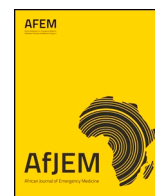




Contents lists available at ScienceDirect

African Journal of Emergency Medicine

journal homepage: www.elsevier.com/locate/afjem

Editorial

African Federation for Emergency Medicine resources for managing COVID-19 in low resourced settings



Despite containment efforts, infection with SARS-CoV-2 has reached pandemic status. More than three-quarters of the world's nations and territories have been affected, and cases are being found in previously unaffected areas each day [1]. At the time of writing, there were 7,039,918 confirmed cases worldwide, and 404,396 deaths [1]; these numbers are expected to grow in the coming months. Although data surrounding the novel coronavirus are rapidly evolving, initial estimates depict a dire situation: 20% of infections lead to severe or critical disease [2]. Mortality has varied across settings, but early data suggest a case fatality rate near 4% [4,5].

It is increasingly likely that the countries with the least capacity to respond will soon be affected on a large scale [6]. There, highly vulnerable populations, compromised by malnutrition and comorbid diseases (HIV, tuberculosis, etc.), face a greater risk of developing severe and critical disease [3]. Early recognition, resuscitation and referral have proven key to effective responses, yielding lower mortality [7]. These processes are, however, significantly more challenging in low-resource settings (LRS) [3,6]. Most LRS have scarce critical care resources, with limitations in the availability of oxygen and other basics, as well as healthcare provider shortages [8,9]. Immediate targeted efforts are needed to assist these settings in managing large numbers of acutely ill COVID-19 patients.

Although substantial literature has been generated surrounding the initial response, much of it describes provisions of frontline care in higher-income regions: predictably, evidence is lacking to inform responses in LRS. In light of this, the African Federation for Emergency Medicine (AFEM) has developed a set of resources tailored to supporting frontline providers who are facing this crisis in LRS.

Our resources include a palliative care guide for families. This visual guide is a useful adjunct for family members nursing a terminally ill relative. It provides guidance on managing symptoms as well as aspects of care and quarantine. The resources also include a growing set of rapid reviews of recent COVID-19 literature. The rapid reviews provide an LRS perspective on COVID-19 literature, breaking down the aspects important within an LRS. It covers topics such as paediatrics, coagulopathy, diagnostics, nebulisation, mask reuse, awake proning, and more.

Sadly, AFEM had to discontinue use of the Severity Scoring Tool. Given that the tool was initially derived using data from Surgisphere, these data being called into question also called into question the validity of the original Severity Scoring Tool. We have already started the process to build a new Severity Scoring Tool using verifiable data from a smaller, reputable source. The derivation and validation process are likely to take several months to complete. In the meantime, AFEM would like to signpost to the open access, interim WHO Clinical management of COVID-19 guidelines. This document provides direction on the urgent management of acute respiratory distress in adult patients with confirmed or suspected SARS-CoV-

2 infection. Practical and realistic strategies are presented for the care of patients of all severity levels, with the assumption that there is no easy access to more advanced testing such as troponin or CT scan.

We know that these resources refer to the need for respiratory interventions, and recognise that most LRS hospitals have few or no ventilators and very limited oxygen supply. In these settings, the number of patients will significantly outweigh available resources. These resources are intended to assist with clinical management in these settings, but we can never replace clinical decision making at the bedside. We are offering these resources to assist you in this battle. These can be downloaded from AFEM website's resources section: <https://afem.africa/resources/>.

Acknowledgement

Jenn Pigoga for her tremendous input into curating the AFEM resources.

References

1. Coronavirus disease (COVID-19) outbreak Geneva: World Health Organization Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>; 2020, [Accessed date: 9 June 2020].
2. Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19). Geneva: World Health Organization; 2020.
3. Yang J, Zheng Y, Gou X, et al. Prevalence of comorbidities in the novel Wuhan coronavirus (COVID-19) infection: a systematic review and meta-analysis. *Int J Infect Dis* 2020. <https://doi.org/10.1016/j.ijid.2020.03.017>. [published Online First: 2020/03/17].
4. Yang S, Cao P, Du P, et al. Early estimation of the case fatality rate of COVID-19 in mainland China: a data-driven analysis. *Ann Transl Med* 2020;8(4):128. <https://doi.org/10.21037/atm.2020.02.66>. [published Online First: 2020/03/17].
5. Novel Coronavirus (COVID-19) situation Geneva: World Health Organization Available from: <https://experience.arcgis.com/experience/685d0ace521648f8a5beee1b9125cd>; 2020, [Accessed date: 20 March 2020].
6. Gilbert M, Pullano G, Pinotti F, et al. Preparedness and vulnerability of African countries against importations of COVID-19: a modelling study. *Lancet* 2020;395(10227):871–7. [https://doi.org/10.1016/S0140-6736\(20\)30411-6](https://doi.org/10.1016/S0140-6736(20)30411-6). [published Online First: 2020/02/24].
7. Sun Q, Qiu H, Huang M, et al. Lower mortality of COVID-19 by early recognition and intervention: experience from Jiangsu Province. *Ann Intensive Care* 2020;10(1):33. <https://doi.org/10.1186/s13613-020-00650-2>. [published Online First: 2020/03/20].
8. Chavula C, Pigoga JL, Kafwamfw M, et al. Cross-sectional evaluation of emergency care capacity at public hospitals in Zambia. *Emerg Med J* 2019. <https://doi.org/10.1136/emmermed-2018-207465>. [published Online First: 2019/07/12].
9. Bitter CC, Rice B, Periyanyagam U, et al. What resources are used in emergency departments in rural sub-Saharan Africa? A retrospective analysis of patient care in a district-level hospital in Uganda. *BMJ Open* 2018;8(2):e019024. <https://doi.org/10.1136/bmjopen-2017-019024>. [published Online First: 2018/02/27].

Lee A. Wallis
University of Cape Town
E-mail address: lee.wallis@uct.ac.za.

<https://doi.org/10.1016/j.afjem.2020.06.001>

Available online 16 June 2020

2211-419X/ © 2020 African Federation for Emergency Medicine. Publishing services provided by Elsevier. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).