How does COVID‑19 affect community-based clinical training for Undergraduate dental therapy programs?

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Community-based education (CBE) is a learning strategy that provides meaningful opportunities for students to apply theory learned in a broader social and cultural context in various community settings.[1] For dental therapy students, it is a necessary adjunct to enrich clinical training. It creates authentic learning experiences which improve clinical skills, enhance critical thinking, instil self-confidence through instruction, and self-reflection; all contributing to the overall self-development of the student.[2] Moreover, students perceive the CBE learning environment as more relaxed and supportive in the transfer of skills.[3] It also makes them more aware of cultural differences and the essential need to respect this diversity. It introduces them to the inequalities of health care where they gain a better understanding of the social determinants of health and simultaneously, instilling a sense of civic responsibility and social accountability.[4] The attributes achieved through community-based clinical training help prepare a graduate for work readiness and facilitates the transition into the workforce.[5]

While the country is in dire need of appropriately qualified dental therapists to meet the oral health care needs of the population, training of these professionals was severely compromised during the COVID-19 pandemic. Transmission of the COVID-19 virus includes droplets, contact and aerosol,[6] hence, heavy restrictions were placed by the South African government to reduce health risks.[7] This included lockdown regulations and wearing of masks, together with social distancing measures.[8] Although training institutions had devised strategies to continue teaching and learning through online platforms, only the theoretical components of teaching was achievable, needless to say, which comes with challenges. Clinical practice is where integration of theory and practice/clinical skill should be facilitated.

Among health professionals, the dental professional is regarded as one of the occupations with the highest risk for contracting the virus and becoming a node of transmission due to close working proximity of 13 – 33 cm to a patient and the aerosol generated during most dental procedures.[9] Therefore, the South African Dental Association (SADA) has issued clinical guidelines to protect dental professionals, their patients and the communities. In the public sector, triage of patients and tele-dentistry were encouraged, ‘COVID screening of patients’, temperature checks, hand-sanitising and maintaining a distance of 1 - 1.5 m between patients were ensured.[9] For dental professionals, full PPE, including head cover, goggles, N95 high respirator masks, face shields, scrubs, long-sleeved surgical gowns, gloves and shoe covers which are changed after every patient attended to, became the norm.[9]

Attending to patients at non-governmental clinics had to undergo the same infection control protocols as any government clinic, if not more stringent, as patients are more susceptible to the virus owing to their low socioeconomic and medically-underserved backgrounds. Most community-based clinical training sites include public community health centres and clinics run by non-governmental organisations. Currently, community-based programs for dental therapy students at UKZN include a 2-week participation per student in the dental clinic of the Phelophepa Health Train and a weekly rotation to a faith-based, non-governmental clinic in a peri-urban area from April to October. Transnet managers announced the suspension of all student rotations during the pandemic on the Phelophepa.[10] SADA has also called for any community-based activity to remain suspended until community prevalence levels of COVID-19 dropped much lower, impacting adversely on any community-based training programs.[11]

Allowing students to engage in community-based programs to fast track student clinical training during a pandemic may seem to be a good strategy, however, it may inadvertently increase potential risks to students and staff. Training institutions tend to ensure safety of students as a top priority, even in times of unrest. Thus, placing students in vulnerable communities can pose a risk to student safety as at the time there was still no rapid test for COVID-19 and some patients may be asymptomatic, even with screening. As the faith-based dental clinic is dependent on donations and sponsors, additional costs of the full PPE, sanitisation, decontamination, temperature screening will impact their budget, leading to reluctance in continuation of services during the pandemic.

Moreover, the administrative staff responsible for the smooth operation of these identified faith-based clinics are generally volunteers or retired people, thus there is an increased risk of contracting COVID-19. Additionally, in the unintentional event of them getting infected while working with students, ethically, who is responsible for their care and hospitalisation or compensation or litigation? More importantly, what if patients tested positive in the unintentional event of them getting infected while working with students, ethically, who is responsible for their care and hospitalisation or compensation or litigation? More importantly, what if patients tested positive through inadvertent cross-infection while receiving dental treatment?

While community-based clinical training plays an essential role in developing a dental therapy graduate and facilitating the transition into the
work environment, in unprecedented times, this form of training should be reviewed. While this paper focuses on dental therapy training, these views can be applied to other health sciences training that use community-based clinical training platforms. There is however a need for collective stakeholder engagement (including community representation) to ensure that decision-making is inclusive and that the best interests of students and communities are considered. Further reviews maybe necessary to establish the global reaction to community-based education during the COVID-19 pandemic.


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