Focused Small-Group Teaching in ENT: 3 Years’ Experience in 159 Medical Students

Awareness and the Use of Evidence-Based Medicine Resources Among Physicians

Remediation Through Coaching for Repeated Examination Failure: Trainees’ Perspectives

Developing Research Competencies of Undergraduate Medical Students in Sub-Saharan Africa

Internet/Digital Use Among Medical College Students of King Khalid University, Saudi Arabia

The Perceived Role of Community-Based Medical Education Among Kenyan-Trained Medical Doctors’ Choice of Rural Practice
Remediation Through Coaching for Repeated Examination Failure: Trainees' Perspectives

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Abstract
Successful attainment of postgraduate medical examinations is a prerequisite for career progression across medical specialties. Failure to successfully pass examinations can have detrimental impacts upon training pathways. Regionally in North West England, individuals who have failed two or more of the same postgraduate examination are offered referral for coaching sessions to provide individualised support and maximise potential for success. To evaluate medical trainees’ perceptions of the coaching value, formative research via an online survey was distributed to all coached trainees in 2018. The survey was developed and piloted, then distributed to participants following completion of the coaching programme. Free text and Likert rating scale responses were recorded. Thematic analysis was conducted using the Framework Method.

Of 37 trainees undergoing coaching, 26 completed the questionnaire (a response rate of 70%). The main themes that arose from the data were: improved concentration, enhanced examination and revision technique, and confidence in the examination. Coaching appears to enhance confidence and examination technique, through the therapeutic coaching relationship and multimodal preparation technique, thus supporting the continued provision of this service. Results will be of interest to those involved in the provision of remedial support for postgraduate trainees.

Key Words
Remediation; Examination; Coaching; Postgraduate; Training Difficulties

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Introduction
Remediation of trainees who are struggling to attain high stakes examination is of crucial importance both for the trainees’ progression and for quality assurance of the healthcare workforce. Despite attempts to standardise the process, postgraduate remediation remains challenging, with a more individualised approach often required due to the presence of multiple contributory factors leading to examination failure. Postgraduate examination failure may negatively impact trainees’ morale and ability in continuing with their chosen training pathway. Increasingly, educational training and governing bodies are releasing recommendations regarding the imposition of an upper limit in the number of attempts per postgraduate examination, thus highlighting the essential need to ensure struggling trainees are adequately prepared for subsequent re-takes to progress in their career pathways. Whether coaching in the remediation setting is perceived to be beneficial or viable is yet to be reported. Regionally, since 2016, Health Education England (working across the North West), the leadership organisation for education, training and workforce development in England, have provided support for struggling trainees via an automatic referral process for examination coaching following two or more unsuccessful attempts at the same postgraduate examination. The aim of this formative study was to explore participants’ perceptions of the value of the examination coaching programme in helping them to prepare for subsequent examination sittings in order for the service to be further tailored to the needs of the trainee and enhance understanding of coaching in the remedial setting.

Materials and Methods
The existing coaching programme involves between one and five sessions with a coach who utilises a standardised, multi-methods approach. Each session lasts between 1.5 and 3 hours. Sessions place emphasis on building rapport leading to an effective working alliance, with the trainee taking responsibility for both the formulation and implementation of study strategies. Coaching...
incorporates the following strategies: assessing time availability with the trainee, creating a study plan, creation of notes (flashcards and audio-notes), utilisation of mnemonics and ambient learning, and mock questions. Additionally, audio-visual techniques are used for mock-assessment and review of performance, which involves video recording of participants and playback with feedback. The trainee is facilitated to create a ‘study unit’, which can be replicated for individual preparation.

As part of the evaluation process, a survey was distributed to all trainees who underwent examination coaching through this service in 2018 (Appendix 1). This was emailed to trainees on completion of the coaching with results anonymised and sent to the primary researcher. The survey used both free text and Likert rating-scale based questions with the hope of the creation of rich data. Responses were clustered into common themes using the Framework Method, which was selected due to its systematic yet flexible approach. Due to the sensitive nature of the topic, limited demographic details were collected in the questionnaire and an assurance of confidentiality was provided, with all potentially identifiable data being suitably anonymised. Informed consent for publication was obtained.

Results
Of the 37 trainees that underwent examination coaching in 2018, 26 participants completed the evaluation form (a response rate of 70%). Participants were from a range of Anaesthetic (42%), Surgical (27%), Medical (19%), and Radiology (12%) training backgrounds. The number of sessions ranged from one to five (median three). Fifteen participants were preparing for a written examination, eight for an oral examination, and three for both a written and oral examination.

The most commonly reported previous preparatory strategies were formal regional and national revision courses (18 participants). When asked how this examination coaching differed from previous preparation, the most frequently reported theme was that of enhanced revision technique, with participants referencing the multimodal approach to revision of benefit, and an improvement of recall in the examination in Table 1. Individualised support provision and the therapeutic relationship which developed with the coach was pivotal, particularly in allowing an open forum to express anxieties surrounding the examination process.

Using a Likert rating scale, participants rated the value placed on examination coaching with responses including ‘extremely valuable’ (42%), ‘very valuable’ (50%) and ‘valuable’ (8%). Ninety-six percent stated they would be prepared to undertake further coaching in the future if required, with one participant stating that they ‘weren’t sure’ if they would. Respondents were asked the outcome of the examination their coaching was preparing them for, with an overall pass rate of 74%. Suggestions to improve the service included referral for coaching at an earlier stage, increased dedicated time to audio-visual recording and subsequent feedback, and making the coaching location more accessible for trainees.

<table>
<thead>
<tr>
<th>Theme (and Subthemes)</th>
<th>Example Participant Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved Concentration:</td>
<td>‘Improved ability to memorise large quantities of clinically irrelevant facts for the exam’ (two participants)</td>
</tr>
<tr>
<td>• Enhanced Recall</td>
<td>‘The sessions gave me more focus.’ (three participants)</td>
</tr>
<tr>
<td>• Enhanced Focus</td>
<td></td>
</tr>
<tr>
<td>Improved Technique:</td>
<td>‘Concentrated more on the non-knowledge-based side of the exam like presentation style’ (two participants)</td>
</tr>
<tr>
<td>• Exam Technique</td>
<td>‘Multimodal revision – making notes, recording a spoken summary of notes, and then listening back to the summary.’ (twelve participants)</td>
</tr>
<tr>
<td>• Revision Technique</td>
<td></td>
</tr>
<tr>
<td>Therapeutic Benefits of Coaching</td>
<td>‘Made me feel comfortable, helped me overcome my fears.’ (four participants)</td>
</tr>
<tr>
<td>Improved Confidence</td>
<td>‘Instilled some self-belief that had become severely lacking due to repeated failures at examination.’ (three participants)</td>
</tr>
</tbody>
</table>
Discussion

Our findings suggest trainees with repeated examination failures place value on the provision of a structured approach towards exam preparation and the individualised support afforded from a coaching programme. Despite these, a paucity of published literature into coaching in remediation exists, with much of the research relating to medical education based in the setting of surgical skills acquisition, resilience development and non-technical skills such as team working (Lovell, 2018). Our findings are believed to be the first report of adopting coaching in the remediation process. Aspects relating to improved examination outcomes and the most effective remediation provision are considered in the coaching process.

The creation of a working alliance between coach and student has been identified as the pivotal factor in successful outcomes, which resonates with our findings. The coaching provided adopts a multi-methods approach, which also compliments existing findings that medical learners are most likely to identify as multimodal learners, incorporating a combination of visual, auditory, reading and kinaesthetic learning styles created through audio-visual techniques.

Existing research supports a more individualised approach in the remediation process. However, to what extent the role of the individualised support versus the taught revision methods plays needs further exploration. Kotter and Niebuhr (2016) studied undergraduate students, identifying that resource-orientated coaching may be an effective means of reducing stress in medical examinations. These findings suggest that coaching may enhance examination performance via negating the negative impacts stress and anxiety may play in the process. This is further supported by Powell (2004), who identified that individualised behavioural modification significantly improved examination outcomes in medical students with ‘debilitating’ examination anxiety. A more in-depth exploration through individual interviews or focus groups may provide further clarification of the interplay of these factors.

The participant population of the study was small, thus limiting the transferability of findings to other settings. Despite a high survey response rate (70%), it is possible that the perspectives of those who did not find the coaching useful are lost if they opted not to complete the survey. The nature of the individualised coaching programme meant difficulty in participants providing anonymised feedback, however, the questionnaire did not request identifiable information and was analysed by the primary researcher who was not involved in the provision of coaching. Regarding examination outcome, it is possible that trainees were utilising other revision strategies simultaneously during their coaching as well as personal, social, or environmental factors playing a role in examination outcomes. A review of examination outcomes in trainees declining coaching may provide ‘control’ results and provide further information regarding ongoing funding of the coaching service.

Despite being piloted on medical trainees, the questionnaire was not validated, meaning further research would be necessary to support or dispute the findings. Due to potential concerns regarding the sustained benefits of short-term remediation, a more longitudinal follow-up may provide valuable insight as to the sustained impact coaching has on the trainee, for example, in subsequent examinations. We plan to enhance the programme by adopting trainee improvement suggestions, such as increased allocated time to audio-visual work during the coaching session. Due to the formative nature of this exploration, we are currently considering the feasibility of implementing coaching provision remotely via videotelephony to maximise resources, as the distance to coaching sessions appeared to be the major barrier in those having accessed the service in 2018.

Conclusion

To our knowledge, this is the first published evaluation of the examination coaching programme for postgraduate examination preparation in the remedial setting. Our findings suggest that trainees with multiple postgraduate examination failures find benefit in the provision of examination coaching and the structure and the multi-methods approach it adopts. Results provide useful insights for those involved in the medical remediation process and support further exploration of the coaching in other settings, such as in undergraduate medical training and multi-professional curriculums.

References


Appendix 1: Survey Template

Exam Coaching Study Survey

1. Please confirm your specialty:

2. Please indicate examination outcome. Pass Fail

3. Was this a written/oral/OSCE-style exam? Written Oral OSCE

4. How many coaching sessions did you have? 1 2 3 4 5

5. What previous courses/preparation techniques had you tried for this exam?

6. In what ways did the exam coaching sessions differ from previously attempted techniques?

7. On the scale below, please indicate how valuable you think the exam preparation coaching was:

Not valuable Somewhat valuable Valuable Very valuable Extremely valuable

1 2 3 4 5

8. Which aspects of the coaching did you find most beneficial in preparing for your exam(s)?

9. Would you be prepared to undertake further coaching if facing similar challenges in the future?

Yes No

10. Which aspects of the coaching (if any) could be improved?

11. Would you recommend this coaching service to a colleague?

Yes No

If not, why not?

12. We would welcome any additional comments not covered in the above questions.
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