An Australian and Sri Lankan Collaboration in Clinical Pharmacy

“It’s not just cricket”

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Background: In 2006, University of Sri Jayewardenepura (USJ) commenced one of the first Bachelor of Pharmacy programmes in Sri Lanka. A clinical pharmacy subject is included in the fourth year of the curriculum, but due to lack of local expertise, USJ requested funding from World Health Organisation, and assistance from international colleagues to deliver the subject.

Aim: Aim of this collaboration was to write and deliver a six week undergraduate clinical pharmacy subject.

Methods: Objective of the subject was to deliver knowledge and skills required to practice as a clinical pharmacist, and to build local capability. The curriculum was designed using the subject profile, expertise of clinical pharmacists from Queensland, and consultation with local academics.

Results: In July 2010, the clinical pharmacy subject was delivered by the international team to the first cohort of students, and evaluated. 45 hours of lectures, 21 hours of tutorials and 12 hours of ward-based teaching sessions were delivered. Students provided feedback on delivery and content of lectures. The curriculum and presentation were continually refined during delivery in response to feedback. The students were assessed using multiple choice and short answer questions, and objective structured clinical examinations stations. Overall the course was well accepted by local academics and students.

Conclusion: Experienced pharmacists in developed countries such as Australia can significantly impact on the quality of undergraduate training in developing countries like Sri Lanka. This undergraduate teaching (especially the ward based teaching component) from international pharmacists may play a role in driving clinical pharmacy services forward.
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BACKGROUND

The first pharmacist certificate course was introduced in Sri Lanka in the early 1990s. Bachelor of Pharmacy (BPharm) programs were only introduced in 2006. The University of Queensland (UQ) in Brisbane commened their first program in 2009 with an intake of 19 students. This full-time four year program consists mainly of lectures with limited practical and tutorial sessions. The aim of the UQ program is to produce a pharmacist graduate who is able to deliver the elements of pharmaceutical sciences and who would serve the country with competence, compassion and care.

As a result of the lack of BPharm graduates in Sri Lanka, there is also a shortage of qualified pharmacy educators in the field. The current program is taught mostly by local pharmacists who are often expected to teach at a higher degree with little exposure to the pharmacy profession. It is because of this gap that experts from UQ requested assistance from their international colleagues to teach the clinical pharmacy subject.

AIM

The aim of this collaboration was to write, deliver and evaluate a clinical pharmacy subject for undergraduate clinical pharmacy students.

METHOD

A pilot test of five clinical pharmacists ("the team") from Queensland was invited by the SSN to travel to Sri Lanka to deliver a one week course in clinical pharmacy subject.

All members of the team had experience in clinical pharmacy and teaching background. The objective of the clinical pharmacy course was to deliver the knowledge and skills needed to practice as a clinical pharmacist and to aiming to build local capability in this field. The content of this course was designed by the team based on the UQ subject profile, using their clinical expertise and teaching experience, and collaborating with the local academics. A student feedback questionnaire was developed by the team during the development phase.

RESULTS

Development of subject

In February 2016, the team began the process of course development. UQ provided the team members with a list of topics regarding the areas to be covered in the clinical pharmacy course. Each team member was allocated a week to course development. The team decided that lectures, tutorials and handouts teaching sessions would be used to deliver the content.

Delivery of course

In July 2016, the clinical pharmacy course was delivered by the team. Forty-five hours of lectures, 21 hours of tutorials and 17 hours of workshop based teaching sessions were delivered. The lectures were delivered in the morning while the workshop based teaching sessions were delivered in the afternoon. Each lecture was approximately one hour in duration. The team wanted the lectures to be interactive, as case studies were intended to encourage student participation in class.

The workshops were dedicated to tutorials and workshop based teaching sessions. Half the class stayed at the university to complete a tutorial, while the other half attended the workshop based teaching sessions. The following day, the groups alternated. The tutorials included theoretical questions and case studies where the students were encouraged to interpret their pharmacokinetic knowledge into these cases.

Each student attended two week based teaching sessions. During these sessions, the students were divided into small groups of three to five students and each group was allocated a patient. The students were expected to deliver a medication history from the patient, gather all relevant information from the medical records, determine appropriate dosages and present their findings to the larger group. The team focused on the week based teaching sessions with the help of the two local academics. The team provided feedback to the students and encouraged group discussion.

Assessment of students

The students were assessed on both oral and written work, and the skills they gained during the week based teaching sessions. An objective multiple choice question (MCQ) exam was held during the six weeks of teaching. At the conclusion of the course, the students were assessed on their knowledge of medication history taking (MHT). A final MCQ exam was conducted by the student, under the supervision of the course team. The students were given a maximum of 30 minutes to complete the exam.

The examination covered all the key principles and techniques associated with assessing a patient's medication history. The students were expected to use their knowledge of medication history taking to answer the questions. The exam was designed to assess the students' ability to interpret their pharmacokinetic knowledge into these cases.

Evaluation of course

The content and delivery were continually refined during the course in response to anonymous student feedback. Student feedback questionnaires were systematically distributed to the students after the final lecture by both the team lecturers and the after a whole week of learning by the team lecturers in the course. The questionnaire covered all of the 5 week based teaching session, and two open responses questions. Three open response questions were included to allow feedback on what they would have liked added to the course or what they felt they had gained from the experience to help them in their studies.

The responses were compared using thematic analysis and several issues emerged.

Strong preferences were received to continue with a similar course with a greater emphasis on patients and less on theory. The feedback also suggested that the course should be expanded to cover the wider range of patients and include more case studies.

We received the full support and encouragement from the local academics. The students provided valuable feedback about their experiences and what they had gained from the course. The course team is actively working on incorporating these recommendations into future courses.

SUMMARY OF FINDINGS

1. The feedback from the students was overwhelmingly positive. The students found the course challenging but rewarding, and they appreciated the opportunity to learn from experienced clinical pharmacists.

2. The feedback also highlighted areas where improvement is needed, such as increasing the number of case studies and providing more practical examples. The team is actively working on incorporating these recommendations into future courses.

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CONCLUSION

This collaboration has been successful in delivering a high-quality clinical pharmacy course to students in Sri Lanka. The feedback from the students has been overwhelmingly positive, and the course has had a significant impact on the students' learning. The team is committed to continuing this collaboration and improving the course to meet the needs of the students and the profession.