Medicines use review workshops for pharmacy undergraduate students

The aim of conducting medicines use reviews and prescription intervention service is to enhance patients’ knowledge about compliance with and use of their medicines. Although MURs can only be provided by accredited registered pharmacists, the practice team at Leicester School of Pharmacy has introduced MUR workshops for final year pharmacy undergraduates. MURs form an integral part of community pharmacy practice and, recognising that a high proportion of students choose community pharmacy as a career, the primary aim of the workshop was to give students insight into the MUR service and the process of conducting MURs. The workshops were also designed for the further development of students’ skills in communication, consultation and the application of clinical knowledge to practical case scenarios. These are desirable skills and are transferable to all aspects of pharmacy practice.

Key learning objectives
There are three main learning objectives of the workshop. First, students are required to understand what MURs are. Secondly, students should have an appreciation of why pharmacists carry out MURs and which patients are suitable for MURs. Finally, students should learn the principles of how to carry out an MUR. They are then given the opportunity to participate in MUR case scenarios.

Teaching design and delivery
The MUR workshop is delivered to final year undergraduate pharmacy students. These students are suitable for such an exercise since they have much of the clinical knowledge required for conducting MURs. The workshop is held towards the end of the year just before completion of the degree, when practising consultation skills and applying clinical knowledge is introduced MUR workshops for final year pharmacy undergraduates.

The session lasts for two hours and has two main components. The first component is a structured, teacher-led session, involving an introduction to MURs and information on the MUR service specification. Students are first taught the practicalities of how to provide the service and the MUR accreditation requirements. They are advised to read the MUR service specification before the session in order to provide them with the prerequisite information needed to understand the session. They are also given guidance regarding patient selection for MURs so they appreciate that it is patients with long-term medical conditions who are most appropriate. Some students have observed MURs during practice placements and have an awareness of some of the service requirements, for example, the need to have a consultation room and the process of obtaining patient consent for an MUR.

Students are then taught how to conduct the MUR. A key issue highlighted is the difference between compliance and concordance. Issues relating to non-compliance with treatment are emphasised, as well as the possibility of inappropriate prescribing.

The second component of the workshop is a student-centred session, giving them the opportunity to conduct role play exercises. Students are placed into groups of four. One student in each group is required to act as the pharmacist, one as the patient and the other two as observers. Each group is provided with a case scenario based on adapted real patient cases from practice. An allocated time of 20 minutes per case scenario is provided (as per Department of Health recommendations on the length of time an MUR should take). The student who acts as the pharmacist is advised to complete a blank MUR form for the patient case scenario. The “patient” is given additional information on his or her case scenario brief, including information which the “pharmacist” is expected to extract during the MUR. The two student observers in each group are advised to make notes on the pharmacist’s interaction with the patient, with particular respect to his or her communication skills. Once the role play is complete, the observers take over as the pharmacist and patient and the previous role players become observers.

Two case scenarios are provided per group of four students. Examples of patient case scenarios include an elderly woman who is non-compliant with her antidepressant therapy, a middle-aged male patient on a corticosteroid inhaler therapy for his asthma who experiences a sore throat and hoarseness resulting in non-compliance, and a frail elderly woman on warfarin and amiodarone who does not understand the reason for her warfarin dose alteration following recent consumption of cranberry juice for a presumed urinary tract infection. Resources provided to assist the pharmacist in conducting the MUR include anticoagulant monitoring books, blood pressure monitors and a placebo inhaler.
Following completion of the workshop series, students are provided with an overview of all of the case scenarios, which are posted on the university’s virtual learning environment.

**Student feedback**

Feedback from the session is obtained through evaluation surveys. Students are asked to evaluate the session with regard to four elements. Responses are elicited using a scale of 1 to 5 (1 being least useful and 5 being most useful). Students are also given the opportunity to provide comments and feedback on how they would change the workshops.

The results obtained for feedback from the first student cohort were positive. Out of 120 students in the year group, 107 (89 per cent) participated in the workshop evaluation survey, which can be considered to be representative of the cohort’s views. Responses to each statement are shown in Table 1.

Ninety-one percent of students gave a response of 4 or 5 when asked how useful they felt the introduction to MURs was. Students found it more useful to participate in the MUR role play exercises rather than observing it (88 per cent of students gave a response of 4 or 5 to participation versus 75 per cent for observing).

Following participation in this workshop, 75 per cent of students felt encouraged to provide an MUR service in the future. Most comments were positive and suggestions for improvement were constructive. Recurring themes emerging included a desire to watch a DVD clip of a pharmacist conducting a real MUR before practising it in the workshop. Students were also keen to see the difference between a well conducted and a poorly conducted MUR. Specific feedback comments included:

> The role plays were good fun and helped put into perspective how difficult completing an MUR in 20 minutes can be.

> I would like to see more practical MUR workshops in the future. I believe this is an essential service that must be provided for patient benefit and safety.

**Table 1: Students’ responses to the medicines use review workshop**

<table>
<thead>
<tr>
<th>Student evaluation survey questions</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>How informative was the content on introduction to MURs?</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>46</td>
<td>51</td>
</tr>
<tr>
<td>How useful did you find participating in the MUR role play exercise?</td>
<td>2</td>
<td>1</td>
<td>10</td>
<td>44</td>
<td>50</td>
</tr>
<tr>
<td>How useful did you find observing the MUR role play exercise?</td>
<td>2</td>
<td>5</td>
<td>20</td>
<td>47</td>
<td>33</td>
</tr>
<tr>
<td>Has this workshop encouraged you to provide an MUR service in the future?</td>
<td>2</td>
<td>5</td>
<td>21</td>
<td>38</td>
<td>41</td>
</tr>
</tbody>
</table>

*1 = least useful, 5 = most useful

**Future developments**

Based on these results and findings, and following our experience from the first MUR workshops, a potential possibility for future development may include the production of a DVD clip.

In response to student feedback, this DVD could include examples of well conducted MURs versus poor ones.

Students also wanted more MUR workshops and more examples of real-life case studies.

Although fitting more sessions into a busy curriculum is challenging, the opportunity exists to use MUR workshops to help students consolidate and apply their clinical knowledge to real practice.