



Maximising health science student volunteers for the COVID-19 response: A valuable resource

To the Editor: In response to COVID-19, a nationwide lockdown was initiated in South Africa (SA) on 27 March 2020, to minimise transmission of the virus and give the healthcare sector time to prepare for unprecedented patient loads. COVID-19 has also caused clinical teaching at many health science faculties across the world to come to a complete halt out of concern for the safety of students and staff alike. Most health science faculties across SA shut down, with online learning taking the place of lectures. Although there has been disagreement about the role that health science students should and could play in fighting the pandemic, several centres across the world and in SA have utilised students as valuable resources to help cope with the overwhelming patient burden, managing, to varying degrees, to integrate students into frontline responses.^{1,2} In this brief commentary we outline the valuable contribution to our frontline response made by University of Cape Town (UCT) health science students. We highlight the role a student society was able to help play in centralising and co-ordinating early student volunteering in Cape Town, and how the volunteer experience contributed towards student medical education.

Evolution of UCT student volunteer initiatives and a co-ordinated effort

During level 5 lockdown, several health science students based in Cape Town were eager to volunteer their services in response to the rising number of COVID-19 cases. However, the UCT Faculty of Health Sciences (FHS) was initially reluctant to integrate students into the frontline response because of concerns for the safety of students and staff, asymptomatic viral transmission, shortages of personal protective equipment (PPE), and movement restrictions imposed by national lockdown regulations. However, with clinical teaching at UCT FHS suspended and students receiving only remote teaching, several students accessed existing Western Cape provincial initiatives *ad hoc* in a personal capacity, hoping both to contribute and to maintain clinical skills. Noting that student volunteer efforts were being haphazardly deployed, and as healthcare workers became sick and COVID-19 cases surged, a group of students on the Executive of the UCT Surgical Society – an academic health science student organisation consisting of 384 members, established in 2006 – worked

with the UCT FHS, clinicians from various departments at Grootte Schuur Hospital (GSH), Tygerberg Hospital and the Western Cape Department of Health (WCDoH) in an attempt to centralise and co-ordinate several student volunteer initiatives through a website called the UCT Surgical Society COVID-19 Student Taskforce.

This centralised platform offered new student volunteers easy access to an array of opportunities that grew and developed over the course of the COVID-19 case surge in the Western Cape, and included the COVID-19 Hotline in the Disaster Management Centre at Tygerberg Hospital, the GSH COVID-19 Testing Centre, case and contact tracing in the Western Cape, and the opportunity to assist with ward work at GSH. A brief outline of these initiatives and their suitability to safe student volunteering is provided in Table 1. Medical, health and rehabilitation sciences, PhD and master's students from the UCT FHS were recruited through the website, and volunteer initiatives were advertised extensively via the UCT Surgical Society's social media platforms and 'Vula' announcements. The initiatives were also supported by other student societies, including the Student Health and Wellness Community Organization (SHAWCO), PaedSoc, the Internal Medicine Society (MedSoc), UCT Rural Support Network and the like, which helped to spread the call for student volunteers.

The online volunteer platform enabled students to access different volunteer work opportunities in a centralised manner, reducing the admin involved with volunteering *ad hoc*, and streamlined and standardised the processes of signing indemnity forms, attending training sessions and understanding the risks involved with different initiatives. For example, those who were willing to work with COVID-19 patients directly could volunteer for GSH Testing Centre work, while those who were not could volunteer for the COVID-19 Hotline. Students who were not based in Cape Town or who had family members at high risk could work remotely on case and contact-tracing work. This organisation in the early weeks of lockdown allowed quick uptake of student volunteers, while also forming an important group with whom healthcare workers from across different departments, such as the GSH Department of Medicine, WCDoH, the UCT Primary Healthcare Directorate and the UCT FHS Deanery, could liaise about student involvement. As the faculty re-opened for final-year students, these student co-ordinated initiatives could segue into more formalised volunteer opportunities such as the 'Selective' programme, where senior medical students could use their

Table 1. Brief outline of the student volunteer initiatives

The COVID-19 Hotline

The COVID-19 Hotline initiative entailed students volunteering for 12-hour shifts to staff the COVID-19 telephone hotlines in the Disaster Management Centre at Tygerberg Hospital. This does not involve direct patient contact but provides valuable service, while also giving student volunteers the opportunity to gain experience in disaster management protocols.

Grootte Schuur Hospital Testing Centre

Testing Centre activities involved both administrative and clinical patient testing duties. Health and rehabilitation sciences, PhD and master's students from the University of Cape Town Faculty of Health Sciences and medical students in years 1 - 3 were asked to assist with administrative tasks such as filing patient results in folders, transporting sample boxes from the testing centre to the lab, and taking patient scripts to the pharmacy (no patient contact). Senior medical students in years 4 - 6 were asked to assist doctors with screening and testing patients for COVID-19.

Case and contact tracing in the Western Cape

While volunteering was easily accessible for Cape Town-based UCT students, opportunities were very limited for those students residing in other provinces who were unable to return to campus. Case and contact tracing in the Western Cape could be done remotely therefore became an excellent opportunity for this group of students. Volunteers assisted the Western Cape Department of Health to contact patients and their close contacts (family, work and social) to ascertain risk and prevent further infection by ensuring that people knew what to do in terms of isolating at home or seeking appropriate medical care at a medical facility.

volunteer hours towards their compulsory elective time in 6th year. In addition, through UCT Plus, an organisation that rewards students for extracurricular contributions to community service, sport and leadership, volunteer hours were also able to qualify as contributions with formal accreditation towards a 'UCT Plus Leadership through Community Service Award'.^[3]

Student volunteering – a significant contribution

Over a period of 19 weeks starting from 16 March 2020, about 213 students volunteered across these initiatives, contributing significant hours and receiving extremely positive feedback from those organising these frontline services. In comparison, the entire Cape Town volunteer database, run by the WCDoH, consisted of only a total of 248 registered nurses and doctors who had volunteered for shifts in hospitals around the metropole. This illustrates the considerable resource that students became in the frontline response. Although other faculties have also utilised student volunteering, we feel that the centralised co-ordination of appropriate opportunities really helped to utilise this resource effectively, and furthermore helped to ensure that safety protocols and necessary training for student volunteers were standardised and adhered to.

Student volunteers have also made unique and valuable contributions to the provincial response by coming up with innovative ways to improve existing systems and protocols. For example, case and contact tracing student volunteers recognised that language was a significant barrier for many of the patients they contacted, so they translated the 'interviewing script' into the local languages of Afrikaans and isiXhosa to make the information the contact tracing teams were disseminating more accessible to patients, thereby enhancing communication. The students involved with the case and contact tracing work have also, where necessary, gone above and beyond their allocated duties by identifying households with food insecurity, arranging food parcels, discerning isolation challenges, and making arrangements to transport cases and contacts to an isolation or quarantine facility.

The volunteer experience for medical students in SA

Volunteering for the COVID-19 initiatives has been an invaluable experience for health science students in SA, as it has empowered them to make meaningful contributions to the frontline response according to their individual and varied skill sets. This unique experience has allowed students to develop and expand their clinical knowledge and abilities during the lockdown period and has

provided them with an opportunity to gain first-hand experience in disaster management protocols in the midst of a global pandemic. Furthermore, the volunteer opportunities have helped to broaden students' understanding of the health system as a whole and enabled them to engage with patients at all levels of the referral pathway through screening patients over the telephone, testing patients for COVID-19, organising food parcels and quarantine facilities for patients in need, providing telephonic health promotion and disease prevention information, and identifying patients and contacts for follow-up to prevent further transmission of the virus. All this has given students a holistic understanding of healthcare provision in SA and the significant and important role that socioeconomic factors play in influencing the health of our population, which is a rare experience at tertiary-level institutions. Times of crisis inspire innovation. This was clearly demonstrated through the way students systematically identified problems in health and safety protocols, contact-tracing transcripts and system processes and collaborated with other students, clinicians and the WCDoH to overcome these challenges.

This has been a unique opportunity for students to experience and be part of a massive public health response, and has given them an opportunity to engage with and apply important public health principles directly into our own SA healthcare system.

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