after-hours care.

Discussion
The positive response from the general public towards an interprofessional student run primary health care clinic in Aberdeen, suggest that this Canadian model of interdisciplinary health professional education would likely be a successful addition to the pharmacy curriculum in Scotland.
Introduction

Current pharmacy student experiential learning provision in the United Kingdom (UK)

The Pharmacy profession in the UK has seen dramatic changes over the past decade. Most recently the Scottish Government has set out its vision for the delivery of high quality patient-centred pharmaceutical care in the aptly named document “Prescription for Excellence”. The emphasis of this vision is firmly placed on the integrated delivery of care in collaborative partnership with all healthcare professionals to provide high quality pharmaceutical care to all patients regardless of age and setting.

These fast paced changes to the profession provide challenges for pharmacy educators at both the Undergraduate and Postgraduate levels. In the UK the Undergraduate pharmacy education programme is based on a four year Master of Pharmacy (MPharm) degree followed by one year of experiential learning (pre-registration year). To ensure the quality of all courses, the General Pharmaceutical Council (GPhC) has set out very clear education standards for the MPharm degree. Within these standards, emphasis is placed on interprofessional education and practical experience of working with patients, caregivers, and other healthcare professionals. Furthermore these practical, interprofessional experiences, should increase year to year and may include off-site student placements with direct exposure to real patients, simulations, and integration of real patients, caregivers and other healthcare professionals in-class.

The challenges associated with providing adequate interprofessional learning experiences for pharmacy students are similar amongst all health professional degree courses in the UK. These challenges include, geographical location, cohort size, access to good teaching facilities/environments, attraction of volunteer patients or authentic practice sites, lack of resources for adequate re-imbursement, and a process to ensure a high quality student experience. Consequently, the interprofessional, experiential learning opportunities that currently exist for pharmacy students in the UK are limited by the breadth of disciplines involved, the limited availability to all students, and the fact that most opportunities do not provide exposure to authentic patient care scenarios. Therefore, the development of a sustainable, quality assured model, which provides authentic, interprofessional, experiential learning opportunities on a continuous basis, such as, the student run interprofessional student run primary health care clinics in Canada, would be invaluable to Pharmacy education in the UK (REF: Pammett R. “Interprofessional Student Run Primary Health Care Clinics as Educational Experiences for Pharmacy Students” – to be co-published).

Benefits of interprofessional student run primary health care clinics to UK pharmacy students

The structure, function, and educational benefits of interprofessional student run primary health care clinics have been described by Pammett and colleagues in this issue (Pammett R. “Interprofessional Student Run Primary Health Care Clinics as Educational Experiences for Pharmacy Students”). Crucially, these clinics do not just
serve an educational purpose, but also provide an essential clinical and social service to the general public, by contributing direct healthcare and social programming to the community. The concept of an interprofessional student run medical clinic has not yet been developed or implemented in the UK.

In Scotland, medical treatment and prescriptions are free of charge under the National Health Service (NHS). The economic downturn has resulted in many cuts to the NHS in recent years and a restructuring of health service provision to the general public. ‘After-hours’ access in particular has seen changes as primary care physicians are unavailable after 6pm on weekdays and not at all at weekends. This has resulted in an increased demand for community based primary care services, particularly those that are available ‘after-hours’. Consequently, it would be logical to presume that the establishment of interprofessional student run primary health care clinics in Scotland would offer a valuable additional service that communities within the UK would likely value and utilize. In addition it would offer vital experiential learning opportunities for students.

The purpose of this study was to determine if there is support for implementing this educational model in the United Kingdom and to highlight the implications for pharmacy education in Scotland. In order to gauge the general public’s views and expectations of such a clinic, we conducted a cross-sectional postal survey across Aberdeen city and shire.

Methods
Questionnaire development
A questionnaire, along with a covering letter describing the aim of the study, concept of a student run medical clinic, and assurance of confidentiality was developed by a team of research experienced academics at Robert Gordon University, Aberdeen in accordance with best practice applicable to surveys of health service recipients and survey design. The questionnaire comprised information on: demographics, respondents use of healthcare services, their views on a healthcare student led, walk in service, and their personal opinion about such a service. Five-point Likert scales, semantic differentials, and open/closed questions were used as response options.

Questionnaire distribution
Questionnaires were mailed to 3000 randomly selected members of the general public across Aberdeen city and shire between June and August 2013. Non-responders were mailed up to two reminder questionnaires at four-week intervals.

Data analysis
Data was analysed using descriptive statistics, cross-tabulations and parametric Analysis of Variance (p > 0.05) using SPSS (version 20. Content analysis was performed on the responses to the open question.

Ethics
The study was approved by the Ethical Review Panel of the School of Pharmacy and Life Sciences at Robert Gordon University, Aberdeen, Scotland.
Results
A total of 824 questionnaires were returned giving a response rate of 27.5%. The majority of respondents were 60 years or above (54.6%; n=450), male (49.5%; n=408), holding either a secondary school (53.3%; n=439) or college (23.4%; n=193) degree and being in either full time employment (36.4%; n=300) or retired (43.1%; n=355). 66.4% (n=547) were prescribed regular medication and described their health as good (33.9%; n=279) or fair (20.9%; n=172).

Over half of respondents (62.4%; n=514) would consider accessing healthcare from an interprofessional student led, walk in service. Younger respondents (aged 18-29) were more likely to consider accessing the student led walk in service (70.6%; n=24) compared with older (aged 60 or over) respondents (49.5%; n=253) (p=0.002). The range of services they expect to see include, general health checks (BMI, blood pressure, blood glucose, carbon monoxide and cholesterol monitoring) (60%; n=494); help for sexually transmitted diseases (57.5%; n=474); weight management (56.8%; n=468); smoking cessation (54.4%; n=448) and drug misuse services (47.2%; n=387). Most encouragingly, the majority of respondents had a positive attitude toward such a service (62.4%; n=514). This is illustrated by the following quote from one respondent’s questionnaire: “An excellent idea. Go for it!! [...] a great chance for students to learn” [P-2131]

Answers to the open question highlighted some concerns over student ability; suitability for children and accessibility of such a service. Many comments pertained to the improvement of the current system of out-of-hours care.
“Concerned that advice or care may not come from a totally qualified, experienced or fully trained professional”.-[P638]
“I think for people with problems of getting around i.e walking, walk-in services should be nearer home. To travel 120 miles round trip is very hard.” – [P707]
“This is healthcare on the cheap as usual getting students to do the work of professionals.” [P-55].

Discussion
The generally positive response towards an interprofessional student run primary health care clinic, suggest that this Canadian model of interdisciplinary health professional education would likely be a successful, and would be a valuable addition to the pharmacy curriculum in Scotland. Encouraged by the public’s positive attitude, future projects will focus on surveying other key stakeholders (i.e., health professional educators, students, various health professionals, health board leads) regarding their views on implementing an interprofessional student run medical clinic in Aberdeen. This is a prime example of how innovative pharmacy practices can lead to knowledge transfer and improved pharmacy education across international borders.

Declaration of Conflict of Interest
No conflict of interest.
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**Author Contributions**

*Roles:*
Weidmann AE
Initiated education exchange collaboration; responsible for design and development of health care clinic in Scotland; principle author.
Pammett R
Contributed to development and writing of manuscript, reviewed final version of manuscript.
Landry E
Contributed to development and writing of manuscript, reviewed final version of manuscript.
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**References**


