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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**

This paper was submitted to the Bulletin of the World Health Organization and was posted to the COVID-19 open site, according to the protocol for public health emergencies for international concern as described in Vasee Moorthy et al. (http://dx.doi.org/10.2471/BLT.20.251561).

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# **RECOMMENDED CITATION**

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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.<sup>(1)</sup> 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.<sup>(2)</sup>

COVID-19 case fatality rates range from 0.35 to 11%.<sup>(3)</sup> Risk factors for severe illness and mortality in COVID-19 include being elderly, the presence of pre-existing health problems, multi-morbidities,<sup>(4)</sup> and being of black and ethnic minority heritage.<sup>(5)</sup> 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.<sup>(6, 7)</sup> Inadequately resourced health systems in Africa face challenges of providing needed critical care medications and mechanical ventilators for intensive care.<sup>(8)</sup>

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

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<sup>(11)</sup>. However, the neglect of palliative care among the dying and the resulting unnecessary serious health-related suffering is well established.<sup>(12, 13)</sup> WHO's omission of palliative care from COVID-19 response plans has been highlighted.<sup>(14)</sup> 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.<sup>(15, 16)</sup> Within limited resources, palliative care teams are supporting complex decision making for patients with severe COVID-19 illness.<sup>(17)</sup> 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.<sup>(18)</sup>

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 carerelated 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 <sup>(19)</sup>. 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.<sup>(19)</sup> 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	+	х	х	+	++	+	Х	х	х	х	х	х	х	х	N/A	х	+
Botswana	+	+	х	+	++	+	х	х	х	+	+	х	х	х	N/A	х	+
Cote D'Ivoire	+	+	+	+	х	+	+	х	х	х	+	х	х	х	N/A	+	+
Ethiopia	+	+	++	+	++	+	+	+	+	х	+	+	+	+	N/A	х	+
The Gambia	+	+	х	+	++	+	+	х	х	х	+	х	х	х	N/A	х	+
Morocco	+	х	х	+	++	+	х	х	х	х	х	х	х	х	N/A	х	+
Namibia	+	+	х	+	++	+	+	х	х	х	+	х	х	х	N/A	х	+
Nigeria	+	х	х	+	++	+	Х	х	х	+	+	х	х	х	N/A	х	+
South Africa	+	+	х	+	++	+	х	х	х	х	+	+	х	х	N/A	х	+
South Sudan	++	++	++	++	++	+	++	+	+	+	++	х	х	+	N/A	++	+
Sudan	+	+	+	+	++	+	х	х	х	+	+	х	х	х	N/A	х	+
Eswatini	+	х	+	+	++	+	+	х	+	х	+	+	х	+	N/A	х	+
Tanzania	+	+	++	+	++	+	++	х	+	х	+	++	++	х	N/A	++	++
Togo	+	+	х	+	++	+	х	х	х	+	х	х	х	х	N/A	х	+
Uganda	+	+	+	+	++	+	+	х	х	х	++	х	х	+	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.<sup>(20)</sup> 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.<sup>(21)</sup> 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 <sup>(22)</sup> and palliative care training and education are limited,<sup>(20)</sup> 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.<sup>(23)</sup> 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.<sup>(12)</sup> This might also be indicative of the pervasive reticence and taboos around discussing the death and dying in African cultures.<sup>(24)</sup>

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.<sup>(25)</sup> 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<sup>(21)</sup> 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 <sup>(12, 25)</sup> 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.

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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,	Availability of	If YES	If NO						Pri	nciple	e 2: Ho	olistic	Care	Prov	ision					
·	version and source of the guidelines	Specific Palliative care recommendations	Verbatim palliative care recommendations	Other recommendations that are palliative in approach	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	5 2.17
Algeria	Preparation and	Yes	2- Symptomatic treatment (Pg105-		Par	No	No	Par	Ful	Par	No	No	No	No	No	No	No	No	No	Not	Par
8	Response Plan		107)		tial	t	t	tial	ly		t	t	t	t	t	t	t	t		met	tial
	to the Threat of		a) Oxygen therapy: (2.4)		ly	me	me	ly	me	ly	me	me	me	me	me	me	me	me	Ap		ly
	Coronavirus		Objective: Obtain an oxygen		me	t	t	me	t	me	t	t	t	t	t	t	t	t	pli		me
	Covid-19		saturation greater than or equal to		t			t		t									ca		t
	-		92%. (2.1)																ble		
	No date and no		The modes of administration of O2																		
	version		vary according to the administered																		
			rates:																		
			• Oxygen glasses: flow between $0.5$ to																		
			51 / min;																		
			• Oxygen mask: flow between 5 to 8 l																		
			/ min;																		
			• Oxygen mask with reserve above 81/																		
			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)					1							1					1	
			- Prevention and treatment of					1							1					1	
1			complications.																		

			<ul> <li>4- Specific treatment</li> <li>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,</li> <li>In the absence of contraindications and under medical supervision:</li> <li>1st intention: Chloroquine: 500 mg twice a day for 5 to 7 days Or</li> <li>Hydroxychloroquine: 200 mg, 3 times a day for 10 days</li> <li>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</li> <li>Atazanavir: 300 mg / day for 2 weeks.</li> </ul>																	
Botswana	Interim Clinical Guidance for the management of patients with Coronavirus disease 2019 (COVID-19) in Botswana Version: 1.0 2nd April 2020	Yes	<ul> <li>Early supportive therapy in hospitalised COVID-19 patients (page 20)</li> <li>Oxygen <ul> <li>Oxygen therapy is likely to be the single most effective supportive measure in COVID-19 patients overall. (2.4)</li> <li>Give supplemental oxygen therapy immediately to patients with low oxygen saturation. (2.4)</li> <li>Start oxygen therapy if the Sp02 falls below 90% in adults and children or if below 92% in pregnant women(15). (2.1, 2.4)</li> <li>Once commenced, aim for an Sp02 of 92-96%.</li> <li>Do not over oxygenate as this is associated with harm.</li> <li>Titrate oxygen therapy up and down to reach targets by means of nasal cannula, a simple face mask or a face</li> </ul> </li> </ul>	Par tial ly me t	Par tial ly me t	No t me t	Par tial ly me t	ly me	tial t	ne	No N t t me m t t	ti e ly	ar Pa al tia / ly ne mo t	l t m	t	t	t me t	t t	ne	Par tial ly me t

mask with reservoir bag, as
appropriate.
Fluids (page 20)
Use conservative fluid management
in patients with SARI when there is no
evidence of shock. (2.4)
Aggressive fluid resuscitation may
lead to pulmonary oedema and worsen
oxygenation.
• In resuscitation for septic shock in
adults, give 250–500 mL crystalloid
fluid (normal saline or Ringer's
Lactate) as rapid bolus in first 15–30
minutes and reassess for signs of fluid
overload after each bolus.
Vasoactive Agents (page 21)
• Aim for a mean arterial pressure of
60-65 mmHg.
• Only start vasopressors once
confirming that patients are fluid
replete.(2.1, 2.4)
• We suggest using norepinephrine as
• We suggest using norepinepinene as
first line vasoactive agent. If
unavailable we suggest using
vasopressin or epinephrine.
• If signs of poor perfusion and
cardiac dysfunction persist despite
achieving MAP target with fluids and
vasopressors, consider an inotrope
such as dobutamine.
Antibiotics (page 21)
If clinical suspicion for co-infection
exists, consider empirical
antimicrobials to treat copathogens
causing the syndrome. (2.5)
Treat suspected or confirmed
pneumonia with:

Cote	Guide de la	No	<ul> <li>o Co-amoxiclav 625mg PO TDS or 1·2gram IV TDS for seven days AND</li> <li>o Azithromycin 500mg OD/IV for seven days</li> <li>Specific therapies (page 21)</li> <li>Ensure patients have thrombo- prophylaxis prescribed if not contraindicated. (2.1, 2.6)</li> <li>Do not routinely give systemic corticosteroids for treatment of COVID- 19 unless they are indicated for another reason(17, 18).</li> <li>There is no current evidence from RCTs to recommend any specific anti- nCoV treatment for patients with suspected or confirmed COVID-19 infection.</li> <li>Do not therefore give hydroxy- chloroquine or chloroquine to patients.</li> <li>If pneumocystis pneumonia is strongly suspected start high dose CTX and steroids, if necessary.</li> <li>Consider a blood transfusion if the Hb &lt; 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 (&gt;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</li> </ul>	Care and management pg 17-19	Par			Par	No	Par	Par	No	No	No	Par	No	No	No	No	Par	Par
D'Ivoire	Société			Whatever the clinical form, the care				tial	t	tial	tial	t	t	t	tial						tial
	Ivoirienne de			must necessarily include personnel	ly	ly		ly	me	ly	ly	me	me	me	ly	me	me	me	Ap	ly	ly
		1							4				+	1		4					
1	Pneumo-			protection measures, an appropriate	me	me	me	me	ι	me	me	t	ι	ι	me	ι	t	t 1	pli	me	me
	Pneumo- Phtisiologie			protection measures, an appropriate assessment and a consistent	me t	me t	me t	me t	ι	t t	t	l	ι	l	t ne	ι	ι	-	pli ca		me t

Ethiopia	prise en charge de la COVID- 19Version du 16 avril 2020	Νο	<ul> <li>Staff protection measure (2.17)</li> <li>Therapeutic attitude (2.7, 2.3)</li> <li>psychological support (2.7)</li> <li>oxygen therapy if SaO2 ≤ 95% (2.1, 2.4)</li> <li>treatment of symptoms (fever, runny nose, abundant drink) (2.4)</li> <li>patient and family education (2.3, 2.1, 2.17): barrier measures, establish telephone connection daily (2.7), daily temperature monitoring, ban visits</li> <li>Transfer of the patient to the intensive care unit (2.2)</li> <li>Assessment to be made in the care unit (2.1)</li> <li>Treatment of special cases (2.11)</li> <li>Management must be multidisciplinary, (2.16) particularly for:</li> <li>o children</li> <li>o elderly subjects</li> <li>o pregnant women</li> <li>o subjects with disabilities</li> <li>All basic asthma and COPD treatmentsshould be continued (corticosteroids inhaled, possibly associated with other molecules (LABA, LAMA, montelukast, oral corticosteroid therapy at minimum effective dose) (2.6)</li> </ul>	Par	Par	Ful	Par	Ful	Par	Par	Par	Par	No	Par	Par	Par	Par	No	Νο	Par
Еппорта	NATIONAL COMPREHEN SIVE COVID19 MANAGEME NT HANDBOOK		<ul> <li>General principle of clinical mangement for COVID-19 (page 40 to 41)</li> <li>Underlying /chronic diseases should be identified as early as possible with detailed history from patient, close family members or friends. (2.1.)</li> <li>Drug interactions, adverse effects of drugs and drug allergies must be</li> </ul>	Par tial ly me t	Par tial ly me t	rui ly me t	Par tial ly me t	rui ly me t	tial ly me	tial ly	tial ly	tial	t me	Par tial ly me t		Par tial ly me t	Par tial ly me t	No t Ap pli ca ble	no t me t	Par tial ly me t

First edition	considered during managing the
APRIL 2020	patient with COVID-19. (2.6)
	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)

			<ul> <li>Information on patient's condition should be communicated to their family regularly and upon request by the treating physician. (2.3)</li> <li>Determine methods for patient/family information provision including alternate languages/interpretive services. (2.3, 2.14)</li> <li>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)</li> <li>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)</li> <li>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)</li> <li>Allow family members to view patients or provide for basic needs of their family members (e.g. clean</li> </ul>																	
			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	*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	Par tial ly me t	Par tial ly me t	No t me t	Par tial ly me t	Ful ly me t	Par tial ly me t	Par tial ly me t	No t me t	No t me t	No t me t	Par tial ly me t	No t me t	No t me t	No t me t	No t Ap pli ca ble	No t me t	Par tial ly me t

-			A sith some sin 500 mg daily apply for
			Azithromycin 500 mg daily orally for
			3 days (2.5).
			*Closely monitor patients with
			moderate COVID-19 disease for early
			signs of clinical deterioration, such as
			rapidly progressive respiratory failure
			and sepsis and respond immediately
			with supportive care interventions.
			The ability to identify, assess and
			escalate care for deteriorating
			hospitalised COVID-19 patients
			appropriately can make some
			difference in our outcomes. Use of the
			MEWS Score (Modified Early
			Warning Score) can identify patients
			who are deteriorating or at risk of
			deteriorating to ensure timely
			assessment and intervention (2.1, 2.2,
			2.4).
			* IV Antibiotics if suspected
			secondary bacterial infection, IV
			Ceftriaxone 2g Daily for 5 days
			initially, then review. If suspected
			CAP, follow with macrolide,
			Azithromycin 500 mg daily orally for
			3 days (2.5, 2.6).
			* Oxygen therapy via fixed oxygen
			delivery masks to keep Sp02 between
			95-96% if no COPD. If COPD, keep
			SpO2 between 88-92%
			If a patient is failing to respond to
			oxygen delivered via a face mask,
			then consider non-invasive ventilatory
			(NIV) support if persistent hypoxia
			(SpO2 < 92%) despite high flow
			oxygen
			Check Arterial Blood Gas (ABG) if
			available.
			Initiate oxygen therapy at 5 L/min and
			titrate flow rates to reach target SpO2
	•		

	93% during resuscitation; or use
	ce mask with reservoir bag (at 10–
	5 L/min) if patient in critical
	ondition. Once patient is stable, the
	rget is > 90% SpO2 in non-pregnant
	lults and $\geq$ 92–95% in pregnant
p.	tients. Oxygen should be turned
d	own if saturations are consistently
	D-100%) (2.1, 2.4).
	Maintain the airway and give
	tygen therapy during resuscitation to
ta	rget SpO2 $\ge$ 94%; otherwise, the
	rget SpO2 is $\ge$ 90% (25).
	The ability to identify, assess and
	calate care for deteriorating
	ospitalised COVID-19 patients
	propriately can make some
	fference in our outcomes. Use of the
	EWS Score (Modified Early
	arning Score) can identify patients
	ho are deteriorating or at risk of
	teriorating to ensure timely
	sessment and intervention. (2.1, 2.2)
	Treat any associated co-morbidity
	propriately
	are for pregnant women and
	conates
	Pregnant women should be treated
	ith supportive therapies as described
	ove. So far, there is no evidence on
	other-to-child transmission of
	OVID-19 when infection is in the
	ird trimester. There is no evidence
	at pregnant women present with
	fferent signs or symptoms or are at
	gher risk of severe illness (2.1,
	Encourage and support mother and
	by to be together. Consider

separating mother and baby partially
or completely (e.g. discharging baby
home before unwell mother) only after
taking into account limited local
capacity, disease severity,
psychological wellbeing, parental
preferences, if method exists to feed
baby e.g. bottle or cup feeding (2.1,
2.7, 2.11).
*Provide oxygen via nasal cannula to
maintain SPO2 >90% (>88% for
preterm neonates).
Avoid potentially aerosolizing
techniques if possible (E.g. suctioning,
CPAP). If a neonate requires CPAP
for clinical reasons (Silverman score
≥4 or persistently hypoxic despite
oxygen (2.11).
* Provide routine maintenance fluids
according to age and weight, as per
standard care. Provide expressed
breast milk as soon as possible as per
standard neonatal care including use
of gastric tubes and cup feeding (2.4,
2.11).
Children with COVID-19
*Older children and adolescents
should receive oxygen via a face
mask. Face masks with reservoir bags should be reserved for those with
severe disease to deliver 10 – 15
L/min. Head boxes or other devices to
maximise oxygen delivery should be
used where possible.
CPAP is not currently available for
children with confirmed or suspected
COVID-19 (2.4, 2.11).
*Children with asthma should be
treated as usual but with salbutamol

				given via a spacer rather than nebulized to reduce the risk of aerosolization of COVID-19. Oral steroids should be used as normal for																	
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		children with asthma (2.1, 2.4, 2.11). 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)	Par tial 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 Ap pli ca ble	No t me t	Par tial ly me t
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 $\geq$ 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		Par tial ly me t	Par tial ly me t	No t me t	Par tial ly me t	Ful ly me t	Par tial ly me t	Par tial ly me t	No t me t	No t me t	No t me t	Par tial ly me t	No t me t	No t me t	No t me t	No t Ap pli ca ble	No t me t	Par tial ly me t

cornerstone of therapy for patients that
develop severe manifestations of
COVID-19 (2.1, 2.2, 2.4).
*Understand the patient's co-morbid
condition(s) to tailor the management
of critical illness (2.1, 2.5)
*Monitor for drug-drug interactions
(2.6).
*Use conservative fluid management
in patients with SARI when there is no
evidence of shock (2.1, 2.4).
Treatment of co-infections (page 47)
*Give empiric antimicrobials to treat
all likely pathogens causing SARI and
sepsis as soon as possible, within 1
hour of initial patient assessment for
patients with sepsis (2.4, 2.5).
*Empiric therapy should be de-
escalated based on microbiology
results and clinical judgment (2.1).
Acute Respiratory Distress Syndrome
(ARDS) (page 47)
*Recognize severe hypoxemic
respiratory failure when a patient with
respiratory distress is failing standard
oxygen therapy and prepare to provide
advanced oxygen/ventilatory support
(2.1, 2.4).
*Endotracheal intubation should be
performed by a trained and
experienced provider using airborne
precautions (2.1, 2.4).
*Rapid sequence intubation is
appropriate after an airway assessment
that identifies no signs of difficult
intubation (2.1, 2.4).
*Aim for an initial tidal volume of
6mg/kg.16 Tidal volume up to 8 ml/kg

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,
*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).
Septic Shock (page 48)
*Recognize septic shock in adults
when infection is suspected or
confirmed AND vasopressors are
needed to maintain mean arterial
pressure $(MAP) \ge 65 \text{ mmHg AND}$
lactate is $\geq 2 \text{ mmol/L}$ , 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)

· · · · · · · · · · · · · · · · · · ·	
	o Prolonged capillary refill (> 2 sec)
	or feeble pulses; tachypnoea; mottled
	or cold skin or petechial or purpuric
	rash
	o Increased lactate; oliguria;
	hyperthermia or hypothermia (2.1,
	Pregnant women with COVID-19
	(page 48)
	*Considering asymptomatic
	transmission of COVID-19 may be
	possible in pregnant or recently
	pregnant women, as with the general
	population all women with
	epidemiologic history of contact
	should be carefully monitored (2.1,
	2.4, 2.11).
	*Pregnant women with a suspected,
	probable or confirmed COVID-19
	infection, including women who may
	need to spend time in isolation with
	obstetric, foetal medicine and neonatal
	care, as well as mental health and
	psychosocial support, with readiness
	to care for maternal and neonatal
	complications (2.1, 2.4, 2.7, 2.2.11).
	*Currently no evidence that pregnant
	women present with increased risk of
	severe illness or fetal compromise.
	*Pregnant and recently pregnant
	women who have recovered from
	COVID-19 should be enabled and
	encouraged to attend routine antenatal
	or postpartum care as appropriate.
	Infants and Mothers with COVID-19
	(page 48)

		1	*Infants born to mothers with	,			Π														
			suspected, probable or confirmed			ļ															
			COVID-19 infection, should be fed													( L					
			according to standard infant feeding	,	1		1									1					
			guidelines, while applying necessary	,	1		1									1					
			precautions for IPC (2.1, 2.1, 2.11).	,	1		1									1					
			*As with all confirmed or suspected	,	1		1									1					
			COVID-19 cases, symptomatic	,	1		1									1					
			mothers who are breastfeeding or		1	ļ	1									1					
			practicing skin-to-skin contact or	,	1		1									1					
			kangaroo mother care should practise	,	1		1									1					
			respiratory hygiene, including during		1	ļ	1									1					
			feeding (for example, use of a medical	,	1		1									1					
			mask when near a child if with		1	ļ	1									1					
			respiratory symptoms), perform hand		1	ļ	1									1					
			hygiene before and after contact with	,	1		1									1					
			the child, and routinely clean and	,	1		1									1					
			disinfect surfaces which the		1	ļ	1									1					
			symptomatic mother has been in		1	ļ	1									1					
			contact with (2.1, 2.4, 2.11).		1	ļ	1									1					
			*Breastfeeding counselling, basic		1	ļ	1									1					
			psychosocial support and practical		1	ļ	1									1					
			feeding support should be provided to		1	ļ	1									1					
			all pregnant women and mothers with		1	ļ	1									1					
			infants and young children, whether		1	ļ	1									1					
			they or their infants and young		1	ļ	1									1					
			children have suspected or confirmed		1	ļ	1									1					
			COVID- 19 (2.1, 2.4, 2.7, 2.11).		1	ļ	1									1					
			*In situations when severe illness in a	,	1		1									1					
			mother due to COVID-19 or other		1	ļ	1									1					
			complications prevent her from caring		1	ļ	1									1					
			for her infant or prevent her from		1	ļ	1									1					
			continuing direct breastfeeding,													( L					
			mothers should be encouraged and			ļ										1					
			supported to express milk, and safely			ļ										1					
			provide breastmilk to the infant, while			ļ										1					
			applying appropriate IPC measures			ļ										1					
			(2.1, 2.4, 2.11)																		
Nigeria	NATIONAL	No		Clinical management of COVID-19	Par	No	No	Par	Ful	Par	No	No	No	Par	Par	No	No	No	No	No	Par
1	INTERIM		i i i i i i i i i i i i i i i i i i i			1	1 1			tial				tial							tial

	GUIDELINES			RR >30/min, or SpO2 < 90% (<92%	ly	me	me	ly	me	ly	me	me	me	ly	ly	me	me	me	Ap	me	ly
	FOR			in children). (2.4, 2.11)	me	t	t	me	t	me	t	t	t	me	me	t	t	t	pli	t	me
	CLINICAL			•Provide further supportive care as	t			t		t				t	t				ca		t
	MANAGEME			appropriate (2.4)															ble		
	NT OF			•Continue supportive care as																	
	COVID-19			appropriate (2.4)																	
				•Ensure optimal oxygenation (2.4)																	
	Version 1 14			•Use broad spectrum antibiotics based																	
	March 2020			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)																	
South	Clinical	Yes	4.2 Early supportive therapy in		Par	Par	No	Par	Ful	Par	No	No	No	No	Par	Par	No	No	No	No	Par
Africa	management of		hospitalised COVID-19 patients (page		tial		t	tial		tial	t	t	t	t	tial	tial		t	t	t	tial

suspected or	11)	ly	ly	me	ly	me	ly	me	me	me	me	ly	ly	me	me	Ap pli	me	ly
confirmed	•Give supplemental oxygen therapy	me	me	t	me	t	me	t	t	t	t	me	me	t	t	pli	t	me
COVID-19	immediately to patients with low	t	t		t		t					t	t			ca		t
disease	oxygen saturation. (2.4)															ble		
	• Oxygen therapy is likely to be the																	
Version 3 (27th	single most effective supportive																	
March 2020)	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 $\geq$ 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																	

		progressive respiratory failure and sepsis, and apply supportive care interventions immediately. (2.1, 2.2, 2.4)																	
South Sudan Covid-19	Yes	Management for Severe Illnesses	Ful	Ful		Ful	Ful					Par		No	No	Par	No	Ful	
Clinical Care		(pages 10-13)	ly	ly	ly	ly	ly	tial	ly	tial	tial	tial	ly	t	t	tial	t	ly	tia
Management		The aim is to provide early optimized	me	me	me	me	me	ly	me	ly	ly	ly	me	me	me	ly	Ap pli	me	ly
Guideline for South Sudan		supportive care and monitoring (2.2).	t	t	t	t	t	me t	t	me t	me t	me t	t	t	t	me t	pli ca	t	me t
		Oxygen therapy and monitoring 2.4,															ble		
Version 1, 2020		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 $\ge$ 92–95% in																	
		pregnant patients.																	
		*Initiate oxygen therapy at 5 L/min																	
		and titrate flow rates to reach target																	
		SpO2 $\ge$ 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								1	1	1						1	
		breathing, severe respiratory distress,																	
		central cyanosis, shock, coma or																	
		convulsions) should receive airway																	
		management and oxygen therapy																1	
		during resuscitation to reach a target																	

of SpO2 $\geq$ 94%. Use of nasal prongs
or nasal cannula is preferred in young
children, as it may be better tolerated
*Perform Haematology and
biochemistry laboratory testing, and
ECG where available at admission and
as clinically indicated to monitor for
complications, such as acute liver
injury, acute kidney injury, acute
cardiac injury or shock.
*All patient must be closely
monitored for signs of clinical
deterioration, such as rapidly
progressive respiratory failure and
sepsis and respond immediately with
supportive care interventions.
*Remember application of timely,
effective and safe supportive therapies
is the cornerstone of therapy for
patients that develop severe
manifestations of COVID-19 (2.1,
Fluid management: Cautious and
conservative fluid management in
severely ill patients is recommended
and must be under direct guidance of
an experienced physician.
*Patients should be treated cautiously
with intravenous fluids, because
aggressive fluid resuscitation may
worsen oxygenation, especially in
settings where there is limited
availability of mechanical ventilation
Anti-microbials: Empiric use of
antibioticsmaybe considered when
bacterial superinfection (Bacterial
Sepsis/pneumonia) is being suspected
based on clinical judgement (high
index of suspicion). In such a case,

	give appropriate, empiric broad-
	spectrum antimicrobials as soon as
	possible following laboratory
	confirmation of causative organisms
	from respiratory and/ or blood
	samples.
	*Amoxicillin/ Clavulanic acid and
	Metronidazole combination for patient
	who can take oral medication is the
	first line antibiotic to consider.
	*Where oral medication is not
	feasible, give IV ceftriaxone and
	monitor for clinical improvement.
	*Empiric antibiotic treatment should
	be based on the clinical diagnosis
	(community acquired pneumonia,
	health care-associated pneumonia [if
	infection was acquired in health care
	setting] or sepsis), local epidemiology
	and susceptibility data, and treatment
	guidelines.
	*Empiric therapy should be de-
	escalated on the basis of microbiology
	results and clinical judgment (2.1, 2.4,
	Anti-viral : There are no known
	effective antivirals for coronavirus
	infections and multiple clinical trials
	are ongoing to evaluate the activities
	of various antivirals in COVID-19
	(2.5).
	Bronchodilator : If bronchodilator
	treatment is required, provide metered
	dose inhalers and spacers instead of
	nebulizers to prevent aerosolization of
	the virus (2.1, 2.4, 2.6).
	Nutritional Support
•	

	1	<u> </u>		<u> </u>
*Consider medical nutrition therapy				
for all patients staying in the ICU,				
mainly for more than 48 hrs.				
*Oral diet shall be preferred over				
Enteral Nutrition or Parenteral				
Nutrition in critically ill patients who				
are able to eat, and if not possible,				
initiate early enteral nutrition within				
48 hours.				
*In case of contraindications to oral				
and Enteral Nutrition, Parenteral				
Nutrition should be initiated within				
three to seven days				
*Gastric access should be used as the				
standard approach to initiate Enteral				
Nutrition using nasogastric tube				
feeding				
*Hypocaloric nutrition (not exceeding				
70% of Estimated Energy) should be				
administered in the early phase of				
acute illness and increased from day 3				
to day 7 to 80-100% based on stability				
and tolerance of the patient.				
*Micronutrients (i.e. trace elements				
and vitamins) should be provided				
daily with Parenteral Nutrition and				
should be included for better recovery.				
*In non-intubated patients not				
reaching the energy target with an oral				
diet, oral nutritional supplements				
should be considered first and then				
Enteral Nutrition (2.1, 2.4).				
Energy				
*Critically ill adult patients should				
receive feedings at rates of 25 to 30				
kcal/kg.				
*The amount of glucose (PN) or				
carbohydrates (EN) administered to				
ICU patients should not exceed 5				
mg/kg/min.				
*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).         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.       Image: Comparison of the second stafe distance (2 metres).				
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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)         Providing Psychological support: Staff         should introduce self and the facility.         Be sensitive to culture, ethnicity,         gender, sexuality, and maintain a safe				
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)         Providing Psychological support: Staff should introduce self and the facility. Be sensitive to culture, ethnicity, gender, sexuality, and maintain a safe				
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should introduce self and the facility. Be sensitive to culture, ethnicity, gender, sexuality, and maintain a safe				
Be sensitive to culture, ethnicity, gender, sexuality, and maintain a safe				
gender, sexuality, and maintain a safe				
distance (2 metres) Re empethetic				
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				

for a mental health assessment and
care (2.1, 2.3, 2.4).
a) Psychological First AID (PFA)
(pages 28-29)
This is a humane, supportive and
practical help offered to those
suffering serious crisis/ distressing
events. PFA strives to provide and
share accurate information that can
help in dispelling myths and provides
messages about healthy behaviour and
better knowledge on people's
understanding of the COVID-19
disease. PFA is provided to all persons
diagnosed with COVID-19 by
applying the main principles of Look,
Listen and Link (2.2.2.7)
Listen, and Link (2.2,2.7)
b) Health Education:
Assess the knowledge of patient.
Speak frankly, but compassionately.
Avoid euphemisms and medical
terms. Allow silence and tears. Avoid
the urge to talk to avoid your own
discomfort. Proceed at the patient's
pace. Have the patient tell you his or
her understanding of what you have
said. Encourage questions. Encourage
and validate emotions (2.1, 2.3).
c) Emotional support:
Use of detailed and extensive
psychoeducation; cognitive
restructuring; active listening; seek for
clarification; reflect on thematic issues
discussed during the health talk and
counselling session. Summarize
discussions and provide feedback
during session (2.1, 2.4, 2.8).

d) Spiritual support: Provide Spiritual Support on request by the patient. Link patient with a well-informed spiritual leader. Interaction should be supervised by the counsellor at the treatment center (2.8)
e) Psychiatric support: For all patients who manifest psychiatric symptoms, a trained Psychiatrist should evaluate and offer treatment options appropriate for the patient. The mhGAP-HIG approach is recommended. Treatment modalities are: Supportive Psychotherapy and Cognitive Restructuring. Use of medications only when necessary (to be prescribed by a trained healthcare worker). Conduct regular review and mental state monitoring 2.1, 2.4, 2.7).
Evaluation at discharge and post discharge: Assess the patient's psychosocial stability through clinical interview and formal assessment tools. Assess social needs and available resources. Assess occupational needs and available resources (2.1, 2.4)
Post Discharge: Evaluate worry about stigma and coping Skills. Discourage maladaptive coping skills e.g. social withdrawal, misuse of alcohol and psychoactive substances. Help patient and relatives plan social and occupational reintegration (involve the social workers). Discuss the plan for home visit (if applicable) and future

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).					
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).					
Management of COVID-19 in Special					
Populations (pages 18-19)					
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					

*Pregnant women presenting as mild/
moderate, severe and critical cases
should be managed as generically
described above. A multidisciplinary
approach must be adopted with
consultations from obstetricians,
paediatricians and intensive care
experts.
* IPC measures also apply to pregnant
and breastfeeding women.
*For pregnant women who are
recovering from COVID-19 infection,
psychosocial support
and counselling should be provided.
*Assessment of patient's co-morbid
condition(s) must be conducted, and
management tailored accordingly
(2.11)
b) Infant & Mother with COVID-19
*No vertical transmission has been
reported (During pregnancy, birth and
breastfeeding)
*Infants whose mothers are suspected
or confirmed COVID-19 patients
should be breastfed according to the
infant feeding guidelines while
maintain necessary precautions for
IPC. (Wear mask, hand hygiene
before and after contact with infant,
disinfect surfaces the mother may
have come in contact with.
*If the mother presents with severe
illness, or other complications prevent
her from direct breastfeeding, she
should be encouraged to express milk.
(must maintain IPC measures)
*Breastmilk substitutes, feeding
bottles and teats, pacifiers or dummies
is not recommended.

			<ul> <li>*Encourage mother-baby-pair to remain together regardless of if mother or child is a suspect, probable or confirmed COVID-19 infection (2.11).</li> <li>c) Elderly patients with COVID-19 *Comorbidities and old age have been reported as risk factors for mortality with people with COVID-19.</li> <li>*Elder people are at higher risk of severe illness and death if infected.</li> <li>*Manage such patients with a multidisciplinary approach especially in the decision-making process to address multiorgan involvement and clinical deterioration.</li> <li>*Also involve caregivers and family members in the decision-making throughout the management of the patient (2.1, 2.3, 211).</li> <li>d) People Living with HIV (PLHIV) *There are no data or specific information on the risk of COVID-19 in PLHIV.</li> <li>*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).</li> </ul>																	
Sudan	COVID-19 Case Management protocol Version 1 (April 2020)	Yes	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)	Par tial ly me t	Par tial ly me t	Par tial ly me t	Par tial ly me t	Ful ly me t	Par tial ly me t	t me	t me	No t me t	Par tial ly me t	Par tial ly me t	No t me t	No t me t	No t me t	No t Ap pli ca ble	No t me t	Par tial ly me t

"Give antimicrobials to treat       all likely principane casing SARI.         Give antimicrobials within one hour       of minial putent assessment. for         patients with spsis (2.4, 2.5)       "Don't rotatively give systems"         "Don't rotatively give systems"       end of the systems"         ergenaments at ARDS outside of       ellipsic systems"         ergenaments at ARDS outside of       ellipsic systems"         of another crassen (2.4, 2.6)       "Closely monitor putentisms with SARI         for signs of clinical deterioration, such       as a pipely progressive respiratory         failure and appears and apply       supportive curvit interventions         summediately (2.1, 2.2, 2.4)       "Closely monitor putents with SARI         of or signs of clinical deterioration, such       end of the management         of crisical lines and apply       supportive curvit interventions         immediately (2.1, 2.2, 2.4)       "Management         of strike and Approximation       end of the management         of crisical lines and approximate early with       potient and family classes         potient and family (2.4, 2.3, 2.1)       Management         Management of by oversite       end of the performed by oversite         experimed private with approximation and approximation approximation and approximation approximation approximation approximation approximation approximation approximation	
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*In patient with severe ARDS, prone ventilation for more than 12 hours per	
ventilation for more than 12 hours per	
day is recommended (2.4)	
	day is recommended (2.4)

*Use a conservative fluid
management strategy for ARDS
patients without tissue hypo perfusion
(2.4)
Management of septic shock (page 6)
*Recognize septic shock in adult
when infection is suspected or
confirmed and vasopressors are
needed to maintain MAP  65mmHg
and lactate $\Box$ 2mmol/L in absence of
hypovolemia and in children with any
hypotension or 2 to 3 of the following:
altered mental state, tachycardia or
bradycardia, tachypnea, oliguria,
hyperthermia, hypothermia, mottled
skin or petechial or purpuric rash (2.4,
*In resuscitation from septic shock in
adult give at least 30ml/kg isotonic
crystalloid in the first 3 hours, and in
children give 20ml/kg as a rapid bolus
and up to 40-60 ml/kg isotonic in the
and up to 40-60 m/kg isotonic in the first 1 have $(2,4,2,5,2,11)$
first 1 hour (2.4, 2.5, 2.11)
*Administer vasopressin when shock
persists during or after fluid
resuscitation, the initial blood pressure
target is MAP   65mmHg in adults
and age appropriate targets in children
(2.4)
Special consideration for pregnant and
lactating women (page 7)
*For pregnant women suspected of
COVID-19 or confirmed and due for
labor, to deliver in isolation centers
(2.4, 2.11)
*Isolation centers should be equipped
with a surgical setup

*If operation room not available,
deliver in nearest facility and
adherence to infection control
measures
*Lactating mothers should continue to
breastfeed her infant/young child
while taking all infection prevention
precautions (2.4, 2.11)
*If condition of mother deteriorates
then separate child from mother and
extract breast milk for feeding
infant/young child (2.4, 2.11)
*A midwife should be present in
every isolation center
*A nutritionist should be present in
every isolation center
Nutritional guideline during the
isolation period for children age 6-59
months (page 7 to 8)
*Severe Acute Malnutrition (SAM),
should apply SAM protocol for
treatment (2.4, 2.11)
*Moderate Acute Malnutrition
(MAM), should apply MAM protocol
for treatment
*Child without Acute Malnutrition,
should be provided Vitamino/plumpy
doz
*Healthy children without
malnutrition should give one
preventive dose of Vitamin (A), if
she/he did not take any dose during
the previous six months (2.4, 2.11)
the previous six months (2.4, 2.11)
Additional Supportive Measures (page
13)
*Optimize nutritional support
Contract international support     APationalize mediantions and quard
*Rationalize medications and guard against interactions (2.6)

			*VTE risk assessment and appropriate prophylaxis of admitted patients (2.4, 2.6)																		
Eswatini	COVID-19 CASE MANAGEME NT GUIDELINES in the Kingdom of Eswatini 8th APRIL 2020 V1.0	No		COVID-19 management approach (page 14 to 19) •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 co- morbidities 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)	Par tial ly me t	No t me t	Par tial ly me t	Par tial ly me t	Ful ly me t	Par tial ly me t	Par tial ly me t	No t me t	Par tial ly me t	No t me t	Par tial ly me t	Par tial ly me t	No t me t	Par tial ly me t	No t Ap pli ca ble	No t me t	Par tial ly me t

		<ul> <li>Involve caregivers and family members in decision-making and goal-setting throughout the management of COVID-19. (2.3, 2.14, 2.17)</li> <li>Provide patient-centred support for patients currently not taking treatment or if struggling with adherence. (HIV) (2.1)</li> <li>Handling Dead Bodies (page. 26)</li> <li>The dignity of the dead, their cultural and religious traditions, and their families should be respected and protected throughout. (2.16, 2.9)</li> </ul>																	
Standard Operating Procedures (SOPs) for Case Management and Infection, Prevention and Control (STANDARD OPERATING PROCEDURE FOR CLINICAL MANAGEME NT OF COVID 19 CASES) March 2020	No	Management of severe cases (page 12 to 13) *Provide supplemental O2 to achieve O2 sats >93% (2.1, 2.4). *May deteriorate rapidly: continuously monitor O2 sat and vital signs; escalate oxygen dose and delivery devise if hypoxia remains with maximal oxygen doses (2.1) *Provide basic care of severe/critical illness: o A:maintain an openairway. If low conscious level–nurse patient in recovery position notlying 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 * Non-invasive positive pressure ventilation is NOT recommended as it can aerosolize the virus and increase	Par tial ly me t	Par tial ly me t	Ful ly me t	Par tial ly me t	ly	tial ly	Ful ly me t	No t me t	Par tial ly me t	No t me t	Par tial ly me t	Ful ly me t	Ful ly me t	No t me t	t	Ful ly me t	Ful ly me t

			1 1		<u> </u>			
		spread. If additional respiratory						
		support is required, patients should be						
		intubated (2.1, 2.4).						
		*Begin arranging for transfer to higher						
		level of care as needed (2.2).						
		Management of critical cases (page 13						
		to 14)						
		*Provide basic care of severe/critical						
		illness:						
		o A: maintain an open airway. If low						
		conscious level-nurse patient in						
		recovery position notlying 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 (2.1, 2.4).						
		*Test and treat co-infections, if						
		possible, including influenza or other						
		viruses, malarial blood tests, and						
		blood cultures (2.4, 2.5).						
		*Ventilator triage will likely be						
		necessary						
		o If resources are limited, determine						
		which patients have the best chance of						
		survival with mechanical ventilation						
		(2.1).						
		*End of life discussions should be						
		held with patients and their families if						
		resources are not available or						
		appropriate, especially the elderly,						
		terminally ill, and co-morbid with						
		poor baseline functioning (2.3, 2.12).						
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	Psychosocial Team and support (page
	22 to 26)
	The psychosocial team is composed of
	Social Workers, Social Welfare
	Officers, Clinical and Community
	Psychologists, Risk Communication
	and Health Promotion experts, Charity
	Social care organization
	representatives, Community
	Development Officers and Psychiatric
	Medic such as Clinical Officer and
	Nurses.(2.16) The following are the
	roles of the psychosocial team during
	and after COVID outbreak:
	*Reaching out to communities in
	order to identify affected people, and
	those who are vulnerable, address
	social stigma and discrimination,
	neglected people and provide
	Psychosocial support to the affected
	people in all social and psychological
	needs (2.7)
	*Assessing affected people for
	psychological conditions and advise
	or link them to treatment interventions
	(2.1, 2.4, 2.7)
	*Enhancing psychosocial wellbeing of
	affected people and health workers on
	the task force (2.7, 2.17)
	*Networking with other service
	providers for psychosocial care of
	people (2.2,2.7, 2.16)
	*Communicating with other
	institution for supporting families of
	affected individuals (social service
	needs or material support) (2.2,2.7,
	2.16,2.17)
	*Engaging other social welfare
	structures to facilitate restoration of
L [	

	livelihood activities in post epidemic
	phase. (2.2,2.7, 2.16,2.17)
	*Training of frontline healthcare
	workers, community health workers
	and other responders in first
	psychological aid and risk
	communication (2.3)
	SOPs for Psychosocial Support to
	COVID Taskforce Health Workers
	Working In COVID Outbreak (2.17')
	In order to provide psychosocial
	support to COVID healthcare workers,
	it is recommended to follow this
	guidance before, during and after
	deployment of teams, in conjunction
	with the SOPs "Health Workers'
	Occupational Safety and Health
	Management in the Context of
	COVID-19.
	Before deployment
	*Perform psychological evaluation of
	each healthcare worker, as part of the
	pre-deployment health check, ensure
	they are well informed of terms and
	conditions, possible occupational
	health and safety risks.
	* Provide psychosocial awareness
	among the taskforce members about
	nature of illness, signs and symptoms,
	mode of spread and case fatality.
	*Discuss with and train them on what
	medical and occupational health
	preparations they need to make/have
	in place and ask whether they are
	confident in use (PPEs, immunization,
	prevention of violence, fatigue, first
	psychological aid, buddy systems,
	*Ensure that heath care workers are
	informed of the emotional issues

associated with the kind of work they
are going for
*Orient the team on self-help
mechanisms needed to manage stress
and relaxation methods, stimulating
health-promoting coping strategies
(sufficient rest, healthy food, physical
activity, stay in contact with family
and friends, relax and distress, first
psychosocial aid, buddy systems) and
avoiding unhealthy family, e.g. avoid
wearing uniform in public, avoid
bringing working clothes at home,
digital connection
with loved ones
*Inform health workers about their
rights and responsibilities as
humanitarian workers 10)Specific
attention should be paid to repurposed
health workers, i.e. medical and
nursing students, volunteers, other
health workers which don't have
previous experience in working under
public health emergencies and
providing patient care to patients with
infectious diseases and using PPE
During deployment
*Arrange sessions (once weekly) for
healthcare workers to voluntarily
attend and share COVID experiences
2) Discuss with the healthcare workers
on how to enhance coping
mechanisms and to maintain a
respectful working relation and
encourage those with serious distress
(if any) to seek medical or
psychological care.
*Work with the logistic team to
ensure that health workers are availed
with recreational facilities such as

When providing psychosocial support
to individuals, families, rejected
persons and community members
follow these steps:
*Interact with the client but avoid
direct contact. Establish
rapport/alliance.
*Promote active listening to the client
and show that you are willing to offer
help to them while expressing
empathy, using open-ended questions
and understandable language.
*Client must be provided with
adequate information to counteract
false beliefs about the disease and told
that anxiety is a common reaction in
the face of extreme situations like
what they are going through. (2.3)
*Promote positive thinking among
community members at risk, stress
management and relaxation
techniques, encourage healthy eating
and drinking habits as recommended
by medical experts. (2.7)
*During confinement, allow contact to
connect with their social networks
either by phone or through alternative
safe approaches (2.3, 2.7)
*When connecting COVID contacts to
their social networks or spiritual
support ensure that client's social
network (family members and
significant others) are oriented about
COVID and safety precautions before
linking with the client. (2.7, 2.8)
*Encourage family members to
regulate their emotions before contact
with client and provide necessary
support through the available safety
procedures. (2.7, 2.17)

		*When preparing COVID 19
		survivors before discharge, follow the
		following steps:
		. Provide Psychosocial support (PSS)
		with survivor's family, neighbourhood
		and community members to avoid
		discrimination and stigmatization for
		individual and family member at the
		community level.
		. Talk to the survivor about anticipated
		stigma, and stress. Equip them with
		stress management skills. (2.7)
		*When communicating death to the
		family members after confirmation of
		death from case management team, it
		is advised to the psychosocial team to
		follow the following steps:
		. Contact and invite family members
		of the deceased to witness the body of
		their relative.
		. Communicate the death of their
		beloved one, the time he died, the
		cause of death (use
		laboratory results) and burial
		arrangements
		. In case of a very ill relative to the
		deceased within the Treatment Unit
		the psychosocial team will consider
		their health state to or not to
		communicate information about the
		death of a
		beloved one.
		. In case the very sick relative is aware
		of the death of a close relative within
		the Treatment Unit, support the
		person in grief process.
		. Discuss with family member about
		alternative ritual practices and safe
		mourning. (2.3, 2.13, 2.17)
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Togo	Protocole de prise en charge thérapeutique des cas de Covid - 19 confirmés au Togo (Protocol for therapeutic	Yes	<ul> <li>5.4 Treatment for symptoms and complications</li> <li>Paracetamol 1000 mg every 8 hours in case of fever (2.4)</li> <li>Reduce throat pain with lemon and honey (2.10)</li> <li>Oral rehydration / 3 liters per day</li> <li>Vitamin C 1 tablet per day</li> </ul>	Par tial ly me t	tial ly	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	Par tial 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	Par tial ly me t
	management of confirmed covid -19 cases in Togo)		<ul> <li>Amoxicillin and clavulanic acid or ceftriaxone if lung infection (2.5)</li> <li>Anti histamine like (desloratadine, loratadine, mequitazine) if cold</li> <li>Oxygen therapy in case of dyspnea</li> </ul>																	
	Version 001 from 16 april 2020		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) For oxygen therapy, use:																	
			Glasses for flow rates between 1 and 5 liters/min Masks for flow rates from 6 to 10 liters per minute o Mask at high concentration for flow																	
			rates greater than 10 liters per minute -Ventilation assistance to be considered if persistence of respiratory distress with lower saturation 90% despite oxygen therapy (2.1, 2.2, 2.4)																	
Uganda	Guidelines on Clinical care COVID-19	Yes	Management of severe COVID-19 (Page 22) •Give supplemental oxygen therapy immediately to patients with SARI	Par tial ly me		Par tial ly me	Par tial ly me	Ful ly me t	Par tial ly me	Par tial ly me	No t me t	No t me t	No t me t	Ful ly me t	No t me t	No t me t	Par tial ly me	No t Ap pli	Ful ly me t	Par tial ly me
	No date and no version		<ul> <li>and respiratory distress, hypoxaemia</li> <li>or shock and target &gt; 94% and ≥ 92–</li> <li>95% in pregnant patients .</li> <li>Closely monitor patients with</li> <li>COVID-19 for signs of clinical</li> <li>deterioration, such as rapidly</li> </ul>	t	t	t	t		t	t							t	ca ble		t

progressive respiratory failure and
sepsis and respond immediately with
supportive care interventions. (2.1,
2.2)
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.
• 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) $\geq 65 \text{ mmHg AND}$
lactate is $\geq 2 \text{ mmol/L}$ , 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

minutes and reassess for signs of fluid
overload after each bolus.
• In resuscitation from septic shock in
children, give 10–20 mL/kg
crystalloid fluid as a bolus in the first
30–60 minutes and reassess for signs
of fluid overload after each bolus.
(2.1, 2.4)
Monitor for overload
Caring for Pregnant women with
COVID-19 (page 28)
Considering asymptomatic
transmission of COVID-19 may be
possible in pregnant or recently
pregnant women, as with the general
population all women with
epidemiologic history of contact
should be carefully monitored.
Pregnant women with a suspected,
probable or confirmed COVID-19
infection, including women who may
need to spend time in isolation with
obstetric, foetal medicine and neonatal
care, as well as mental health and
psychosocial support, with readiness
to care for maternal and neonatal
complications.
• At this point, there is no evidence
that pregnant women present with
increased risk of severe illness or fetal
compromise.
Pregnant and recently pregnant
women who have recovered from
COVID-19 should be enabled and
encouraged to attend routine antenatal,
postpartum or post-abortion care as
appropriate. patients with SARI when
there is no evidence of shock (2.11).
Treatment of co-infections (page 23)
Give empiric antimicrobials to treat

all likely pathogens causing SARI and
sepsis as soon as possible, within 1
hour of initial patient assessment for
patients with sepsis (2.5).
Empiric therapy should be de-
escalated on the basis of microbiology
results and clinical judgment.
Acute Respiratory Distress Syndrome
(page 24)
Recognize severe hypoxemic
respiratory failure when a patient with
respiratory distress is failing standard
oxygen therapy and prepare to provide
advanced oxygen/ventilatory support.
Endotracheal intubation should be
performed by a trained and
experienced provider using airborne
precautions.
Rapid sequence intubation is
appropriate after an airway assessment
that identifies no signs of difficult
intubation.
Caring for Infants and Mothers with
COVID-19 (page 29)
• 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 (2.11).
• 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.
	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.
	• 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
	Caring for Older Persons with
	COVID-19 (pg 30)
	• Ensure multidisciplinary
	collaboration among physicians,
	nurses, pharmacists, other health care
	professionals in the decision making
	process to address multi morbidity and
	functional decline (2.16).
	Early detection of inappropriate
	medication prescriptions is
	recommended to prevent adverse drug
	events and drug interactions for those
	being treated with COVID-19 (2.6).
	Involve caregivers and family
	members in decision-making and
	goal- setting throughout the
	management of COVID-19 (2.1, 2.3,
	2.14)
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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