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. Occasionally during ward rounds interesting cases are encountered, allowing only available doctors to learn from them – depending on who leads the ward round at that time. Accordingly, the idea of taking interesting conditions faced during ward rounds, highlighting these in online teaching and creating a teaching material around them, was adopted.

Methods
A survey among junior doctors was conducted in the 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 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 a 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 (Fig 1).
Results and discussion

Between February and June 2021, subjects related to imaging, interventional cardiology and electrophysiology were identified and 12 lectures were sequentially produced that had 323 views. Thirty feedback forms were filled and analysed. There was a significant gain in knowledge (pre-lecture 42.7% vs post-lecture 91.3%; delta-value of 48.7%, p-value <0.001), with a high percentage recommending the teaching to other colleagues (92.9%), and a high level of enjoyment (95.5%; Fig 2).

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, 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 programme.

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.

References

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