Received: 15 July 2020 | Revised: 17 August 2020 | Accepted: 20 August 2020

DOI: 10.1002/jdd.12401

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Web-based standardized patient encounters for preclinical dental students during COVID-19 pandemic

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1 | PROBLEM

Standardized patient (SP) encounters are an integral component of dental school education. Learning objectives related to SP encounters are intertwined with behavioral sciences, ethics, and professional practice courses in the school curriculum. The spread of coronavirus (COVID-19) has posed significant challenges for dental schools. These challenges are not limited to dental practices, but are expanding to preclinical and clinical education dental settings. One of the positive aspects that prepared dental education for the current situation is the early implementation of technology-enhanced learning (TEL) as educational tools to support the face-to-face learning.[14]

Prior to COVID-19, the spring semester schedule for the classes of 2022 and 2023 involved several SP encounters. Each first-year student was supposed to have 2 encounters addressing gathering information (history taking) and providing information (dental health education) while each second-year student was supposed to discuss a formulated treatment plan in an encounter with an SP. For previous classes, these encounters took place in the simulation clinic and were video recorded for self and peer evaluation to enhance students' reflective practice. With the current situation of COVID-19 we were unable to engage the students in the previous practice of face-to-face encounters with SPs.

2 | SOLUTION

To ensure that the learning objectives related to the SP encounters were achieved, a simulation center management solution (CAE LearningSpace) was introduced for the first time as the SP encounter platform. Standardized patients, students, and faculty were trained and received instructions to set their Web-based accounts with different levels of accessibility based on their assigned roles. Several sessions were scheduled to accommodate the students and the assigned SP. The software linked each encounter to a recorded Zoom meeting. The ability of the software to capture the recorded encounters enabled the faculty to observe these encounters and to provide feedback. This also enabled the students to revisit their encounters for self-improvement. The Web-based software enabled 360-degree simulation training where the SP feedback, case notes, students' self-evaluations, and faculty feedback were incorporated in one platform.

3 | RESULTS

Using the online platform created opportunities for all D1 (n = 60) and D2 (n = 41) students to complete the planned SP encounters. The Web-based software provided (1) 360-degree evaluation in one platform, (2) timely SP feedback following each encounter, (3) postencounter knowledge

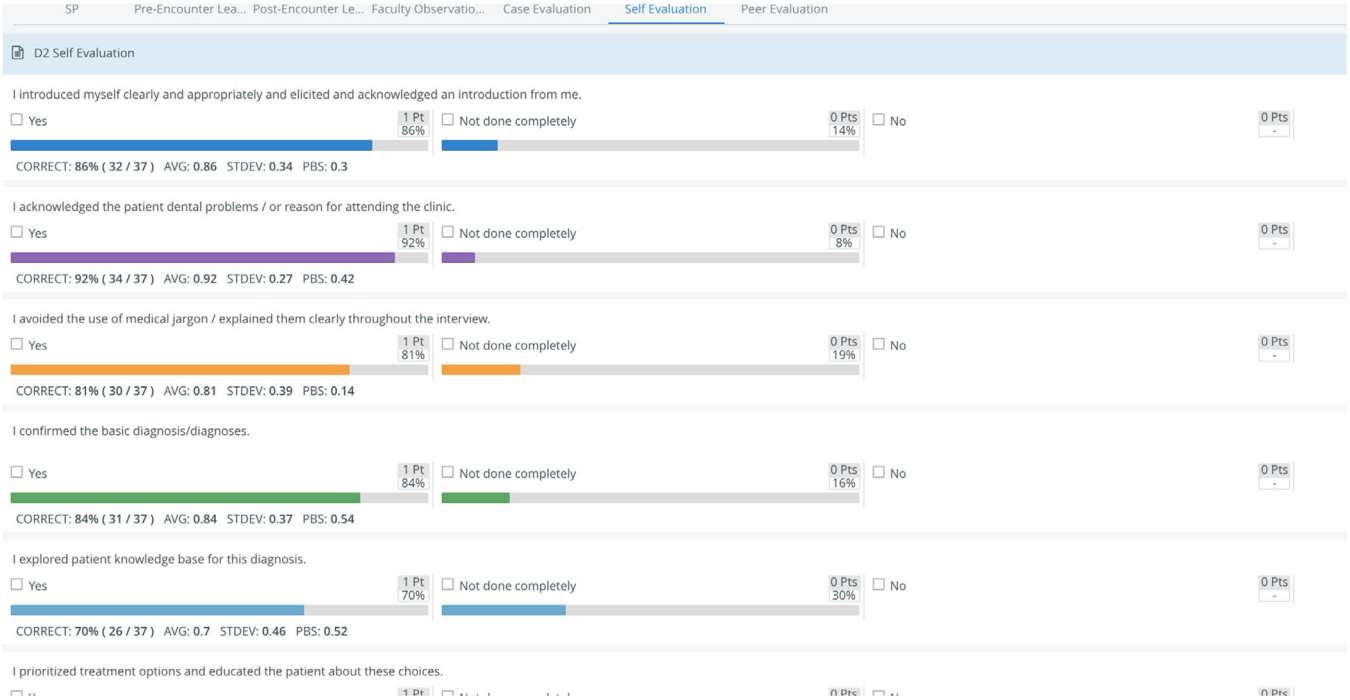

FIGURE 1 Screen shot showing part of the overall self-evaluation of the students in relation to the SP encounter

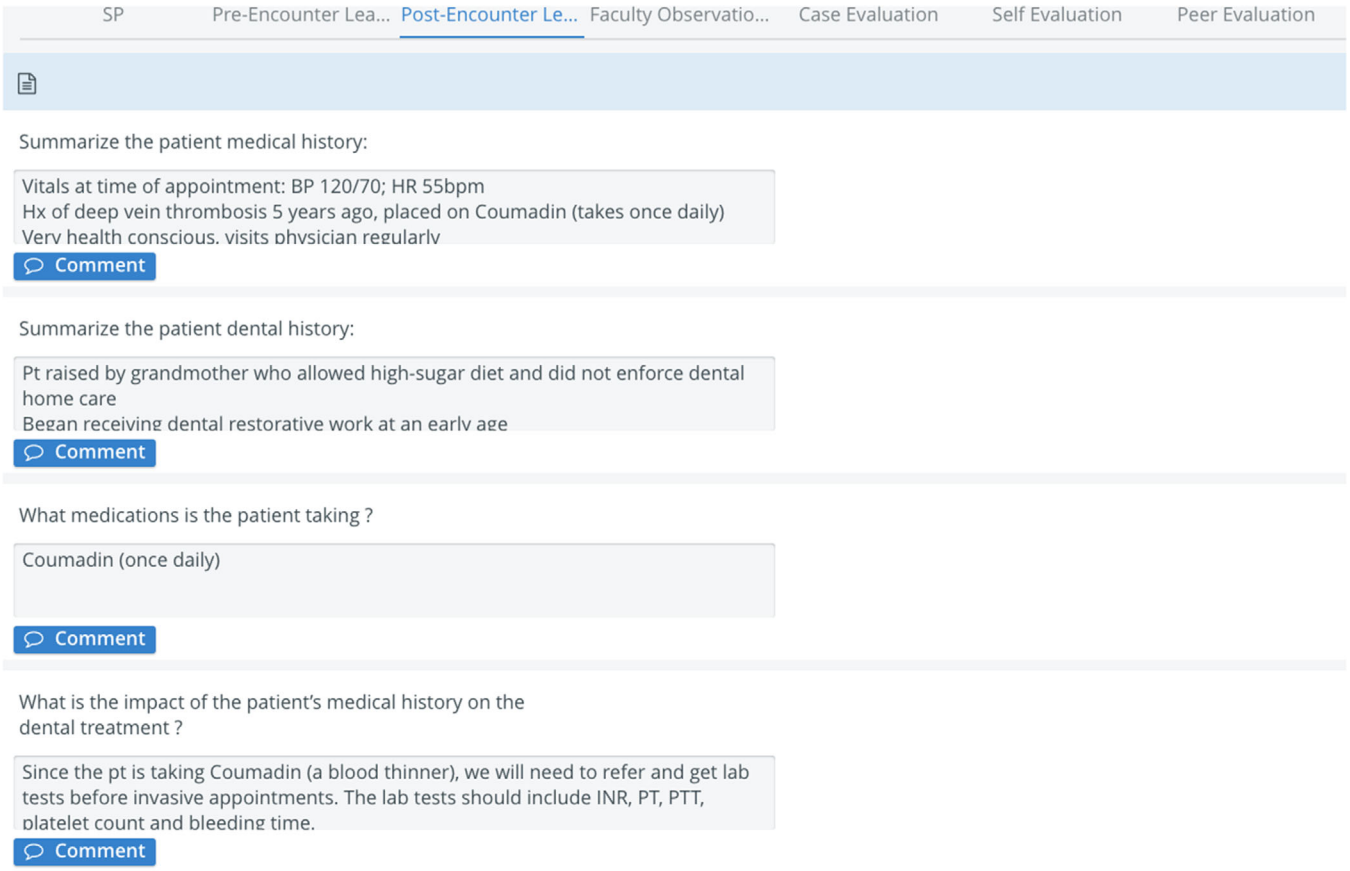

FIGURE 2 Screen shot showing part of the postencounter knowledge assessment questions

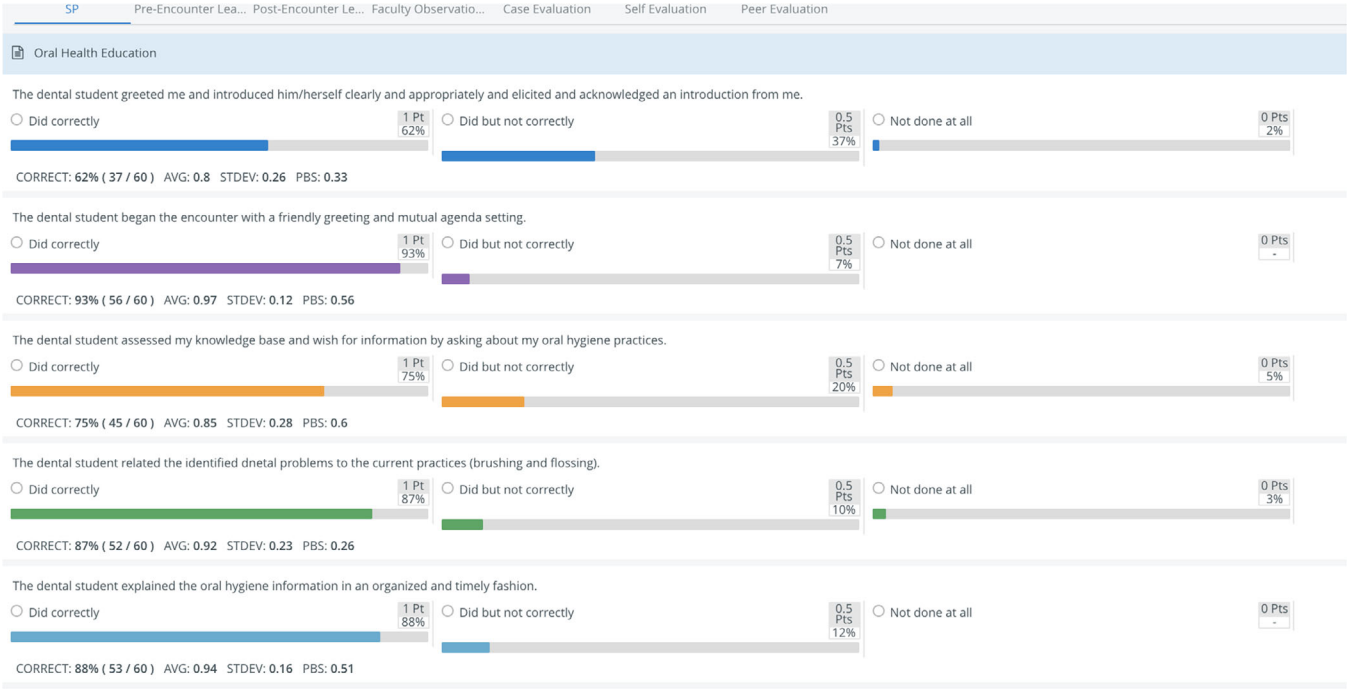

FIGURE 3 Screen shot showing the overall performance of the students based on the SP feedback

assessment, (4) options for students and faculty to revisit the encounters for reflection and feedback, and (5) grades were presented in different formats based on aspects to be assessed (Figures 1-3). Two Zoom feedback sessions were conducted with D1s and D2s, respectively, to gauge their feedback through discussion and Zoom interactive tools.

In general, the students' feedback was positive toward the activity. The majority of the encounters were successful; however, technical issues related to pop-up blockers and unstable internet connectivity were experienced by few students, and for those, the encounter was rescheduled if the connection could not be established. In general, the encounters were positively received by the students and the SP. Incorporation of online SP encounters through a Web-based platform represented a useful tool to enhance dental students' communication skills in the preclinical years and during the current situation of COVID -19.

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How to cite this article: Omar H, Archer L, Schroeder K, Robinson B. Web-based standardized patient encounters for preclinical dental students during COVID-19 pandemic. *J Dent Educ*. 2021;85(Suppl. 1):1167–1169.
https://doi.org/10.1002/jdd.12401