Title: The effectiveness of group instant message coaching during COVID-19 pandemic

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The current COVID-19 pandemic creates new challenges for medical education - the need for physical distancing and having to continue medical education with fewer resources.

In our institution, we needed to prepare fifteen anaesthetic trainees for the upcoming nationwide postgraduate examination, which upon passing would allow them to perform independent registrar duties. The examination comprises of short answer questions (SAQ) and may involve oral exams via teleconferencing in light of COVID-19.

Prior efforts to prepare our trainees were disrupted by the pandemic. Weekly tutorials and group viva sessions were cancelled. Team segregation as part of the pandemic response meant that there were fewer and unequal numbers of educators and trainees in each team. Tutorials via teleconference yielded low attendance due to difficulty in coordinating schedules. Hence there was a need to devise an alternative coaching method that would be regular and sustainable.

This report describes group instant message (GIM) coaching as a promising method for regular examination preparation in times of need.

GIM coaching is based on retrieval practice-based study technique.[1] Whatsapp Messenger application was used. The group comprised fifteen trainees and five educators. The educators coordinated the questions and gave feedback and content expert opinion on all answers. The trainees took turns answering one SAQ each in ten minutes under exam conditions and they had till the end of the day to post their answers back into the group. The educators also provided positive reinforcement and encouraged feedback from other trainees.

The obvious benefits are that GIM can be done anytime at any place. Those who are on medical leave or quarantined can continue to participate. This method is compliant with segregation and social distancing. The unique benefits include accountability where trainees feel encouraged or at the very least obligated to reply in a group forum where other members are otherwise kept waiting. There is also constant exposure to subject matter as opposed to intermittent tutorial sessions. In addition, all information is written down

whereas spoken information during a tutorial can be missed. Trainees can revisit the topics at their convenience. Where we usually cover two to four SAQs during a one-hour tutorial session weekly with less than full attendance, we covered twenty-six SAQs over one month involving all fifteen trainees. This included debrief for each SAQ, at an average cost of about thirty minutes of the educators' time per SAQ.

As with any intervention, inherent challenges are present. Educators cannot guarantee the SAQs were performed under exam conditions. Trainees may also lose focus when it is not their turn to answer with loss of learning value. Some may argue the feedback process has a lag time as opposed to a discussion face-to-face. However we found that with time, the educators and trainees adapted to the style and pace of GIM coaching.

With all trainees favouring this after a month of implementation, we have found GIM coaching to be an efficient, convenient, cost-effective and sustainable teaching alternative during these uncertain times.

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Reference:

1.   Karpicke JD. Retrieval-Based Learning: Active Retrieval Promotes Meaningful Learning. *Curr Dir Psychol Sci*. 2012;21(3):157-163. doi:10.1177/0963721412443552

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1. Dr. Elizabeth Ng – This author conceptualised the work, drafted the manuscript, gave approval for the final version to be published and is accountable for all aspects of the work.

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