

Virtual Theory Exam Courses:

Turning the COVID-19 pandemic into an opportunity to be even better

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Background

Since 2017, a group of trainees in the Yorkshire and the Humber Region, along with the Training Programme Director for exam support, have been delivering trainee-designed and delivered MRCPC theory exam courses. These free study days rotated around the region and consisted of sessions about the exam structure and syllabus, improving weak knowledge areas, how to answer theory questions, as well as a mock exam with individualised feedback.

These revision days were never intended to teach the trainees per se, but were designed to support them by **reducing anxiety, improving exam technique** and encouraging **peer-to-peer learning**.

Feedback was so positive that the days were incorporated into the formal regional teaching programme, offering all trainees access to six courses per year.



Figure 1. Face-to-face theory exam course



Figure 2. Virtual exam committee meeting

The Challenge Opportunity

The COVID-19 pandemic brought all face-to-face teaching to a halt. Instead of allowing the exam revision programme to be suspended, the trainee coordinators completely changed the model to continue exam support via remote learning.

This large undertaking, involved training the whole committee to operate a Moodle-based e-learning platform, in addition to uploading over 200 peer-reviewed questions to an online question bank.

The revision days are now delivered via video conferencing software, and the trainees complete an interactive web-based exam (Figure 3).

Feedback remained exceptionally positive, but the new model actually brought with it benefits for both the trainees and the organisers.

Benefits of the New Model

For candidates, the new model of learning has reduced commuting and improved access to the training around their clinical responsibilities. Candidates also feel the new web-based mock exam is more representative of the online MRCPC theory exams.

From a faculty perspective, we too do not have to commute across the region, enabling us to contribute to more sessions, even between clinical duties.

Each question in the online question bank is now mapped to the syllabus. This helps us to easily identify gaps in our question bank as well as allowing us to automatically generate mock exams with the same proportion of questions from each subject in the syllabus as the real theory examinations.

The web-based examination is marked automatically, giving immediate feedback to trainees. However, the online learning platform also gives the faculty detailed data about the quality of the questions in terms of difficulty and discrimination.

Priorities for the Future

- The peer-to-peer interaction and support we saw in face-to-face revision days has been difficult to emulate in the virtual model of teaching, exacerbating isolation already felt by trainees. The committee must find ways to mitigate this within the confines of the virtual model.
- Utilisation of the newly available quality data will allow the question bank to be continuously improved going forward.
- Encouraging new trainees to join the committee is essential in ensuring the longevity and continued evolution of this training programme.

Conclusion

The COVID-19 pandemic forced us to adapt our model of exam revision support, but in doing so we have future-proofed our course, in addition to gaining valuable quality data to improve our course offering.

Question 1 Correct Mark 1.00 out of 1.00 [Flag question](#)

You are the paediatric ST4 registrar called down to see patients in the Emergency Department. An unimmunised 3 year old child presents to the emergency department with a 3 day history of fever (>39oC). On your arrival he is sat up, quiet, pale and drooling. His temperature is 39.5oC, respiratory rate is 50 and heart rate is 170. Oxygen saturations 94%. You note a soft stridor.

Which one of the following actions should you do first?

Select one:

- a. IV access and IV cefotaxime
- b. Call for anaesthetic support ✓
- c. Oral dexamethasone and allow home but stress importance of getting child immunised at GP
- d. Intramuscular adrenaline (1:1000)
- e. Lie flat and administer humidified oxygen

Your answer is correct.

Call for anaesthetic support. Do not attempt painful procedures which are likely to cause further distress. Laying flat may compromise the airway.

The correct answer is: Call for anaesthetic support

Figure 3. Example theory exam question