

## EDITORIAL

### Overcoming challenges to anatomy education during the Covid-19 pandemic

The year 2020 dawned with the world having to face one of the most serious pandemics in centuries. With the many health precautions having to be implemented, the education sector took a massive blow with schools and universities being closed for many months. Educationists had to adapt promptly to a set of new rules in order to keep the flame of learning from going out.

Educational institutes including universities in Sri Lanka were requested to implement online teaching and learning methods to reduce the disruption to education. As first year teachers anatomists were called upon to make the transition into online teaching. Those institutions that had previously installed LMS (Learning Management Systems) found it easier to make the transition from onsite to online. Workshops were organized by the Medical Education Department to update teachers on new features on LMS and the LMS at Peradeniya was upgraded to a more student friendly one.

Medical faculties were at the forefront of this transition, quickly moving from the regular lecture delivery system to narrated lectures and video and audio conferencing. All anatomy departments across the country commenced online teaching as soon as was practically

possible. However all institutions faced many problems and criticisms during the initial period. One of the biggest hurdles was the accessibility of the material to students. Though some critics blamed the medical faculties for rushing into an educationally unsound system of delivery the students were of a different opinion. Many medical students praised the staff for implementing the system. Preclinical departments were at the forefront displaying narrated lectures and conducting audio and video conferencing to cover all online components on time.

Initial surveys done at Peradeniya showed that up to 70% of the students had good access to internet and owned devices for easy access such as smart phones and tablets. Only 2-3% of students stated that they were unable to access the internet and did not possess internet enabled devices. Teachers went so far as to offer to pay the internet bills of students and even to provide them with devices in order to ensure accessibility to all. With time the students developed systems of their own to help their fellow batch mates and each and every student was able to access if not video and audio conferencing, at least the lectures posted on LMS. At Peradeniya teachers were encouraged to record their real time sessions and upload those to the



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LMS in order for the students to be able to access at their convenience. With the UGC providing free access to video conferencing and the government providing free internet for LMS the accessibility problem was solved to a great extent.

The highly technical and practical oriented field such as Anatomy was faced with the problem of delivering practical material online, imparting gross anatomy knowledge to the students becoming a major obstacle. Different faculties employed different methods to tackle this problem. At Peradeniya displaying labeled photographs of prosected specimens was employed initially. With the universities opening partially we moved on to short video demonstrations of prosected specimens and this is the main method of delivery currently. Further, access to an online dissection atlas was also given to students, which was highly appreciated by them. However, the cost for access to such atlases is very high and became difficult to procure funds continuously. Anatomy department at Peradeniya is currently in the process of developing a digital atlas for this purpose.

A problem faced by teachers during online teaching is the difficulty in judging if the students actually imbibe what is being taught. Most students prefer not to have video conferencing and prefer only audio and thereby many teachers share their screens with students and post questions for students

to answer. Assignments are given at more regular intervals and answers are emailed to the teachers who do their best to correct and send the scripts back. Further at Peradeniya many departments have started social media groups which are a fast and effective method of giving information to students. Questions are posted on LMS and the answers are discussed on social media groups. Email communication too has increased between students and teachers and a better platform for them to ask questions has been set. It is observed that students feel more confident asking questions on social media groups than during lectures or tutorials.

Another difficult task ahead for all anatomists and educationists is holding examinations. Peradeniya held several examinations with minimal contact with students. The anatomy department conducted the gross anatomy spot as a projected Objective Structured Practical Examination (OSPE). Other countries have organized online examinations from home for their students using expensive software programs in order to check if students are cheating. Being a developing country we may not be able to purchase such software but this problem too needs to be addressed in the near future if universities remain closed. The way forward lies in improving internet access, reducing data cost, making internet enabled devices available to students and training staff on novel knowledge

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delivery systems: basically using imagination and innovation.

The process of training doctors cannot be halted especially in a pandemic situation and as anatomists we are bound to set the foundation of medical education and therefore need to move forward as we have been doing for

centuries facing new challenges and overcoming them with confidence.

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