Closing the Gap in Clinical Education Established by the COVID-19 Pandemic: Creation of Gynaecological Oncology Online Learning Modules for Senior Medical Students

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Introduction

- In-person education has been dramatically impacted by the COVID-19 pandemic with social distancing requirements often prohibiting standard teaching sessions from taking place.
- Online module-based learning has become a popular solution to fill the gaps created by the absence of in-person teaching and reduced clinical exposure.[1,2]
- With restrictions easing and in-person teaching resuming, module-based courses have remained popular due to the many benefits they provide, including:
    - The provision of greater flexibility in study.
    - Improved convenience for students.
    - Greater interaction and engagement through a combination of text and audio-visual media.[3,4]
    - Possibility to incorporate test enhanced learning, providing opportunities for students to stop, absorb, and reflect on the information they have read.
- Increased likelihood of distraction, loss of motivation, and thus poor progression through prescribed content are all potential limitations to online module-based learning, especially when used as a standalone learning tool.

Figure 1: Excerpt taken from a module covering ovarian cancer, demonstrating the range of audio-visual media used to improve student understanding of the psychological sequelae associated with a cancer diagnosis.

Aims

- Gynaecological oncology is an often underappreciated and poorly taught area and students typically have limited exposure to gynaecological oncology when on clinical placements.
- It was deemed beneficial to build modules tailored to common gynaecological cancers in order to augment the teaching which already exists in the Medical Program at Bond University.

Methods

- Gynaecological cancers chosen based on disease prevalence, disease morbidity and mortality, and consequences of misdiagnosis.
- Six topics were decided and split into five patient cases – ovarian cancer, endometrial cancer, cervical cancer, vaginal and vulval cancer, and BRCA mutations.
- Resources included BMJ Best Practice, UpToDate, and AMBOSS, and clinical resources for videos, including medical channels on YouTube and MedTube.
- Further information was sourced from published articles found using Cochrane Library and MedLine.
- Rise 360 Articulate, an online eLearning software, was used to create the learning modules.

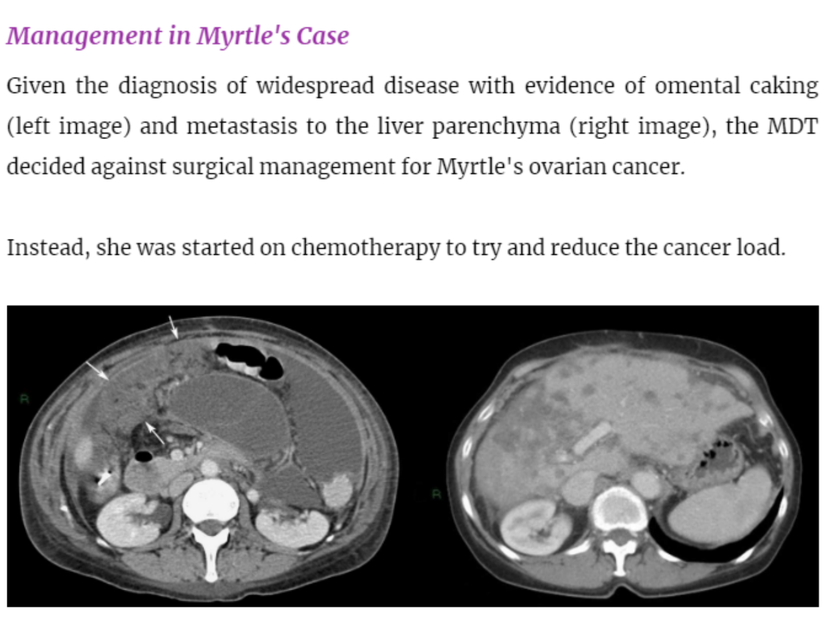

Figure 2: Excerpt taken from a module covering ovarian cancer, demonstrating the use of clinical imaging to create management plans for complex cases.

Project Output

- Five online learning modules were developed covering ovarian cancer, BRCA mutation diagnoses, endometrial cancer, vulval and vaginal cancer, and cervical cancer.
- Modules were presented with engaging cased-based vignettes, visual resources, self-testing tools, and relevant guidelines. Each module included relevant aetiology, pathology, physiology, diagnostics, management options, prognostic factors and patient perspectives.

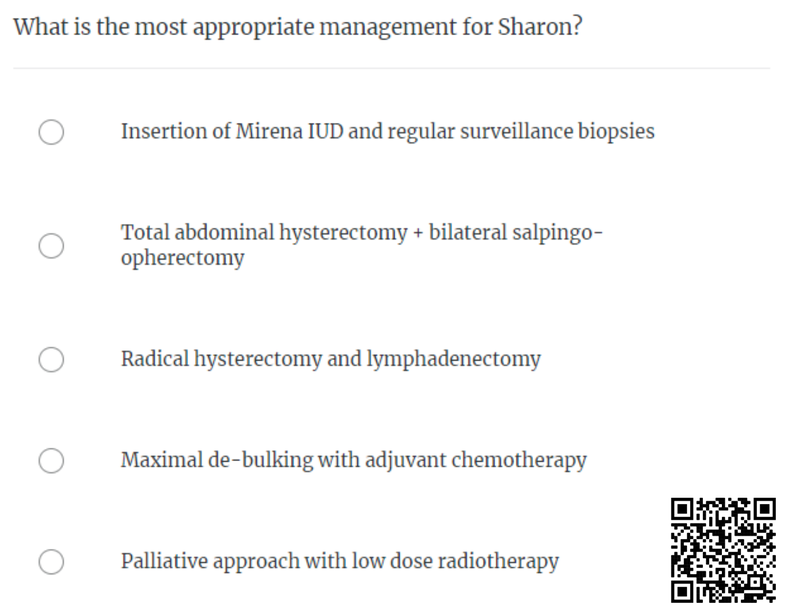

Figure 3: Excerpt taken from a module covering endometrial cancer, demonstrating the use of case-related clinical questions to test student understanding of content covered earlier in the module. QR code redirects to online modules.

Conclusion

- Online learning modules provide a fantastic opportunity to augment face-to-face teaching and improve student understanding of content which may be otherwise complex.
- Learning modules provide greater flexibility when studying and may prove beneficial to visual learners because of the multi-modal nature of the modules.
- Gynaecological oncology has been highlighted as an area of importance for medical education by both the AMC and RANZCOG.
- The implementation of gynaecological oncology learning modules would aid in preparing medical students for their future careers as junior doctors working in gynaecology settings.

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