Ward-round-based online clinical cardiology course
A resource for junior physicians in cardiology rotation.

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INTRODUCTION

Cardiology rotation is common during foundation and internal medicine training, and it is a common place to work for doctors at some stage of their medical careers.
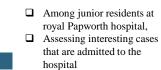
Online teaching is being increasingly promoted to facilitate access and enhance quality of education. During ward-rounds interesting cases are encountered occasionally, allowing only available doctors to learn from them depending on who leads the ward round at that time. Accordingly, the idea of highlighting interesting conditions faced during ward-rounds for online teaching and creating a teaching material around them was adopted.

METHODS

A survey among junior doctors was conducted in cardiology department at Royal Papworth Hospital, Cambridge, UK (RPH) about patients with interesting presentations and challenging subjects. Once identified, PowerPoint presentations were prepared with the help of the scientific advice from involved consultants. Then, videos were recorded for the teaching sessions using Mac OS screen recording. Afterwards, Delivery of online teaching was achieved through regional education video platform. Following that, Feedback was obtained online utilising Microsoft-Forms®. And finally, results were analysed through Jamovi 1.8.2 and Word-Cloud. (Figure-01)

METHODOLOGY

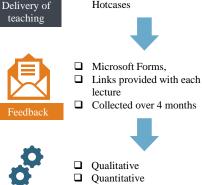Figure-01: Planning the methodology for the project

Survey
- ❑ Among junior residents at royal Papworth hospital,
- ❑ Assessing interesting cases that are admitted to the hospital

Lecture preparation
- ❑ Getting consent from patients
- ❑ PowerPoint slides
- ❑ Script preparations, recording through MacBook system

Delivery of teaching
- ❑ Posting the videos online
- ❑ Sharing links with juniors
- ❑ Peer to Peer teaching and Hotcases

Feedback
- ❑ Microsoft Forms,
- ❑ Links provided with each lecture
- ❑ Collected over 4 months

Analysis
- ❑ Qualitative
- ❑ Quantitative

RESULTS & DISCUSSION

Between February and June 2021, subjects related to Imaging, interventional cardiology, and electrophysiology were identified and twelve lectures were sequentially produced that had 323 views. Thirty feedback forms were filled and analysed. there was significant gain in knowledge (pre-lecture 42.7% vs. post-lecture 91.3%; Δ-value of 48.7%, p-value <0.001) with a high percentage recommending the teaching to other colleagues (92.9%) and high level of enjoyment (95.5%) as well. (Figure-02)

Literature showed that ward round simulation was endeavoured previously, indicating the importance and value of learning that occurs in the context of a ward round. New trends in medicine indicate a proclivity towards telemedicine and virtual engagement with patients. This requires both educators and learners to develop their tools accordingly to bring the highest learning value from these new modalities.

The results of this project show a high level of engagement and acceptance among learners. Also, the convenience to learn with a busy schedule of a medical practitioner and the ability to grow multiple aspects of knowledge simultaneously as well as the teaching of the institution's culture; are all considered to be positive aspects of this program.

Figure-02: Qualitative feedback, WordArt representation of feedback received for the teaching course (A: below, B: right)

CONCLUSION

It is clear that online teaching has a lot of potential in medical education, and while it is predominantly limited to classical forms of classroom teaching; expanding the platform by replicating aspects of the clinical experience online can increase engagement and utilisation among trainees and can create more opportunities to benefit from new forms of communication.

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