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Do the clinical management guidelines for Covid-19 in African Countries reflect the African quality palliative care standards? A rapid review.

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DISCLAIMER

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Abstract

Palliative care should be a component of COVID-19 management to relieve suffering, improve patient outcomes and save cost. We identified and appraised palliative care recommendations within COVID-19 management guidelines in Africa using rapid document analysis. All guidelines of any language published between December 2019 and May 2020 were retrieved through online search and email to in-country key contacts. We appraised the documents using African Palliative Care Association standards for providing quality palliative care. Fifty-five documents were retrieved from 29 out of 54 African countries. Fifteen documents from 15 countries were included in the final analysis, of which eight countries have identifiable PC recommendations in their COVID-19 management guidelines. The other seven countries have statements of recommendations which are relevant to palliative care. Governments and policymakers in Africa must prioritise palliative care within case management guidelines to ensure patients with COVID-19 have access.

Background

COVID-19 was declared a pandemic by the WHO within three months of its emergence.⁽¹⁾ The number of cases and deaths are escalating in African countries. As of 21 May 2020, 95,201 cases and 2,997 deaths have been reported from all 54 African countries.⁽²⁾

COVID-19 case fatality rates range from 0.35 to 11%.⁽³⁾ Risk factors for severe illness and mortality in COVID-19 include being elderly, the presence of pre-existing health problems, multi-morbidities,⁽⁴⁾ and being of black and ethnic minority heritage.⁽⁵⁾ In addition to these, severity and case fatality patterns in Africa may also be influenced by the lowered immunity in individuals with existing and undiagnosed conditions such as HIV/AIDS, tuberculosis infections, respiratory, cardiovascular, and metabolic conditions. Approximately 14% of patients have been reported to have the severe form of the disease, and 0.16% to 5% needed intensive care admission to manage severe respiratory symptoms.^(6, 7) Inadequately resourced health systems in Africa face challenges of providing needed critical care medications and mechanical ventilators for intensive care.⁽⁸⁾

COVID-19 patients and their families report distressing multidimensional symptoms and concerns. These range from distressing physical symptoms such as fever, breathlessness, fatigue, cough;⁽⁹⁾ psycho-social concerns, and spiritual /existential distress caused by the threat to survival, worry, and clinical uncertainty.⁽¹⁰⁾ WHO recommendations for isolation means families and patients risk additional distress and poor access to social support.⁽¹⁰⁾

Palliative care is a core component of Universal Health Coverage and is required by WHA73.3 resolution as part of member state responses to COVID-19⁽¹¹⁾. However, the neglect of palliative care among the dying and the resulting unnecessary serious health-related suffering is well established.^(12, 13) WHO's omission of palliative care from COVID-19 response plans has been highlighted.⁽¹⁴⁾ Palliative care must be a component of COVID-19 case

management to relieve suffering, improve outcomes for patients and their family members, and save costs.^(15, 16) Within limited resources, palliative care teams are supporting complex decision making for patients with severe COVID-19 illness.⁽¹⁷⁾ Evidence from previous fatal viral epidemics demonstrates that hospice and palliative care play essential roles including providing protocols for symptom management, training non-specialists, being involved in triage, and providing psychosocial and bereavement care.⁽¹⁸⁾

Given the low coverage of palliative care services and fragile health systems in Africa, health care professionals should be supported to deliver palliative care through clear comprehensive case management guidelines. This review aims to identify and critically appraise the palliative care recommendations within COVID-19 case management guidelines in Africa. The research questions were;

- a) Are palliative care recommendations present within COVID-19 case management guidelines in these countries?
- b) What are the specific palliative care recommendations?
- c) Are the palliative care recommendations adequate when compared to the African Palliative Care Association (APCA) standards for providing quality palliative care across Africa?

Method

Design

We conducted a rapid document analysis using a systematic procedure to retrieve and analyse COVID-19 clinical case management guidelines from all 54 countries in Africa.

Search Strategy

We searched the Guidelines International Network database for specific guidelines for the management of COVID-19 cases from Africa. In addition, we searched online sources

including government agencies and ministry of health websites. In situations where guidelines were not available online or where documents available do not meet our inclusion criteria, key contact persons (ministry of health official, leaders of national palliative care associations, or palliative care champions) were contacted to obtain these documents. The process was coordinated by the African Palliative Care Association (APCA), the regional body that supports and coordinates the development and sustainability of palliative care. We emailed key contact persons in 39 countries.

Inclusion Criteria

We included guidelines for case management of COVID-19 published between December 2019 and 10 May 2020, written in any language. Our search was restricted to Guidelines prepared by a national government ministry or nationally recognised government body tasked with this responsibility. We included only guidelines prepared by the government as we were interested in assessing whether the government is considering and prioritising palliative care in the delivery of care to COVID-19 patients. Where a country has more than one version of the guideline, the most recent version was used.

Exclusion Criteria

We excluded: guidelines that were regional or hospital-based; guidelines that were prepared by NGOs or national associations not commissioned by the government; High-level strategy documents focusing on National Preparedness and Response Plan; Opinion pieces, commentaries, communique and editorials.

Data extraction (selection and coding)

A data extraction sheet was designed, piloted, and used to extract the following variables: 1) characteristics of each guideline i.e. country, title, date, and version of the guidelines. 2) Verbatim palliative care recommendations and content using related terms such as supportive

care, supportive treatment, supportive therapy, hospice care, and end of life care. OA and MAO reviewed and extracted all guidelines together. Any guideline for which inclusion was unclear was discussed with second reviewers (AO, EC, EN, and KN). AO, EC, EN and KN also conducted independent checking and verification of all extracted data so that data extracted from each guideline was reviewed by a second researcher, and any disagreement was adjudicated by a third reviewer (RH). Guidelines in french language were independently forward translated by official French speakers (HA and SB) and their translations were compared for consistency.

Data Analysis

We conducted a narrative synthesis of the extracted data. We analysed the palliative care-related contents of the guidelines using content analysis. In order to grade adequacy of the palliative care recommendations, we developed a matrix based on Principle 2 of the APCA standards for providing quality palliative care across Africa⁽¹⁹⁾. The APCA standards document was developed through wide consultation with service beneficiaries and providers to establish a framework for the development of evaluation and performance indicators to facilitate palliative care programme improvement and development across Africa. The document contains 37 standard statements grouped under four main principles including organisational management, holistic care provision, children's palliative care, education and training, and Research and Management of Information.⁽¹⁹⁾ As we were reviewing case management guidelines and protocols, we assessed adequacy with respect to Principle 2 (Holistic Care provision) which has 17 standard themes (Table 1). This principle is most relevant to the direct patient and family care and support.

OA and MAO independently graded and checked the adequacy of the COVID-19 case management guidelines assigning fully met, partially met, not met, or not applicable. EN, EC,

AO and KN verified the grading and any disagreement was resolved through discussion. 'Fully met' was assigned when a recommendation in a guideline comprehensively addresses the APCA summary statement for a standard. 'Partially met' was assigned when a guideline's recommendation addressed some or part of the quality standard summary statement. 'Not met' was assigned when a guideline's recommendation was deemed not to have met any aspect of the quality standard. Recommendations were assessed as 'Not applicable' where we could not assess a standard due to the complexity of the criteria and where it is not directly involving patient care.

Role of the funding source

No funding was declared for this study.

Results

Out of the 54 African countries, 31 documents from 14 countries (Nigeria, South Africa, Ghana, Libya, Tunisia, Chad, Cameroun, Djibouti, Equatorial Guinea, Eritrea, Morocco, Cote D'Ivoire, Cape Verde, and Algeria) were retrieved through online searches and 23 documents from responses of 16 Key contact persons (Cote D'Ivoire, Togo, Mozambique, Namibia, The Gambia, Botswana, Tanzania, Uganda, Burundi, Malawi, Kenya, Zimbabwe, Ethiopia, Eswatini, South Sudan, and Sudan). Two responded with no document to provide (Mauritius) or referred us to their website for documents (Rwanda). We had no response from the remaining 21 countries after two reminders were sent and we could not identify a key contact in Niger and Sao tome and Principe where. In total, we retrieved 55 documents from 29 countries. Figure 1 shows the process of retrieval and selection of documents. We included 15 documents (11 in English and four in French) from 15 countries (Algeria, Botswana, Cote D'Ivoire, Eswatini, Ethiopia, Gambia, Morocco, Namibia, Nigeria, South Africa, South Sudan,

Sudan, Tanzania, Togo, and Uganda) in this review. 40 documents were excluded with reasons indicated in Figure 1: PRISMA flow chart

Data extracted from the guidelines are shown in Supplementary File 1. Of the 15 countries' guidelines reviewed, only eight countries (Algeria, Botswana, Namibia, South Africa, Sudan, South Sudan, Togo, and Uganda) had identifiable inclusion of palliative care or supportive care. Other countries (Eswatini, Ethiopia, Cote D'Ivoire, Gambia, Morocco, Nigeria, and Tanzania) have statements of recommendations which are relevant to palliative care within the document.

All 15 guidelines proposed recommendations on the management of physical symptoms, especially managing breathlessness with oxygen and nebulizer or bronchodilators, secondary bacterial infections with antibiotics, and fever with paracetamol. South Sudan and Tanzania's guidelines were the only ones to provide a set of comprehensive recommendations on psychosocial support and ensuring effective communication with patients and families. Tanzania also recommended psychosocial support for healthcare professionals; Cote D'Ivoire, Ethiopia and Eswatini recommended some level of psychosocial support while Namibia and Uganda mentioned psychosocial support only when referring to care of pregnant women with COVID-19. Further details on the palliative care recommendations proposed in the guidelines are in the extraction table (see Supplementary File 1).

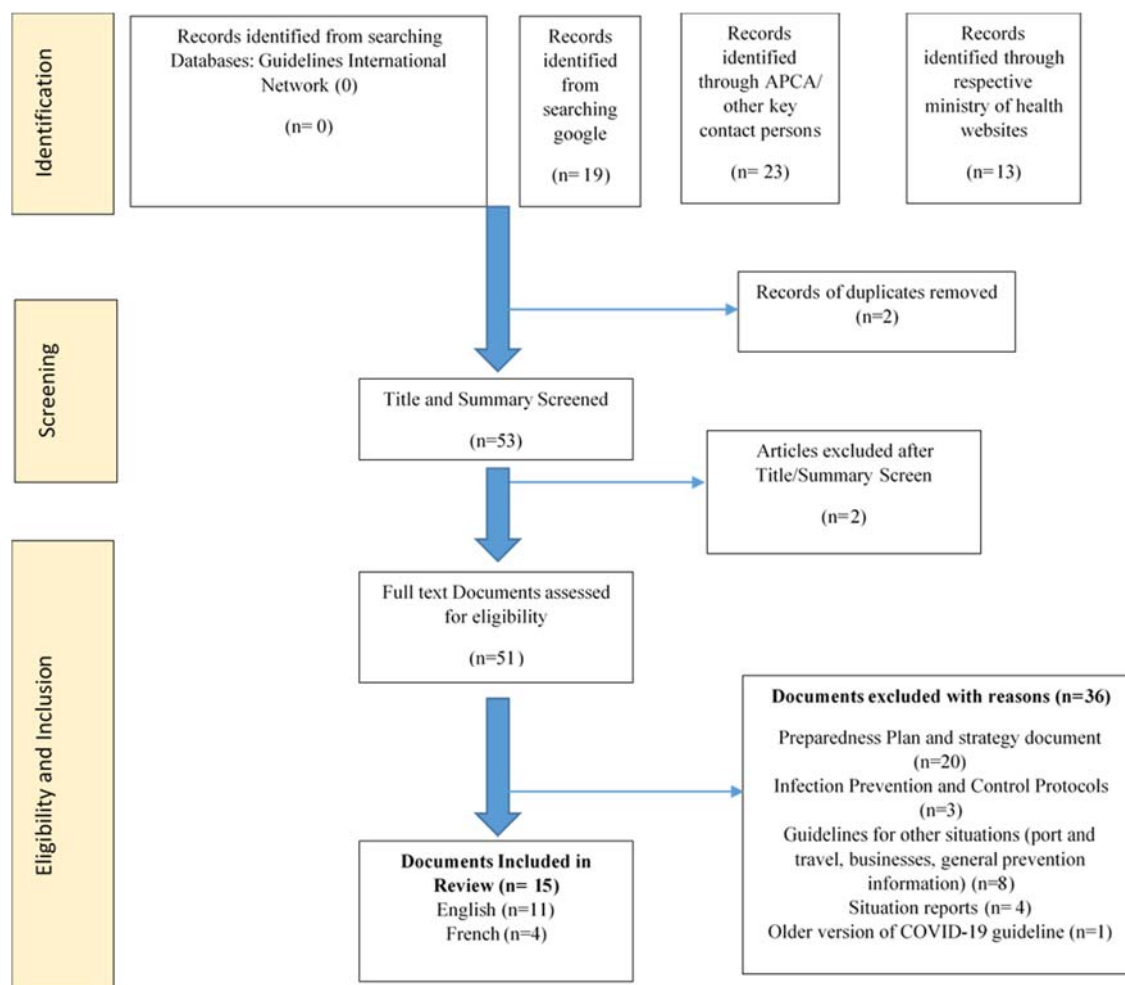


Figure 1: PRISMA flow chart

Reference to information and communication was only present within Cote D’Ivoire, Ethiopia, South Sudan, Sudan, Tanzania, Uganda, and Eswatini guidelines. Recommendations on meeting spiritual needs were only available in Ethiopia and South Sudan guidelines. In addition, only guidelines from South Sudan, Eswatini, Ethiopia, and Uganda have recommendations on decision making and choice in care; while only guidelines from South Sudan, Eswatini, Ethiopia, Tanzania, and Uganda, made recommendations on supporting families whose relations have severe COVID-19 disease.

Table 1 reveals the adequacy of the palliative care recommendations within the guidelines and protocols when evaluated using standard statements listed in principle 2 of the APCA standards for providing quality palliative care. The majority of the standards were not met. Standards 2.1

(Planning and coordination of care), 2.2 (Access to Specialist Palliative care), 2.4 (Pain and symptom Management), 2.6 (Management of Medications), 2.11 (Care for special needs populations), and 2.17 (Providing support to care providers) were partially met by the majority of the guidelines and only standard 2.5 (Management of opportunistic infections) was fully met by 14 out of 15 guidelines. Standard 2.15 (Clinical Supervision) was deemed not applicable and the remaining standards were unmet in the majority of the countries.

Table 1: The adequacy of the guidelines against the APCA standards for quality palliative care in 15 countries

Countries	2.1: Planning and Coordination of Care	2.2: Access to Care	2.3: Communication in palliative care	2.4: Pain and Symptom Management	2.5: Management of Opportunistic Infections (OIs)	2.6: Management of Medications	2.7: Psychosocial Care	2.8: Spiritual Care	2.9: Cultural Care	2.10: Complementary therapies in palliative care	2.11: Care for special needs populations	2.12: End-of-life care	2.13: Grief, loss and bereavement care in adults	2.14: Ethical care, human rights and legal support	2.15: Clinical Supervision	2.16: Inter-disciplinary Team	2.17: Providing support to care providers
Algeria	+	x	x	+	++	+	x	x	x	x	x	x	x	x	N/A	x	+
Botswana	+	+	x	+	++	+	x	x	x	+	+	x	x	x	N/A	x	+
Cote D'Ivoire	+	+	+	+	x	+	+	x	x	x	+	x	x	x	N/A	+	+
Ethiopia	+	+	++	+	++	+	+	+	+	x	+	+	+	+	N/A	x	+
The Gambia	+	+	x	+	++	+	+	x	x	x	+	x	x	x	N/A	x	+
Morocco	+	x	x	+	++	+	x	x	x	x	x	x	x	x	N/A	x	+
Namibia	+	+	x	+	++	+	+	x	x	x	+	x	x	x	N/A	x	+
Nigeria	+	x	x	+	++	+	x	x	x	+	+	x	x	x	N/A	x	+
South Africa	+	+	x	+	++	+	x	x	x	x	+	+	x	x	N/A	x	+
South Sudan	++	++	++	++	++	+	++	+	+	+	++	x	x	+	N/A	++	+
Sudan	+	+	+	+	++	+	x	x	x	+	+	x	x	x	N/A	x	+
Eswatini	+	x	+	+	++	+	+	x	+	x	+	+	x	+	N/A	x	+
Tanzania	+	+	++	+	++	+	++	x	+	x	+	++	++	x	N/A	++	++
Togo	+	+	x	+	++	+	x	x	x	+	x	x	x	x	N/A	x	+
Uganda	+	+	+	+	++	+	+	x	x	x	++	x	x	+	N/A	++	+

Legend

- ++ - Fully met
- + - Partially Met
- x- Not Met
- N/A- Not Applicable

Discussion

Our study set out to critically appraise the case management guidelines for COVID-19 in Africa for their palliative care content and evaluate the adequacy of this against APCA standards for quality palliative care provision across Africa.

The majority of the countries with specific sections on palliative care are in Southern and Eastern Africa. This reflects the development of palliative care in these countries with strong advocacy networks and well-developed services and national policies.⁽²⁰⁾ Also, these countries named their treatment and therapeutic management sections supportive therapy or supportive treatment to recognize the absence of curative treatment for COVID-19 as against other countries.

While some case management documents made recommendations for some symptoms, there were no recommendations on other palliative care problems that may accompany breathlessness in COVID-19 such as delirium, anxiety, and cough.⁽²¹⁾ Also, except for guidelines in South Sudan, Ethiopia, Eswatini, and Uganda, there were no clear recommendations for giving patients and families choices regarding care decisions such as the use of mechanical ventilation. In a continent where healthcare delivery has been known to be paternalistic ⁽²²⁾ and palliative care training and education are limited,⁽²⁰⁾ there is need for explicit recommendations on shared decision making, fostering autonomy of choice, providing psychosocial care, patient-centred referrals to palliative care, and encouraging adequate communication with the patient and families at a time of high anxiety.

The importance of religious and cultural practices around dying in contributing to the spiritual needs of patients and families have been documented.⁽²³⁾ However, most of the guidelines we reviewed did not meet the standards of spiritual and cultural care (2.8 and 2.9 respectively). While there were sections on managing dead bodies in recommendations from some countries,

caring for the dying is omitted in all the case management guidelines. This suggests a lack of priority on supporting the dying phase to reduce distress and suffering.⁽¹²⁾ This might also be indicative of the pervasive reticence and taboos around discussing the death and dying in African cultures.⁽²⁴⁾

There are limitations which may affect the interpretation of our findings. The wording of the APCA standard influenced our analysis. The specific wordings within the APCA standard is arguably HIV/AIDS and cancer-focused. For example, standard 2.5 heading and summary statement read, “Management of Opportunistic Infections (OIs): Appropriate management of opportunistic infections, including tuberculosis (TB), improves the quality of life among people living with HIV and AIDS, and those with other life-threatening illness.” We applied this by looking at treatment recommendations for secondary/ superimposed bacterial pneumonia infections within the context of COVID-19. We acknowledge that the HIV/AIDS pandemic and cancer have largely influenced the development of palliative care in Africa. However, there is a wider debate that people with other progressive serious illnesses aside from HIV/AIDS and cancer have poor access to palliative care in Africa. This highlights the need for APCA to review and expand the standards to make it more inclusive within the context of wider serious health-related suffering.⁽²⁵⁾ Our findings are also based on documents that we were able to retrieve online or from key contact persons. We are aware that there might be other guidelines from government and NGOs which address some of the areas that we identified as weak. In addition, we only did forward translation for guidelines in the French language; therefore some meanings might have been lost in translation.

Furthermore, we applied standard 2.6 (the management of medications) by considering oxygen and other medication recommended in majority of the guidelines as serving palliative care or supportive therapy purposes. In the context of poorly resourced health systems in Africa, even oxygen for the management of breathlessness (which many of the guidelines recommended)

may be unavailable, and as such might require rationing. In addition, the detailed criteria for this standard are related to medications commonly used in palliative care such as opioids which require proper training to prescribe and use. Therefore, clear guidance must also be recommended on the use of opioids as an additional line of management for breathlessness in patients dying of COVID-19⁽²¹⁾ and systems must be put in place to ensure their availability.

Like the HIV/AIDS pandemic before it, the COVID-19 pandemic might catalyse the development of palliative care in Africa to meet the needs of the non-COVID population. The focus of palliative care is on managing serious health-related suffering^(12, 25) and this is the only type of care we can offer patients with severe COVID-19 disease while we conduct further research into developing vaccines and curative treatment. There is extensive palliative care evidence on approaches to managing serious health-related suffering. It is therefore imperative for governments, policymakers, and stakeholders in Africa to prioritise the role of palliative care in the management of patients with COVID-19.

References

1. WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020 [press release]. March 11, 2020.
2. Africa Center for Disease Control. Coronavirus Disease 2019 (COVID-19: Latest updates on the COVID-19 crisis from Africa CDC <https://africacdc.org/covid-19/2020> [Available from: <https://africacdc.org/covid-19/>].
3. Rajgor DD, Lee MH, Archuleta S, Bagdasarian N, Quek SC. The many estimates of the COVID-19 case fatality rate. *The Lancet Infectious Diseases*. 2020.
4. Du R-H, Liang L-R, Yang C-Q, Wang W, Cao T-Z, Li M, et al. Predictors of mortality for patients with COVID-19 pneumonia caused by SARS-CoV-2: a prospective cohort study. *European Respiratory Journal*. 2020.
5. Yancy CW. COVID-19 and African Americans. *Jama*. 2020.
6. Guan W-j, Ni Z-y, Hu Y, Liang W-h, Ou C-q, He J-x, et al. Clinical characteristics of coronavirus disease 2019 in China. *New England Journal of Medicine*. 2020.
7. Mahase E. Coronavirus: covid-19 has killed more people than SARS and MERS combined, despite lower case fatality rate. *British Medical Journal Publishing Group*; 2020.
8. World Health Organisation Regional Office for Africa. Covid 19: Situation Update for the WHO African Region 4 March 2020. 2020 4 March 2020.
9. Lovell N, Maddocks M, Etkind SN, Taylor K, Carey I, Vora V, et al. Characteristics, symptom management and outcomes of 101 patients with COVID-19 referred for hospital palliative care. *Journal of Pain and Symptom Management*. 2020.
10. Wallace CL, Wladkowski SP, Gibson A, White P. Grief during the COVID-19 pandemic: considerations for palliative care providers. *Journal of Pain and Symptom Management*. 2020.

11. World Health Assembly 73. COVID-19 response. Geneva: World Health Organisation; 2020.
12. Knaul FM, Farmer PE, Krakauer EL, De Lima L, Bhadelia A, Kwete XJ, et al. Alleviating the access abyss in palliative care and pain relief—an imperative of universal health coverage: the Lancet Commission report. *The Lancet*. 2018;391(10128):1391-454.
13. Sleeman KE, de Brito M, Etkind S, Nkhoma K, Guo P, Higginson IJ, et al. The escalating global burden of serious health-related suffering: projections to 2060 by world regions, age groups, and health conditions. *The Lancet Global Health*. 2019;7(7):e883-e92.
14. Lancet T. Palliative care and the COVID-19 pandemic. *Lancet (London, England)*. 2020;395(10231):1168.
15. Reid EA, Kovalerchik O, Jubanyik K, Brown S, Hersey D, Grant L. Is palliative care cost-effective in low-income and middle-income countries? A mixed-methods systematic review. *BMJ supportive palliative care*. 2018:bmjspcare-2018-001499.
16. Potts M, Cartmell KB, Nemeth L, Bhattacharjee G, Qanungo S. A Systematic Review of Palliative Care Intervention Outcomes and Outcome Measures in Low-Resource Countries. *Journal of pain symptom management*. 2018;55(5):1382-97. e7.
17. Shamieh O, Richardson K, Abdel-Razeq H, Harding R, Sullivan R, Mansour A. COVID-19 – Impact on DNR Orders in the Largest Cancer Center in Jordan. *Journal of Pain and Symptom Management*. 2020.
18. Etkind SN, Bone AE, Lovell N, Cripps RL, Harding R, Higginson IJ, et al. The Role and Response of Palliative Care and Hospice Services in Epidemics and Pandemics: A Rapid Review to Inform Practice During the COVID-19 Pandemic. *Journal of pain and symptom management*. 2020:S0885-3924(20)30182-2.
19. Association APC. APCA standards for providing quality palliative care across Africa. APCA, Kampala, Uganda. 2010.
20. Rhee JY, Garralda E, Namisango E, Luyirika E, De Lima L, Powell RA, et al. An analysis of palliative care development in Africa: A ranking based on region-specific macroindicators. *Journal of pain and symptom management*. 2018;56(2):230-8.
21. Bajwah S, Wilcock A, Towers R, Costantini M, Bausewein C, Simon ST, et al. Managing the supportive care needs of those affected by COVID-19. *Eur Respiratory Soc*; 2020.
22. Norman I. Blind trust in the care-giver: is paternalism essential to the health-seeking behavior of patients in Sub-Saharan Africa? *Advances in Applied Sociology*. 2015;5(02):94.
23. Selin H, Rakoff RM. *Death Across Cultures: Death and Dying in Non-Western Cultures*: Springer; 2019.
24. Ekore RI, Lanre-Abass B. African Cultural Concept of Death and the Idea of Advance Care Directives. *Indian J Palliat Care*. 2016;22(4):369-72.
25. Radbruch L, De Lima L, Knaul F, Wenk R, Ali Z, Bhatnagar S, et al. Redefining Palliative Care—a New Consensus-based Definition. *Journal of Pain and Symptom Management*. 2020.

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Conflict of interest statement

All authors have declared no conflict of interest.

SUPPLEMENTARY FILE 1: Palliative care recommendations in included Guidelines

Table 1: Palliative Care Recommendations within the included guidelines

Country	Title, date, version and source of the guidelines	Availability of Specific Palliative care recommendations	If YES Verbatim palliative care recommendations	If NO Other recommendations that are palliative in approach	Principle 2: Holistic Care Provision																		
					2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.10	2.11	2.12	2.13	2.14	2.15	2.16	2.17		
Algeria	Preparation and Response Plan to the Threat of Coronavirus Covid-19 No date and no version	Yes	2- Symptomatic treatment (Pg105-107) a) Oxygen therapy: (2.4) Objective: Obtain an oxygen saturation greater than or equal to 92%. (2.1) The modes of administration of O2 vary according to the administered rates: • Oxygen glasses: flow between 0.5 to 5l / min; • Oxygen mask: flow between 5 to 8 l / min; • Oxygen mask with reserve above 8l / min (only in the absence of a respirator) b) Mechanical ventilation: If not improved after 1 to 2 hours 3- Associated treatment: - Adapted vascular filling - Vasopressors: Noradrenaline, Adrenaline, Dobutamine - No broad spectrum antibiotic - Systematic antibiotic therapy in the case of ARDS or if there are foci of alveolar condensation. We will prescribe a 3rd generation cephalosporin associated with a quinolone; (2.1, 2.5) - Prevention and treatment of complications.		Partial ly me t	No t me t	No t me t	Par tial ly me t	Ful ly me t	Par tial ly me t	No t me t	No t me t	No t me t	No t me t	No t me t	No t me t	No t me t	No t me t	No t me t	No t me t	No t me t	Not met	Par tial ly me t

			<p>4- Specific treatment For all patients with a moderate form, a form with pneumonia and / or a severe form suspected of Covid-19 infection: it will be prescribed, In the absence of contraindications and under medical supervision: 1st intention: Chloroquine: 500 mg twice a day for 5 to 7 days Or Hydroxychloroquine: 200 mg, 3 times a day for 10 days 2nd intention: Lopinavir / ritonavir: (tablet 200/50 mg) at a rate of 2 tablets, twice a day respecting the rules of use for 5 to 7 days Or Atazanavir: 300 mg / day for 2 weeks.</p>																		
Botswana	<p>Interim Clinical Guidance for the management of patients with Coronavirus disease 2019 (COVID-19) in Botswana</p> <p>Version: 1.0 2nd April 2020</p>	Yes	<p>Early supportive therapy in hospitalised COVID-19 patients (page 20)</p> <p>Oxygen</p> <ul style="list-style-type: none"> • Oxygen therapy is likely to be the single most effective supportive measure in COVID-19 patients overall. (2.4) • Give supplemental oxygen therapy immediately to patients with low oxygen saturation. (2.4) • Start oxygen therapy if the SpO2 falls below 90% in adults and children or if below 92% in pregnant women(15). (2.1, 2.4) • Once commenced, aim for an SpO2 of 92-96%. • Do not over oxygenate as this is associated with harm. • Titrate oxygen therapy up and down to reach targets by means of nasal cannula, a simple face mask or a face 		Partially met	Partially met	Not met	Partially met	Fully met	Partially met	Not met	Not met	Not met	Partially met	Partially met	Not met	Not met	Not met	Not applicable	Not met	Partially met

			<p>o Co-amoxiclav 625mg PO TDS or 1.2gram IV TDS for seven days AND o Azithromycin 500mg OD/IV for seven days</p> <p>Specific therapies (page 21)</p> <ul style="list-style-type: none"> • Ensure patients have thromboprophylaxis prescribed if not contraindicated. (2.1, 2.6) • Do not routinely give systemic corticosteroids for treatment of COVID- 19 unless they are indicated for another reason(17, 18). • There is no current evidence from RCTs to recommend any specific anti-nCoV treatment for patients with suspected or confirmed COVID-19 infection. • Do not therefore give hydroxychloroquine or chloroquine to patients. • If pneumocystis pneumonia is strongly suspected start high dose CTX and steroids, if necessary. • Consider a blood transfusion if the Hb < 70 g/L (7.0g/dL) in the absence of extenuating circumstances such as myocardial infarction, severe hypoxaemia or acute haemorrhage. Targeting higher Hb thresholds (>90-100 g/L) does not lead to better outcomes in patients with sepsis. Give early enteral nutrition (within 48 hours of admission). 2.10 																		
Cote D'Ivoire	Guide de la Société Ivoirienne de Pneumo-Phtisiologie (SIPP) pour la	No		Care and management pg 17-19 Whatever the clinical form, the care must necessarily include personnel protection measures, an appropriate assessment and a consistent therapeutic attitude	Partially	Partially	Partially	Partially	Not	Partially	Partially	Not	Not	Not	Partially	Not	Not	Not	Not	Partially	Partially

	prise en charge de la COVID-19 Version du 16 avril 2020			<ul style="list-style-type: none"> - Staff protection measure (2.17) - Therapeutic attitude (2.7, 2.3) - psychological support (2.7) - oxygen therapy if SaO2 ≤ 95% (2.1, 2.4) - treatment of symptoms (fever, runny nose, abundant drink) (2.4) - patient and family education (2.3, 2.1, 2.17): barrier measures, establish telephone connection daily (2.7), daily temperature monitoring, ban visits - Transfer of the patient to the intensive care unit (2.2) - Assessment to be made in the care unit (2.1) Treatment of special cases (2.11) Management must be multidisciplinary, (2.16) particularly for: <ul style="list-style-type: none"> o children o elderly subjects o pregnant women o subjects with disabilities All basic asthma and COPD treatments should be continued (corticosteroids inhaled, possibly associated with other molecules (LABA, LAMA, montelukast, oral corticosteroid therapy at minimum effective dose ...) (2.6) 																	
Ethiopia	NATIONAL COMPREHENSIVE COVID19 MANAGEMENT HANDBOOK	No		<p>General principle of clinical management for COVID-19 (page 40 to 41)</p> <ul style="list-style-type: none"> ▪ Underlying /chronic diseases should be identified as early as possible with detailed history from patient, close family members or friends. (2.1.) ▪ Drug interactions, adverse effects of drugs and drug allergies must be 	Partially met	Partially met	Fully met	Partially met	Fully met	Partially met	Partially met	Partially met	Partially met	Not met	Partially met	Partially met	Partially met	Partially met	Not Applicable	Not met	Partially met

	<p>First edition APRIL 2020</p>		<p>considered during managing the patient with COVID-19. (2.6)</p> <ul style="list-style-type: none"> ▪Patient care should be with respect and dignity which include: respect/dignity, medical support, food/water, and information. (2.14, 2.3) ▪ Give supplemental oxygen therapy to patients with low oxygen saturation: (2.4) ▪No proven anti-viral therapy or vaccine against COVID-19 so far necessitating supportive care for specific symptoms. (2.4) ▪Provide symptomatic therapies with antipyretic /analgesic (2.4) ▪In COVID 19 superimposed bacterial infection is common and to treat all likely pathogens antibiotics administration (2.5) ▪Notify the family and provide grief counseling according to the ethical standards (2.3, 2.13, 2.14, 2.17) ▪Close families should be allowed to see the body after tubes removed and wound sites dressed under strict IP precautions (2.13) ▪Religious rituals are to be conducted at the mortuary but coffin should not be opened (2.8, 2.13) ▪Individuals are treated with respect and dignity. (2.14, 2.3) ▪The final decision about which medical interventions to accept, if any, belongs to the patient. (2.3, 2.14, 2.1) ▪Patients should also be allowed to access family members and significant others through phone. (2.3, 2.17, 2.7) 																	
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				<ul style="list-style-type: none"> ▪Information on patient’s condition should be communicated to their family regularly and upon request by the treating physician. (2.3) ▪Determine methods for patient/family information provision including alternate languages/interpretive services. (2.3, 2.14) ▪Ensure regular and timely communication with and feedback to family, friends or other relations of patients who are admitted regarding their health status (2.3) ▪Make sure to speak to patients in a tone that is customary for providing comfort and building trust when speaking to family or community members. (2.3) ▪Do not make promises regarding if a family member will recover – this may lead to mistrust if the patient does not recover. (2.3, 2.12, 2.13, 2.14) ▪Allow family members to view patients or provide for basic needs of their family members (e.g. clean clothes, food, etc.) as per appropriate IPC protocols. (2.7,) ▪If a patient dies, be sure to inform the family as soon as possible and calmly explain the process of body treatment (burial ground or cremation options as culturally appropriate). (2.9, 2.3, 2.13) 																		
Gambia, The	COVID-19 National case management guidelines April 2020, version 1	No		<p>*Paracetamol 1 g tds PO for 48 hrs, then review (2.4). *Rehydrate with IV Fluids N/saline with 5% Dextrose IL over 8 hrs in adults for 24 hrs then review (2.4). *Oral Antibiotics if suspected secondary bacterial infection</p>	Partial ly me t	Partial ly me t	No t me t	Partial ly me t	Fully me t	Partial ly me t	Partial ly me t	No t me t	No t me t	No t me t	Partial ly me t	No t me t	No t me t	No t me t	No t me t	No t Ap pli ca ble	No t me t	Partial ly me t

				given via a spacer rather than nebulized to reduce the risk of aerosolization of COVID-19. Oral steroids should be used as normal for children with asthma (2.1, 2.4, 2.11).																	
Morocco	Protocole de prise en charge des patients atteints de COVID-19 et leurs contacts. (Management protocol for patients with COVID-19 and their contacts.) Circulaire No.029/DELM/2020 du15 Avril 2020	No		6. Therapeutic protocol (pg3) Antibiotic therapy: Not systematic, indicated if secondary bacterial infection. (2.1, 2.5) Amoxicillin + clavulanic acid, 3g per day Or Moxifloxacin 400mg / d in one Or Levofloxacione 500 mg / day in a single dose Nebulization: use if necessary, with the necessary precautions to prevent healthcare-associated infections. (2.1, 2.4)	Partially met	Not met	Not met	Partially met	Fully met	Partially met	Not met	Not met	Not met	Not met	Not met	Not met	Not met	Not met	Not applicable	Not met	Partially met
Namibia	Coronavirus Disease (COVID-19) Standard Operating Procedures (SOP) Apr-20	Yes	Patients with severe COVID-19 (page 47) Oxygen therapy and monitoring *Give supplemental oxygen therapy immediately to patients with SARI and respiratory distress, hypoxaemia or shock and target > 94% and ≥ 92–95% in pregnant patients (2.4). *Closely monitor patients with COVID-19 for signs of clinical deterioration, such as rapidly progressive respiratory failure and sepsis and respond immediately with supportive care interventions (2.1, 2.4). *Application of timely, effective and safe supportive therapies is the		Partially met	Partially met	Not met	Partially met	Fully met	Partially met	Partially met	Not met	Not met	Not met	Partially met	Not met	Not met	Not met	Not applicable	Not met	Partially met

		<p>predicted body weight is allowed if undesirable side effects occur (e.g. dyssynchrony, pH <7.15) (2.1, 2.4). *Use lower inspiratory pressures (plateau pressure <30 cmH2O). (2.1, 2.4). *Hypercapnia is permitted if meeting the pH goal of 7.30-7.45 (2.1, 2.4). *Application of prone ventilation >12 hours a day is strongly recommended for patients with pressures (2.1, 2.4) *In patients with moderate or severe ARDS, moderately higher PEEP instead of lower PEEP is 16 targets (2.1, 2.4). *In patients with moderate-severe ARDS (PaO2/FiO2 <150), neuromuscular blockade by continuous infusion should not be routinely used (2.1, 2.4).</p> <p>Septic Shock (page 48) *Recognize septic shock in adults when infection is suspected or confirmed AND vasopressors are needed to maintain mean arterial pressure (MAP) ≥ 65 mmHg AND lactate is ≥ 2 mmol/L, in absence of hypovolemia (2.1, 2.4). *Recognize septic shock in children with any hypotension (systolic blood pressure [SBP] < 5th centile or > 2 SD below normal for age) or two or more of the following: o Altered mental state o Tachycardia or bradycardia (HR < 90 bpm or > 160 bpm in infants and HR < 70 bpm or > 150 bpm in children)</p>																		
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			<p>*Infants born to mothers with suspected, probable or confirmed COVID-19 infection, should be fed according to standard infant feeding guidelines, while applying necessary precautions for IPC (2.1, 2.1, 2.11).</p> <p>*As with all confirmed or suspected COVID-19 cases, symptomatic mothers who are breastfeeding or practicing skin-to-skin contact or kangaroo mother care should practise respiratory hygiene, including during feeding (for example, use of a medical mask when near a child if with respiratory symptoms), perform hand hygiene before and after contact with the child, and routinely clean and disinfect surfaces which the symptomatic mother has been in contact with (2.1, 2.4, 2.11).</p> <p>*Breastfeeding counselling, basic psychosocial support and practical feeding support should be provided to all pregnant women and mothers with infants and young children, whether they or their infants and young children have suspected or confirmed COVID- 19 (2.1, 2.4, 2.7, 2.11).</p> <p>*In situations when severe illness in a mother due to COVID-19 or other complications prevent her from caring for her infant or prevent her from continuing direct breastfeeding, mothers should be encouraged and supported to express milk, and safely provide breastmilk to the infant, while applying appropriate IPC measures (2.1, 2.4, 2.11)</p>																		
Nigeria	NATIONAL INTERIM	No		Clinical management of COVID-19 (page 21 to 25) ▪Commence oxygen if	Partial	No	No	Partial	Fully	Partial	No	No	No	Partial	Partial	No	No	No	No	No	Partial

	<p>GUIDELINES FOR CLINICAL MANAGEMENT OF COVID-19</p> <p>Version 1.14 March 2020</p>			<p>RR >30/min, or SpO2 < 90% (<92% in children). (2.4, 2.11)</p> <ul style="list-style-type: none"> ▪Provide further supportive care as appropriate (2.4) ▪Continue supportive care as appropriate (2.4) ▪Ensure optimal oxygenation (2.4) ▪Use broad spectrum antibiotics based on local epidemiology (2.5) ▪Early supportive therapy and monitoring is recommended for a favourable outcome (2.1, 2.4) ▪Manage symptoms fever, cough, sore throat, nasal congestion, malaise, headache and muscle pain – with antipyretics, cough medicine, rest, (2.4) ▪Provision of supplemental oxygen therapy is a hallmark of treatment for severe cases (2.4) ▪Supplemental oxygen therapy (2.4) ▪Commence High-Flow Nasal Oxygen (HFNO) or Non-Invasive Ventilation (NIV) at 10-15L/ minutes (2.4) ▪Give supportive therapy as the need arises. (2.4) ▪Maintain nutrition support (enteral or parental as indicated) (2.4) ▪Give oxygen therapy (2.4) ▪Give supportive therapy as need arises to ensure sufficient fluid and electrolyte balance (2.4) ▪Maintain nutrition support (enteral or parental as indicated) (2.4) ▪Supportive therapies as generically described, taking into consideration, physiologic adaptations of pregnancy. (2.11) 	ly me t	me t	me t	ly me t	me t	ly me t	me t	me t	me t	ly me t	ly me t	me t	me t	me t	Ap pli ca ble	me t	ly me t
South Africa	Clinical management of	Yes	4.2 Early supportive therapy in hospitalised COVID-19 patients (page		Par tial	Par tial	No t	Par tial	Ful ly	Par tial	No t	No t	No t	No t	Par tial	Par tial	No t	No t	No t	No t	Par tial

<p>suspected or confirmed COVID-19 disease</p> <p>Version 3 (27th March 2020)</p>		<p>11)</p> <ul style="list-style-type: none"> ▪Give supplemental oxygen therapy immediately to patients with low oxygen saturation. (2.4) • Oxygen therapy is likely to be the single most effective supportive measure in COVID-19 patients overall. Target SpO₂ ≥90% in non-pregnant adults and SpO₂ ≥92% in pregnant patients.⁷ Children with emergency signs (obstructed or absent breathing, severe respiratory distress, central cyanosis, shock, coma or convulsions) should receive oxygen therapy during resuscitation to target SpO₂ ≥94%; otherwise, the target SpO₂ is ≥92%. (2.1, 2.5) • Titrate oxygen therapy up and down to reach targets by means of nasal cannula, a simple face mask or a face mask with reservoir bag, as appropriate: (2.1, 2.5) ▪Use conservative fluid management in patients with COVID-19 when there is no evidence of shock. (2.4) ▪Aggressive fluid resuscitation may worsen oxygenation, especially in settings where there is limited availability of mechanical ventilation. ▪If a clinical suspicion for co-infection exists, consider empiric antimicrobials to treat copathogens causing the syndrome, particularly in severe cases. This may include conventional and atypical bacterial pathogens, influenza and PJP (see section 3.3 above). (2.1, 2.5) ▪Closely monitor patients with SARI for signs of clinical deterioration, such as rapidly 		ly me t	ly me t	me t	ly me t	me t	ly me t	me t	me t	me t	me t	ly me t	ly me t	me t	me t	Ap pli ca ble	me t	ly me t
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			progressive respiratory failure and sepsis, and apply supportive care interventions immediately. (2.1, 2.2, 2.4)																			
South Sudan	Covid-19 Clinical Care Management Guideline for South Sudan Version 1, 2020	Yes	<p>Management for Severe Illnesses (pages 10-13) The aim is to provide early optimized supportive care and monitoring (2.2).</p> <p>Oxygen therapy and monitoring 2.4, 2.6 *For clients presenting with respiratory distress, hypoxaemia or shock, providing supplemental oxygen therapy immediately is the hallmark of care for severe illnesses. *For Adults/Adolescents presenting with emergency signs such as obstructed or absent breathing, severe respiratory distress, central cyanosis, shock, coma or convulsions should receive airway management and oxygen therapy during resuscitation to reach a target of > 90% SpO2 in non-pregnant adults and ≥ 92–95% in pregnant patients. *Initiate oxygen therapy at 5 L/min and titrate flow rates to reach target SpO2 ≥ 93% during resuscitation; *For patients in critical condition and face mask with reservoir bag is available, provide oxygen therapy at 10–15 L/min (2.1, 2.4) *For children presenting with emergency signs (obstructed or absent breathing, severe respiratory distress, central cyanosis, shock, coma or convulsions) should receive airway management and oxygen therapy during resuscitation to reach a target</p>		Fully met	Fully met	Fully met	Fully met	Fully met	Partially met	Fully met	Partially met	Partially met	Partially met	Fully met	Not met	Not met	Partially met	Not applicable	Fully met	Partially met	

		<p>*For intravenous lipids the upper recommendation is 1 g/kg body weight/day with a tolerance up to 1.5 g/kg/day (2.1, 2.4). Protein *For the unstressed adult patient with adequate organ function requiring nutrition support, 1.3 g/kg/day to 1.5g/kg/day may be adequate. *Requirements may rise with metabolic demands to levels of about 2 g/kg/day (2.1, 2.4)..</p> <p>Providing Psychological support: Staff should introduce self and the facility. Be sensitive to culture, ethnicity, gender, sexuality, and maintain a safe distance (2 metres). Be empathetic. Build a therapeutic relationship. Briefly highlight the services provided by the treatment centre (isolation of suspected cases and contacts, treatment of confirmed cases). Explain in clear terms the need for isolation and the use of PPE. Assess and respond to emotional reactions. Recognize cognitive coping strategies e.g. denial, blame, intellectualization. Explore what the news means to the patient. Offer realistic hope/optimism. Establish measures to reduce the negative impact of social isolation in quarantine e.g. communication with family and friends to reduce loneliness and psychological Isolation. Institute measures that promote autonomy (e.g. choice in daily activities). Offer complete assessment at admission. If there are mental health needs, request</p>																		
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		<p>contact. The Oslo Social Support Scale should be administered to assess for social support at home. (See reference). Explore for symptoms of post-trauma and treat if present (2.1, 2.4, 2.16).</p> <p>Support to survivors: A survivor network (where possible) should be established in conjunction with the treatment centres. Engage peer educators (if available) to facilitate group counselling. Provide testimony with the aim of inspiring others. Share coping skills (2.1, 2.4).</p> <p>Management of COVID-19 in Special Populations (pages 18-19)</p> <p>a) Pregnant and breastfeeding women with COVID-19 *Presently, there is paucity of data on clinical presentation and perinatal outcomes after COVID-19 infection during pregnancy. *There is no evidence that pregnancy increases the risk of severe illness or that pregnant women present with different sign and symptoms. *There is no evidence yet of mother-to-child transmission reported. *Just like the general population, pregnant women with history of contact should be monitored closely. *Suspected, probable or confirmed case should be provided with appropriate services: Isolation, obstetric, maternal, foetal and neonatal care</p>																		
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			<p>*Encourage mother-baby-pair to remain together regardless of if mother or child is a suspect, probable or confirmed COVID-19 infection (2.11).</p> <p>c) Elderly patients with COVID-19 *Comorbidities and old age have been reported as risk factors for mortality with people with COVID-19. *Elder people are at higher risk of severe illness and death if infected. *Manage such patients with a multidisciplinary approach especially in the decision-making process to address multiorgan involvement and clinical deterioration. *Also involve caregivers and family members in the decision-making throughout the management of the patient (2.1, 2.3, 211).</p> <p>d) People Living with HIV (PLHIV) *There are no data or specific information on the risk of COVID-19 in PLHIV. *There is a suggested risk amongst PLHIV who are not on ART (yet to start) and those not adhering to ART (started but non-adherent to ART) (2.11).</p>																		
Sudan	COVID-19 Case Management protocol Version 1 (April 2020)	Yes	<p>Early supportive therapy and monitoring (page 5) *Give supplementary oxygen therapy immediately to patient with SARI and respiratory distress, hypoxia, or shock (2.4) *Use conservative fluid management in patients with SARI when there is no evidence of shock (2.4)</p>		Partially met	Partially met	Partially met	Partially met	Fully met	Partially met	Not met	Not met	Not met	Partially met	Partially met	Not met	Not met	Not met	Not applicable	Not met	Partially met

			*VTE risk assessment and appropriate prophylaxis of admitted patients (2.4, 2.6)																			
Eswatini	COVID-19 CASE MANAGEMENT GUIDELINES in the Kingdom of Eswatini 8th APRIL 2020 V1.0	No		<p>COVID-19 management approach (page 14 to 19)</p> <ul style="list-style-type: none"> ▪Prioritised care including oxygen therapy should be offered to patients with severe acute respiratory infections. (2.1, 2.4) ▪Case management focal point to call the patient and explain the procedures to be taken and allay anxiety among close relatives living with the patient (2.1, 2.3, 2.7) ▪Patient should be provided with symptomatic treatment (e.g. Paracetamol for fever) (2.4) ▪Consider hospitalization if the client is at high risk for severe disease (e.g. >60 years or pre-existing comorbidities including diabetes mellitus, hypertension, heart or lung disease) (2.1) ▪Give empiric antimicrobials to cover both typical and atypical causes of Pneumonia within 1 hour of initial patient assessment as per standard protocol (2.5) ▪Consider the patient’s comorbidities and manage them concurrently. (2.6) ▪ Physiological changes with age lead to declines in intrinsic capacity such as malnutrition, cognitive decline, depressive symptoms, and those conditions should be managed comprehensively. (2.11, 2.7) ▪ Early detection of inappropriate medication prescriptions is recommended to prevent adverse drug events and drug interactions (2.6) 	Partially met	Not met	Partially met	Partially met	Fully met	Partially met	Partially met	Not met	Partially met	Not met	Partially met	Partially met	Not met	Partially met	Not applicable	Not met	Partially met	

				<ul style="list-style-type: none"> ▪ Involve caregivers and family members in decision-making and goal-setting throughout the management of COVID-19. (2.3, 2.14, 2.17) ▪ Provide patient-centred support for patients currently not taking treatment or if struggling with adherence. (HIV) (2.1) <p>Handling Dead Bodies (page. 26)</p> <ul style="list-style-type: none"> ▪ The dignity of the dead, their cultural and religious traditions, and their families should be respected and protected throughout. (2.16, 2.9) 																	
Tanzania	<p>Standard Operating Procedures (SOPs) for Case Management and Infection, Prevention and Control (STANDARD OPERATING PROCEDURE FOR CLINICAL MANAGEMENT OF COVID 19 CASES)</p> <p>March 2020</p>	No		<p>Management of severe cases (page 12 to 13)</p> <p>*Provide supplemental O2 to achieve O2 sats >93% (2.1, 2.4).</p> <p>*May deteriorate rapidly:</p> <p>continuously monitor O2 sat and vital signs; escalate oxygen dose and delivery devise if hypoxia remains with maximal oxygen doses (2.1)</p> <p>*Provide basic care of severe/critical illness:</p> <ul style="list-style-type: none"> o A: maintain an open airway. If low conscious level – nurse patient in recovery position not lying flat-on-back. Insert oro-pharyngeal airway if needed. Suction if airway secretions. o B: nurse in sitting up position. Provide simple chest physio. o C: give IV or NG fluids for shock o Supportive care – turn unconscious patients regularly. Provide adequate nutrition and pain relief <p>* Non-invasive positive pressure ventilation is NOT recommended as it can aerosolize the virus and increase</p>	Partially met	Partially met	Fully met	Partially met	Fully met	Partially met	Fully met	Not met	Partially met	Not met	Partially met	Fully met	Fully met	Not met	Not Applicable	Fully met	Fully met

Togo	<p>Protocole de prise en charge thérapeutique des cas de Covid -19 confirmés au Togo (Protocol for therapeutic management of confirmed covid -19 cases in Togo)</p> <p>Version 001 from 16 april 2020</p>	Yes	<p>5.4 Treatment for symptoms and complications</p> <ul style="list-style-type: none"> - Paracetamol 1000 mg every 8 hours in case of fever (2.4) Reduce throat pain with lemon and honey (2.10) - Oral rehydration / 3 liters per day - Vitamin C 1 tablet per day - Amoxicillin and clavulanic acid or ceftriaxone if lung infection (2.5) - Anti histamine like (desloratadine, loratadine, mequitazine) if cold -Oxygen therapy in case of dyspnea with respiratory rate greater than 30 cycles per minute and or a pulse oxygen saturation lower at 92% (the flow must be set to have a saturation \geq 92%). (2.1, 2.4) <p>For oxygen therapy, use:</p> <p>Glasses for flow rates between 1 and 5 liters/min</p> <p>Masks for flow rates from 6 to 10 liters per minute</p> <ul style="list-style-type: none"> o Mask at high concentration for flow rates greater than 10 liters per minute <p>-Ventilation assistance to be considered if persistence of respiratory distress with lower saturation 90% despite oxygen therapy (2.1, 2.2, 2.4)</p>		Partially met	Partially met	Not met	Partially met	Fully met	Partially met	Not met	Not met	Not met	Partially met	Not met	Not met	Not met	Not met	Not applicable	Not met	Partially met
Uganda	<p>Guidelines on Clinical care COVID-19</p> <p>No date and no version</p>	Yes	<p>Management of severe COVID-19 (Page 22)</p> <ul style="list-style-type: none"> •Give supplemental oxygen therapy immediately to patients with SARI and respiratory distress, hypoxaemia or shock and target $> 94\%$ and $\geq 92-95\%$ in pregnant patients . • Closely monitor patients with COVID-19 for signs of clinical deterioration, such as rapidly 		Partially met	Partially met	Partially met	Partially met	Fully met	Partially met	Partially met	Not met	Not met	Not met	Fully met	Not met	Not met	Partially met	Not applicable	Fully met	Partially met

		<p>progressive respiratory failure and sepsis and respond immediately with supportive care interventions. (2.1, 2.2)</p> <ul style="list-style-type: none"> • Application of timely, effective and safe supportive therapies is the cornerstone of therapy for patients that develop severe manifestations of COVID-19. (2.1) • Understand the patient’s co-morbid condition(s) to tailor the management of critical illness. (2.1) • Monitor for drug-drug interactions. (2.6) • Use conservative fluid management in Septic shock (page 26 to 27) • Recognize septic shock in adults when infection is suspected or confirmed AND vasopressors are needed to maintain mean arterial pressure (MAP) \geq 65 mmHg AND lactate is \geq 2 mmol/L, in absence of hypovolemia. • Recognize septic shock in children with any hypotension (systolic blood pressure [SBP] $<$ 5th centile or $>$ 2 SD below normal for age) or two or more of the following: altered mental state; tachycardia or bradycardia (HR $<$ 90 bpm or $>$ 160 bpm in infants and HR $<$ 70 bpm or $>$ 150 bpm in children); prolonged capillary refill ($>$ 2 sec) or feeble pulses; tachypnea; mottled or cold skin or petechial or purpuric rash; increased lactate; oliguria; hyperthermia or hypothermia • In resuscitation for septic shock in adults, give at 250–500 mL crystalloid fluid as rapid bolus in first 15–30 																	
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Legend

Standard 2.1: Planning and Coordination of Care

Standard 2.2: Access to Care

Standard 2.3: Communication in palliative care

Standard 2.4: Pain and Symptom Management

Standard 2.5: Management of Opportunistic Infections (OIs)

Standard 2.6: Management of Medications

Standard 2.7: Psychosocial Care

Standard 2.8: Spiritual Care

Standard 2.9: Cultural Care

Standard 2.10: Complementary therapies in palliative care

Standard 2.11: Care for special needs populations

Standard 2.12: End-of-life care

Standard 2.13: Grief, loss and bereavement care in adults

Standard 2.14: Ethical care, human rights and legal support

Standard 2.15: Clinical Supervision

Standard 2.16: Inter-disciplinary Team

Standard 2.17: Providing support to care providers