

Supporting ZADP LMIC partners during the COVID-19 pandemic

This document outlines the work ZADP has undertaken to support Zambian anaesthesia provider partners during the COVID-19 pandemic. It is regularly updated as both support mechanisms and the pandemic progress. It is intended for other partnerships to read and to consider if the work and strategies here, can also be used to support their partners, as a strong theme found by ZADP is that concerns of healthcare providers and challenges encountered span many LMIC countries.

This work started with discussions with Zambian partners identifying their concerns and outlines the support mechanisms initiated in response.

Summary of one-to-one discussions with Zambian partners about concerns with regard to Covid-19 and suggestions for development

We interviewed, through one-to-one discussions, 17 Zambian Physician Anaesthetists (11 Consultants, 6 trainees) who are all members of our partnership, about their concerns with regard to a COVID-19 outbreak in Zambia. We identified four themes in the concerns reported; spread of infection, critical care capacity, need for a country-wide strategy, and anaesthetists' wellbeing. Further breakdown of these concerns is detailed in table one.

	Subthemes	
Spread of infection	Protecting staff from acquiring infection	All expressed anxiety and concern that anaesthetists are at particular risk due to airway procedures. There was considerable concern about the availability of personal protective equipment (PPE) including protocols and training, and reliable access to soap and water.
	In-hospital spread of infection	There was considerable concern about patient-to-patient transmission on wards, intensive care and the operating theatre, as well as healthcare-worker-to-patient transmission
	Community transmission	Anaesthetists were concerned about the risks to their families if they are exposed and then return home, as well as social implications of staying away from their families. High community transmission due to high-density living and cultural practices (for example places of worship) were a shared concern. It was also raised that the most vulnerable and rural patients were most likely to lack access to public health advice about reducing risk and social distancing.
Critical Care Capacity	Critical care expertise	There was a request for more training and resources in the management of COVID-19

		respiratory complications, and guidance on which patients were suitable for intubation
	Equipment	Concern was about oxygen supplies, a lack of working ventilators and a lack of airway filters (HMEFs)
	Workforce planning	Concern was reported about the staffing requirements of the two hospitals in Lusaka with critical care facilities, both to meet the increased clinical needs and as the smaller hospital has been chosen as the COVID-19 centre however currently there is no physician anaesthetist cover.
Need for a country-wide strategy	Strategic planning involving all specialties	Partners stated they would like a central plan and developed lines of communication between public health, infectious diseases, and other hospital teams
Anaesthetist's wellbeing		Concern was reported about burnout, emotional consequences of seeing a large number of cases, working hours, and absence from family

Table one.

Together we identified a number of ways that the ZADP partnership can support Zambian anaesthetists during this outbreak. This includes focusing on:

1. Sharing learning about clinical aspects of COVID-19 and resources developed in the UK that are also useful for the LMIC context
2. Supporting our Zambian partners in speaking with hospital managers and other specialties about hospital operational management during an outbreak, for example discussing reducing elective surgery to enable less risk for transmission within theatre, more time for training, and conservation of consumables
3. Helping to develop protocols and standard operating procedures, for example those for airway management, developing COVID-19 intubation boxes, perioperative pathway, guidance on who to intubate for COVID-19 complications, and avoiding unnecessary intubation
4. Helping to develop simulation training for PPE use and the theatre pathway in a confirmed or suspected COVID-19 case
5. Mentoring local anaesthetists in advocating to healthcare leaders for increased procurement of PPE, exploring PPE currently available and as other alternatives when this is unavailable
6. Collaborating with other international groups and sharing their resources with our Zambian partners
7. Helping with wellbeing support for anaesthesia providers including a buddy system

Progress to date

So far we have:

1. set up a whatsapp group specifically for Zambia COVID-19 support and a dropbox folder with resources. The resources have been collated and organised into the four themes above.

There are now many useful resources online with open access however due to the mass of information available, it can be difficult for our partners to identify this, so we have used the group, dropbox and communication tools as a means of signposting to resources available

2. held regular group videoconferencing calls to discuss strategies and provide training on COVID-19
3. researched methods of PPE availability for contexts where these are difficult to procure, including homemade options and their effectiveness and cleaning
4. supported letter-writing to institutional/ association leads for support clinically, support with PPE procurement and training, developing new systems to respond to this pandemic and support needed for the academic programme
5. set up a buddy system between Zambian anaesthetists and UK anaesthetists to ensure ongoing support
6. supported the continued running of the academic (training) programme whilst the examination timetable remains. We have also supported local partners in advocating to institutional leads for changes in the academic calendar to account for the effects of this pandemic, whilst still ensuring that after this pandemic the programme is ready to assess and graduate the needed anaesthetic specialists
7. held similar one-to-one discussions with Inspire through Clinical Teaching faculty members from multiple LMIC about their concerns and strategies they are using. We had a group call with faculty members from Kenya, Rwanda, Ethiopia and Zambia in addition to leads from the UK, Canada and South Africa. All individuals shared strategies their institution was using and we discussed what could be developed elsewhere. The concerns and challenges reported by this group were similar to our early discussions with ZADP partners and included: limited resources including personal protective equipment, fear and low morale among healthcare workers (protecting selves, protecting families, hospitals' capacity to look after unwell staff), lack of screening for surgical patients and a lack of equipment to provide anaesthetic and surgical care using full PPE. We have set up a separate Inspire faculty support whatsapp group, and have shared the dropbox folder and continue to communicate with this group.

