

Perceptions of students and academics regarding a new six week course in clinical pharmacy at the University of Sri Jayewardenepura (USJ), Sri Lanka

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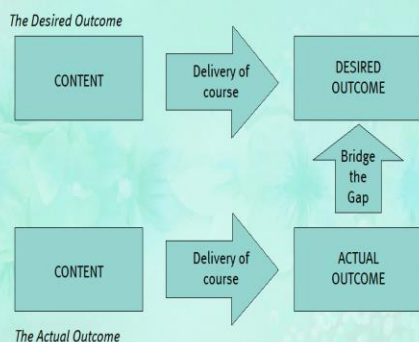
BACKGROUND

Pharmacy training was first introduced in Sri Lanka in the early nineteen fifties. By 1957, a full time pharmacist certificate course was introduced. However, the Bachelor of Pharmacy (B.Pharm) program was only introduced at USJ in 2006 with an intake of 20 students. At present, Sri Lankan pharmacists have limited clinical pharmacy training and experience. The current program is taught mainly by local medical practitioners and Bachelor of Science (B.Sc) degree holders also with no clinical pharmacy experience. However there is a clinical pharmacy subject in fourth year, and because of this gap in expertise, USJ requested assistance from their international colleagues to teach the clinical pharmacy course. A team of five pharmacist academics from Australia were invited to Sri Lanka to deliver a six week course in clinical pharmacy.

AIMS

1. To explore the students' and academics' perceptions of the desired and actual outcomes of a six week course in clinical pharmacy delivered by the Australian pharmacist academics
2. To recommend strategies to bridge the gap between the desired and actual outcomes of the course and to improve the course for the next cohort of students

Figure 1: Simplified visual model of the aims



METHODS

Description of the clinical pharmacy course

The clinical pharmacy course was delivered by the team to 20 fourth (final) year B.Pharm undergraduates at USJ over a 6 week period. 45 hours of lectures, 21 hours of tutorials and 12 hours of ward-based teaching sessions were delivered.

The lectures were interactive and the academics encouraged student participation in class. Tutorials and ward based teaching sessions were held in small groups to maximise the learning experience. The tutorial tasks included theoretical questions and case studies where the students were encouraged to integrate their pharmaceutical knowledge into practice. At the ward-based teaching sessions, the students were tasked with obtaining a medication history from a patient, gathering relevant information from the medical notes, determining the appropriateness of the prescribed medicines, then presenting their findings to the class and participating in a facilitated discussion.

Description of the assessment

The students were examined at the end of the six week clinical pharmacy course at ten OSCE stations. An in-course multiple choice question (MCQ) theory examination was held during the six weeks and a final MCQ and short answer theory examination was conducted at the end of their teaching year.

Evaluation of the clinical pharmacy course

Students, local academics and the Australian academics were invited to participate in focus groups to obtain a variety of perspectives about the clinical pharmacy course. Focus groups were held three times: at the beginning of the clinical pharmacy course, at the half way point (after three weeks) and after the completion of the course (after six weeks). They were conducted three times to account for any changes in perceptions during the course. The focus group questions related to the participants' expectations and reflections of the course. Verbatim transcripts of the focus groups were analysed by thematic analysis.

RESULTS

All the students enrolled in the fourth year of the B.Pharm program at USJ (n=20), all the local academics (n=6) and four Australian pharmacist academics (n=4) participated in the study. However, not all local and Australian academics were available for all three focus groups due to work commitments. Several themes were extracted from the analysis. The main themes and subthemes are presented in Tables 1-3

Table 1: Themes from students' comments

Desired Outcome	Actual Outcome
Theoretical knowledge	Provided theoretical knowledge Duplication of the theory previously covered in other lectures in the B.Pharm program
Ability to apply knowledge into clinical practice	The six week period provided insufficient training in skills in applying knowledge into practice Acknowledgement of the value of case studies to learn to apply theory into practice Ward based teaching helped link their theoretical knowledge with clinical practice
Effective communication skills	Ward based teaching helped the students improve their communication skills Students wanted more practice communicating with other health care professionals

Table 2: Themes from local academics' comments

Desired Outcome	Actual Outcome
Theoretical knowledge	Duplicated some of the theoretical material from previous B.Pharm subjects
Effective communication skills	Acknowledgement of cultural barriers to communication e.g. not current practice in Sri Lanka for pharmacists to make suggestions to doctors

Table 3: Themes from Australian academics' comments

Desired Outcome	Actual Outcome
Theoretical knowledge	Students had a good theoretical knowledge base from their previous B.Pharm courses
Application of knowledge into clinical practice	Students lacked the ability to apply this knowledge into clinical settings to problem solve
Effective communication skills	Students had good communication skills

DISCUSSION

Desired Outcomes

In summary, the desired outcomes of the clinical pharmacy course were to provide the students with sufficient knowledge, the ability to apply this knowledge to identify medication related problems, and to use effective communication skills in order to resolve these problems.

Actual Outcomes

The Australian pharmacist academics observed that the current fourth year B.Pharm students had sound theoretical knowledge from their previous studies but lacked the ability to apply this knowledge to solve medication related problems. The local academics commented on how some of the theory from the clinical pharmacy lectures had already been covered in their previous subjects. Most of the students requested omitting some of the theory from the lectures and discussed the value of the practical aspects of the course such as the tutorials and ward based teaching sessions.

The Australian pharmacist academics believed that the students had very good communication skills when dealing with patients and other healthcare professionals. However, the students believed they still needed more practice in communicating with other healthcare professionals. The local academics identified that it may be difficult for students to discuss issues with other health care professionals because it is not current practice in Sri Lanka. The local academics postulated that with greater practical exposure this hurdle may be overcome.

Recommendations to bridge the gap between the desired and actual outcomes

To address the above issues, the study recommends:

- increasing the duration of the clinical pharmacy course
- increasing the number of ward based teaching sessions and tutorials
- incorporating more problem based learning sessions
- initiation of a post graduation training period to better prepare the students for practice

CONCLUSION

Overall, the study explored the students' and academics' perceptions of the desired and actual outcomes of the clinical pharmacy course. It was also constructive in identifying areas requiring improvement in the course for the next cohort of fourth year B.Pharm students at USJ.

