PAEDIATRIC TRAUMA FOR ANAESTHETISTS: AN INTERACTIVE E-LEARNING COURSE

E. Samuel, Great Ormond Street Hospital NHS Trust, UK

Introduction and Aim

Trauma is the leading cause of death and disability in children over 1 year of age. Anaesthetists play a vital role in the initial management, stabilisation, and transfer of children with trauma.

Research has shown that blended learning is the most efficient way of adult teaching [1,2].

Digital Technology allowed the creation of interactive e-courses making e-learning an invaluable tool for delivering knowledge to anaesthetists. I am presenting an example of creating an online interactive course for anaesthetists as part of my project during my teaching and learning fellowship with (HEE-EOE).

This is a clinical e-course that aims to provide a comprehensive up to date guidance in managing paediatric trauma to anaesthetists.

Methods

Addies model [3] was used to create the course. Phase one (Analysis): no similar courses are available on e-learning for healthcare (elfh) and the association of paediatric anaesthetists of Great Britain and Ireland (APAGBI) websites. The target audience are all anaesthetists expected to provide emergency care to children with trauma, who do not work in a major trauma centre (MTC). Resources used were: British Journal of Anaesthesia articles, East of England Trauma Network (TEMPO), European Paediatric Life Support (EPLS) and NICE guidelines.

Phase two (Design): A storyboard was created to determine the sections, contents, objectives, assets, and tools to deliver the course. The course was divided into 3 main sections: Pre-hospital management, Primary survey at hospital, and secondary survey with various types of paediatric trauma.

Phase Three (Development): The course was created using Articulate 360 (an online course creator platform), and Vyond (an animation software). Scientific material was created by me, and was quality approved by experts in the field.

Phase four (implementation): choosing the Learning Management System (LMS) to launch the course which is (Bridge platform, the East of England blended learning platform). The course can also be launched on eLFH and APAGBI websites.

Phase five (Evaluation): in this phase the course will be evaluated in terms of the learner's engagement, experience and whether learning transfer has been achieved.

Results

The course has been reviewed by subject matter experts who gave positive feedback. It is currently being piloted by peers to provide feedback from a learner perspective. It will then be launched on Bridge platform.

Discussion and Conclusion

I present an example of using digital technology to create an interactive e-course to deliver teaching to anaesthetists.

The course is based on EOE trauma guidelines which might differ in some respects from other major trauma centres' guidelines. In order to make it suitable for all anaesthetists, adding the guidelines of all MTC in the UK will be required.

Please confirm the surname of the Presenting Author

Samuel

References

- 1. Suleri JI, Suleri AJ. Comparing virtual learning, classical classroom learning and blended learning. European Journal of Sustainable Development Research. 2019;3(1):1-8.
- 2. Kumar SE, Ganesan G, Anbu G, Priya T, Selvaraj V. Perception of Learning Environment Among Anaesthesiology Residents During the Pandemic in a Tertiary Hospital in India: Comparative Cross-Sectional Study. Turkish Journal of Anaesthesiology and Reanimation. 2022 Jun 1;50(Suppl 1):S50.
- 3. Branch RM. Instructional design: The ADDIE approach. New York: Springer; 2009 Sep 23.