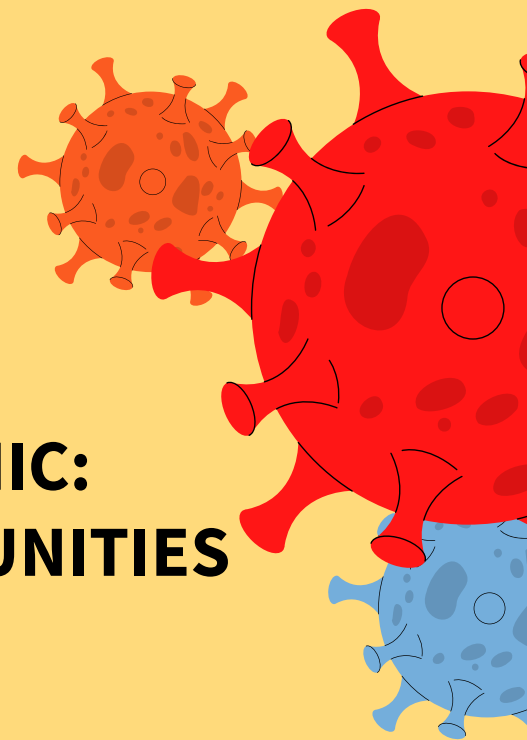


CLINICAL TRAINING FOR THE AUDIOLOGY STUDENTS OF INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA (IIUM) DURING THE COVID-19 PANDEMIC: THE CHALLENGES VS. OPPORTUNITIES



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The COVID-19 pandemic has undeniably caused a huge impact on how education is being delivered including the clinical training for Audiology students in IIUM. Going through this pandemic, the Department of Audiology & Speech Language Pathology (DASLP), IIUM has adapted and devised several methods to help with the students' clinical training, which includes Tele-Audiology services, virtual external clinical placement, simulated online clinic, online clinical observation and virtual clinical examination. In this paper, we reflect upon the challenges faced and how they were turned into opportunities.

Tele-Audiology services

To control the spread of the COVID -19, the new standard operating procedure (SOP) for the IIUM Hearing and Speech clinic was introduced. The SOP is designed to observe the 3 W 3 C components (Wash, Wear, Warn, Crowded, Confined, Closed Conversation).

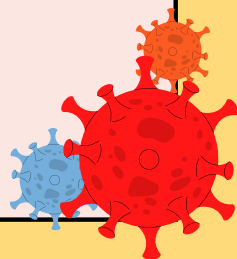
As such, the number of patients coming to the audiology clinic was reduced to 60% from the normal operation to allow for the sanitization process in between patients. This reduction has somehow affected the amount of clinical training that can be offered to the students. Hence, a tele-audiology service was introduced. The clinical session was conducted virtually via an online meeting platform. During the tele-audiology clinical sessions, students learned how to set up an online platform that is convenient to all parties (especially to the patients), to communicate effectively with the patients, and to come out with alternative troubleshooting techniques should patients have any concerns or issues. In our opinion, this service should be continued in the future as it would benefit the patients greatly, (particularly those who need urgent attention) as well as the students (as they learn a new way of providing services despite the limitations to conducting physical sessions).

Virtual external clinical placement

Apart from the clinical placement in IIUM Hearing and Speech Clinic, students were also assigned for clinical placement at the Ear, Nose & Throat (ENT) clinic, Sultan Ahmad Shah Medical Centre, IIUM

for face-to-face clinical sessions. While we are grateful to have various settings for clinical trainings; they were still insufficient to cater the needs of students' clinical training as well as their clinical hours. Hence, external clinical placement is needed. Unfortunately, during the Movement Control Order (MCO), there were a limited number of external hospitals and clinics that can offer physical supervision (as they need to abide by their own SOP). To make matters more challenging, the students' movement for interstate or inter districts were also limited during MCO. These challenges were turned into opportunities when the DASLP managed to collaborate with various external hearing aid centers & audiology clinics to offer virtual external clinical placement across the states.

Going through this pandemic, the Department of Audiology & Speech Language Pathology (DASLP), IIUM has adapted and devised several methods to help with the students' clinical training, which includes Tele-Audiology services, virtual external clinical placement, simulated online clinic, online clinical observation and virtual clinical examination



Together with the training they received internally and the virtual placement, students gained clinical experiences in different settings which included hearing aids and cochlear implant settings. This process has taught us that the effort to shape our future audiologists was not merely contributed by the DASLP, but it was a result of the collective responsibility by Malaysian audiologists nationwide. Thank you!

Simulated online clinic

There was a period during MCO 2.0 where there was a great surge in the number of Covid-19 cases. It totally halted our clinic's operation, which could have affected the clinical training if prompt action was not taken by the department. As an alternative, we initiated the simulated online clinic. The simulated clinic sessions were conducted via the Google Meet platform under the supervision of the Audiologists. The students were required to share their screen while conducting audiological testing (via Audiology clinic simulator software) and attempt the clinical session as they would normally during a physical clinic. The introduction of simulated online clinics was one of the efforts to preserve the quality of the Audiology clinical training for the students despite the limitation of the physical clinic that they can attend. This effort was in line with the implementation of the simulated clinical training for Audiology students in other countries, which was proven effective (1).

Online clinical observation

Previously, two groups of students were allowed in the clinic. The first group was the students who were directly involved in the clinical session as the tester), and the second group was the observation group (they observed the session conducted by the first group).

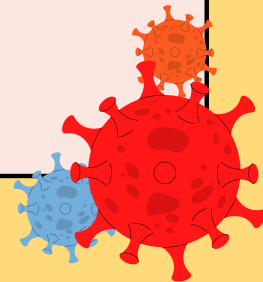
After the session, both groups were involved in the discussion with the supervisors. As to abide by the new SOP for crowd control, the observation session was done online. This decision was made in order to limit the number of people in the clinic at any given time. The clinical session was recorded via an action camera placed on the shoulder, or on the head strap of the student who was the tester during the session, or on the tripod (refer to Figure 1). A consent to record the session was obtained from the patient prior to the recording, and the confidentiality of the patient was ensured throughout the process (i.e., no recording shall be kept in personal computers, and shall not be distributed elsewhere). The video recording was then uploaded into a secured google drive which was later made available to all students. This recording enables the observation group to watch the session from their own monitors. Through this practice, not only the session benefits the students under the observation group but also to other students who have the opportunity to learn different cases as these recordings are accessible by them.

Virtual clinical examination

The challenge continued with regard to assessing the clinical competency of our students. Traditional clinical examination using real patients was not possible as the clinic was not allowed to operate, and it was also a difficult time to get patients. As an alternative, the virtual clinical examination was introduced. This exam was a live online session, where the students needed to perform all the basic routine testing, i.e. from history taking until explaining results and providing feedback to the patient. Students were required to share their screen with the examiners to show their techniques in obtaining the hearing threshold of the case. Different cases were prepared appropriate to the aims of each

of the clinical courses. Though it was a different medium of examination, the assessments were able to assess the performance of the students, almost thoroughly. The DASLP also had the opportunity to invite an external examiner for this exercise. We received positive feedback on this alternative way of assessing the clinical competency of the Audiology students.

"The SOP is designed to observe the 3 W 3 C components (Wash, Wear, Warn, Crowded, Confined, Closed Conversation)."



Despite all the challenges and the change to the method of delivery for the Audiology clinical training, the Malaysia Quality Assurance (MQA) standard was always maintained to its highest standard (2). The lessons learned by the DASLP, IIUM from this pandemic with regard to the Audiology clinical training are very valuable: We are ready to face the new challenges; we turn the challenges into opportunities to explore and grow; and together we survive and succeed. Despite the negative impact of the COVID-19, as Muslims, in general, we shall believe that every disaster created by Allah should be viewed as an opportunity for us to learn and progress (3):

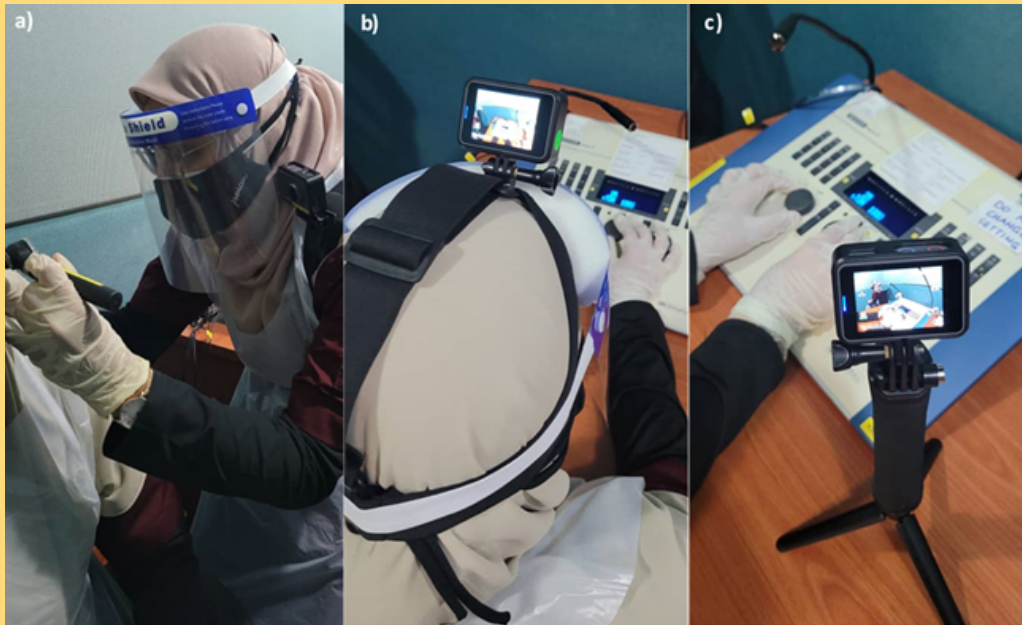


Figure 1: The setting for clinical recording via an action camera ; a) placed at the shoulder, b) placed on the head strap of the student who was the tester for the session, c) using a tripod

“Men who celebrate the praises of God standing sitting and lying down on their sides and contemplating the (wonders of) creation in the heavens and the earth (with the thought): “Our Lord! not for naught hast Thou created (all) this! Glory to thee! Give us salvation from the penalty of the fire.” (Chapter 3: 191).

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