Significant benefit of a targeted HIV testing module on medical students’ knowledge and confidence

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Background

• With one quarter of HIV positive individuals in the UK remaining undiagnosed, it is important to equip the next generation of clinicians to offer appropriate HIV testing.
• Despite national guidelines for HIV testing, this topic can be overlooked by medical school curriculums and medical students may graduate with a limited knowledge about when and how to offer testing.
• Our medical school introduced a targeted-testing teaching (TTT) session for fifth year medical students in their genitourinary medicine module and we performed a questionnaire survey to evaluate its efficacy in improving knowledge and student confidence in HIV testing.

Methods

• A short survey was developed which included questions assessing knowledge of HIV testing guidelines and gauging student confidence to offer testing.
• This survey was distributed to fifth year medical students, one group who had not yet completed the GU/HIV module and one group who had; questionnaires were distributed at whole group teaching sessions and completed/collected the same day.
• Results were compared for those students who had completed GU/HIV modules (GU+) and those who had not (GU-). Chi-squared testing was performed where appropriate.
• GU+ students were also asked to rate the impact of TTT on their knowledge.

Results

Population

• 100 and 119 questionnaires were returned by GU+ and GU- students (a response rate of 92.6% and 97.5%, respectively).

Knowledge of Testing Guidelines

• Of the 3 knowledge-based questions, GU+ students were significantly more likely to provide correct answers for 2 (p<0.001); these are indicated in table 1.

Table 1: HIV testing knowledge

<table>
<thead>
<tr>
<th>Question Topic</th>
<th>% of GU+ Correct</th>
<th>% of GU- Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV testing in A&amp;E</td>
<td>55.6</td>
<td>59.3</td>
</tr>
<tr>
<td>Testing an unconscious pt</td>
<td>89*</td>
<td>57.6</td>
</tr>
<tr>
<td>Background prevalence</td>
<td>42.4*</td>
<td>10.1</td>
</tr>
</tbody>
</table>

*statistically significant difference favouring GU+ (p<0.001)

Student Confidence

• For the 2 confidence questions, GU+ students were significantly more likely to feel confident in offering HIV testing (p<0.001). Table 2: HIV testing confidence

<table>
<thead>
<tr>
<th>Question Topic</th>
<th>% of GU+ Yes</th>
<th>% of GU- Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confident on when to test</td>
<td>69.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Confident on how to discuss testing</td>
<td>96.0</td>
<td>18.0</td>
</tr>
</tbody>
</table>

• After TTT (GU+ only) 92%, 98% and 62% felt more confident about when to test, more confident about how to discuss testing and more knowledgeable about testing in general, respectively.
• Most students said they would be happy to offer and conduct HIV testing in a variety of medical settings; significantly fewer reported this for an acute admissions unit (AAU) compared with antenatal clinic (79% vs 96%).

Conclusion and Discussion

• GU+ students scored significantly better in 2/3 knowledge questions and were significantly more confident about when and how to offer testing compared to their counterparts
• Most students felt more confident and knowledgeable about HIV testing after TTT
• This suggests that HIV testing could be beneficial to all medical students
• Although most students were happy to offer and conduct testing, significantly fewer were happy to do so in AAU compared with an antenatal clinic (where opt-out testing is well-established). This may warrant further exploration and consideration of context-based teaching (e.g. providing TTT in an AAU setting).
• For the future, the durability of the impact of the GU module and TTT could be assessed by repeating the questionnaire 12 months after completion or by assessing the impact of TTT on provision of HIV testing post-qualification.
• It may also be helpful to compare cohorts of medical schools that have TTT and those who don’t offer it to see if there is a difference in HIV testing behaviour in junior doctors in different medical settings.
• Although this survey focuses on medical schools and their current curriculums, it may be important to explore current clinicians’ attitudes and behaviours with regards to HIV testing as many may not have received much HIV teaching during their training, particularly if they are not in a specialty that directly deals with HIV testing or management.

For copies of the poster and/or questionnaire, please contact mickey.chong.10@ucl.ac.uk