## COVID-19 - A MUTATION IN THE EVOLUTION OF PRE-CLINICAL DENTISTRY AT A REGIONAL UNIVERSITY

Sharron A Longa, Ernie Jenningsa, Hilary Whitehouseb, Alan Nimmoa

Presenting Author: Sharron Long (Sharron.long1@jcu.edu.au)

<sup>a</sup>College of Medicine and Dentistry, James Cook University, Smithfield QLD 4878, Australia

<sup>b</sup>Graduate Research Centre, James Cook University, Smithfield QLD 4878, Australia

**KEYWORDS:** online learning, student engagement, COVID-19

**BACKGROUND:** Dentistry at James Cook University (JCU) began the transition away from traditional lectures in 2018. There was slow uptake from both staff and students to embrace the new university wide pedagogy (JCU, 2017). By the beginning of semester one in 2020 the transition had entered a period of hiatus with a clear divide between those that embraced the new pedagogy and those that did not. Enter the phenomenon which is the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and the COVID-19 pandemic.

**AIMS:** The aims of this study were to evaluate changes in student participation and satisfaction during enforced online learning and intense practical (clinical skills) learning on return to campus, and the impact on academic staff workload during 2020.

**METHODS:** Participants were students enrolled in Bachelor of Dental Surgery (pre-clinical years) (n=172) and the academics who taught into the pre-clinical years (n=10). Student engagement with the online teaching was analysed and once the university was given permission to return to oncampus activities the staff and students were invited to discuss their experiences via interviews and focus groups conducted via Zoom (Zoom Video Communications, Inc. 2020)

**RESULTS:** Student engagement was low with all online activities and continued to decrease as the semester progressed with fewer students attending "live" sessions, preferring to watch recordings of the sessions, leading to a potential lack of understanding of content. Upon return to campus and in person practical sessions, students appeared to struggle with mastering clinical skills and application of theory. This was reflected in the increase in students requiring supplementary assessment or failing outright. Staff were stressed by the increased level of unknowns as well as the increase in workload caused by the increase in meetings they were required to attend. Staff stress levels continued to remain high once they were able to return to campus due primarily to increased workload resulting from teaching under strict social distancing requirements.

**CONCLUSIONS:** The sudden pivot in pedagogy caused by the COVID-19 pandemic caused high stress levels to students and staff. Staff reported a doubling in the number of meetings they were required to attend and felt that they were under significant stress to adjust to the enforced online teaching pedagogy. The stress levels of staff did not decrease once a return to campus was permitted as classes often had to be double or triple taught to abide by the university's COVID-19 policies. Students reported that the level of disorganisation they saw in their subjects made studying difficult. There was a small number of students who preferred the online format and felt that their studies were not impacted by the move to online teaching. Students appeared to struggle with the application of the taught theory and mastering clinical skills, essential skills required to progress in their degree.

## **REFERENCES**

2020. Zoom (Version 5.1.3) [Computer software]. Zoom Video Communications, San Jose, California, Unites States James Cook University.2014."Blended Learning Policy" Retrieved 26/04/2017, from https://www.jcu.edu.au/policy/learning-and-teaching/blended-learning-policy

Proceedings of the Australian Conference on Science and Mathematics Education, 29 September - 1 October 2021, page 33, ISSN 2653-0481