Exploring the Acceptability and Value of an Online Teaching Module to Prepare for an Objective Structured Clinical Exam (OSCE)

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Background

• Objective Structured Clinical Exam (OSCE) is a high-stake hurdle assessment in our final year (4th year) pharmacy
• Oral exam to assess clinical knowledge, problem solving and communication skills through simulated case scenarios in OSCE stations
• In each OSCE station, the candidate role plays with a simulated patient/doctor (actor) to identify and solve medication-related problem(s) in community pharmacy or hospital setting
• Each station is marked by an examiner (academic/pharmacist) with an analytical checklist (case dependent) and a communication rubric
OSCE preparation before the exam -

**Small group workshops**
- 1 tutor facilitator : 4 students
- resource intensive
- logistically difficult to organise
- allow for individual feedback
- only get to practice a couple of cases
- students want more cases to practice

**Whole class tutorials**
- 1 tutor facilitator per class
- student volunteers practise mock cases
- student markers use checklist and rubric
- only volunteers get feedback
- most worried about being embarrassed in front of class
- students want more cases to practice
A solution: Monash OSCE Virtual Experience (MOVE)

- An online OSCE practice module is developed using Articulate Storyline™ and delivered via Moodle – Subject website
- 20 video clips featuring clinical pharmacy case scenarios to role play with a virtual patient or doctor
- Each scenario has a set time limit to identify and solve the problem like in a real exam situation
OSCE Practice Module

• a standard set of questions for history taking and interaction with virtual patient
• student can then provide their recommendations using a text box and submit to receive an automatic feedback
Results – Audit of Student Attempts

- 193/195 (99%) students in Australia and 40/40 (100%) students in Malaysia completed at least one scenario
- 81% of all students attempted every scenario, 2 or more times
- >7000 views were documented in 8 weeks
- Most attempts were completed 2 - 4 weeks before the exam
Students feedback – Focus group - Pros

Students reported that the online module -

• taught them targeted questioning techniques and time management

• provided a mechanism for identifying and reflection of knowledge gaps

• avoided embarrassment of live practice in situations of knowledge gaps

• they appreciated the variety of clinical scenarios available to practice

• they could access the online module multiple times from any location 24/7

“it taught me not to forget those questions like are you pregnant or breastfeeding because sometimes I do forget to ask that”
PA student

“It makes you think about what you’re actually going to say rather than like press every single question”
PA student

“It’s less daunting looking at someone on the screen, knowing that they can’t see you as well. If that same person was right next to me and I know they’re marking me, I’d get scared.”
PA student

“is a good way to prepare you as face-to-face sessions can be very demotivating, especially if you don’t get all the points”
MA student

“we actually found it very useful, and split them to ten questions each and familiarized ourselves with those cases before we practiced with other so you can then provide more solid feedback to your friends”
MA student
Focus group student feedback - Limitations

- couldn’t provide individualized feedback on student performance
- lack of interaction with a real person to feel real and fully engaged
- didn’t help much with oral communication skills

“I like doing it with a real life person, getting feedback is way more useful than working with a computer”
MA student

“...it’s different when you’re talking to someone versus when you’re talking to them online...it flows differently.”
MA student

“you can see their facial expressions if you’re practicing with someone”
MA student

“It doesn’t help much with communication, just questioning....right management...and time management, it’s really important to have friends to practice with...because everyone speaks to the patient differently”
PA student
Survey questionnaire – student feedback

• All students were given a survey questionnaire after their OSCE
• All 236 students across both campuses were asked to complete a hard copy questionnaire
• Response rate: 50.8% (120 students)
### Survey feedback – how students prepare OSCE

<table>
<thead>
<tr>
<th>Student OSCE preparation methods</th>
<th>Malaysia campus (% students)</th>
<th>Australia campus (% students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read Textbooks / online resources AMH, eTG, APF</td>
<td>97</td>
<td>69</td>
</tr>
<tr>
<td>Attempted Online module</td>
<td>77</td>
<td>74</td>
</tr>
<tr>
<td>Revised lecture notes</td>
<td>69</td>
<td>43</td>
</tr>
<tr>
<td>Practised with friends</td>
<td>90</td>
<td>54</td>
</tr>
<tr>
<td>Spoke to previous year candidates</td>
<td>26</td>
<td>35</td>
</tr>
<tr>
<td>Did not prepare</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>
I found the online module helpful

<table>
<thead>
<tr>
<th></th>
<th>Malaysia campus Students (%)</th>
<th>Australia campus Students (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Helpful</td>
<td>46</td>
<td>30</td>
</tr>
<tr>
<td>Somewhat Helpful</td>
<td>46</td>
<td>38</td>
</tr>
<tr>
<td>Slightly Helpful</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>Made no difference</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>
Conclusions

• Monash OSCE Virtual Experience (MOVE) Online module was well received by students as a learning and exam preparation tool

• Additional work is required to support students feel more engaged and comfortable with using virtual learning resources

• Further study is required to compare the outcomes of live vs. virtual preparation for OSCEs
Acknowledgements

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