

# Increasing COVID-19 response capacity in African countries: Voluntary recruitment of medical and health students

## ANALYSIS OF 9 TIBA COUNTRIES

### About the survey

This paper presents findings from a short survey conducted by TIBA<sup>1</sup> program ([www.tiba-partnership.org](http://www.tiba-partnership.org)) in nine African countries including Botswana, Ghana, Kenya, Rwanda, South Africa, Sudan, Tanzania, Uganda and Zimbabwe. A short questionnaire was administered to assess the country's potential to mobilize medical students to work as additional work force against the COVID-19 pandemic.

According to ECDC (2020)<sup>2</sup>, the sustained widespread COVID-19 transmission severely challenges hospital capacities, especially to resource poor countries like those in Africa. So, countries must take different measures ahead of time in order to be prepared. Such measures include voluntary recruitment of inactive healthcare workers e.g. retired government personnel, students, staff from private hospitals, NGOs and other agencies to work with experts and thus increase response capacity and save lives.

Key findings from the study are as summarized below.

### Key findings from the study

Data from eight countries that responded are presented as Annex 1, and they establish the following arguments:

**#1: Partnerships exist for mobilizing students:** Different cadre of medical and health students can be accessed and mobilized directly through the academic institutions, or through existing partnerships between research and academic institutions. These are both postgraduate and undergraduate students, with the latter being the majority.

**#2: Mechanisms for engaging undergraduate students are lacking:** While most partners found engaging postgraduate students straight forward, working with undergraduates is unclear despite their significant numbers. In most cases, universities get closed with no plans for mobilising the students in fighting the pandemic. Countries like Tanzania, Rwanda and Sudan listed some experiences in mobilizing students during epidemics and for various voluntary /outreach work. For example, in Rwanda final year medical students were recently used in airport

screening. Analysis of these experiences and cross-learning should be encouraged;

**#3: Other medical personnel can also be recruited:** Respondents were of the opinion that where necessary, other personnel trained in medical and health professions can also be recruited. Those include medical interns, laboratory scientists, pharmacists, postdocs, research personnel and professional teaching staff. However, some of these may not be in the government payroll and mechanisms for engaging them especially from the private sector should be developed.

**#4: 'Students mobilization strategies' are currently not part of the National Epidemic Preparedness Plans:** While most countries have 'overall epidemic preparedness plans', mobilization of undergraduate medical and health students is not part of those plans.

**#5: Students have important roles in the emergency response:** Respondents are of the opinion that apart from doing what the students are specializing in, they can also be involved in: (i) case identification (including screening); (ii) case management; (iii) sample collection and analysis; and (iv) offering preventive services (such as public health education /awareness and distribution of awareness campaign material).

**#6: Countries need comprehensive student mobilization plans to be used even in the future:** Apart from Tanzania most interviewed countries do not have the scheme elaborated. An effective scheme will address issues related to recruitment procedures, training, compensation (rates, mechanisms and who pays) and other logistics. It should also explain what students will do after the emergency, especially if it lasts for long. Currently, all students are expected to just continue with studies after the emergency when colleges are opened. There are no special arrangements for them.

**#7: Compensation for students once mobilized for an emergency role is currently not clear:** Regarding compensation, respondents mentioned the following scenarios:

<sup>1</sup> Tackling Infections to Benefit Africa (TIBA) ([www.tiba-partnership.org](http://www.tiba-partnership.org))

<sup>2</sup> European Centre for Disease Prevention and Control. Guidance for health system contingency planning during

widespread transmission of SARS-CoV-2 with high impact on healthcare services. Stockholm: ECDC; 2020 <https://www.drugsandalcohol.ie/31746/1/COVID-19-guidance-health-systems-contingency-planning.pdf>

- a) **It is not known but it can be worked out:** Botswana explains that the government through different ministers can work out the logistics. But they don't indicate whether the students will be compensated or not;
- b) **They are not paid:** Only the cost of logistics is currently covered. When students are involved in outreach activities, Rwanda pays only for transport, accommodation and meals. In Zimbabwe students are expected to volunteer;
- c) **Are paid in-kind:** According to Sudan students are compensated through supporting their research and lab costs. However, this only works with postgraduates;
- d) **Are compensated based on terms set by the government:** According to Tanzania the rates are per 12 hours and depending on their ranks. The rates range between US\$20 and US\$60 per 12 hours.

Countries can explore these options and establish what works best where.

**#7: There are important things to consider when mobilizing students to work in an emergency situation:** Respondents provided the following advice to institutions interested in developing such a scheme (see Fig.#1):

- \* **Prepare the institutions:** This includes assessing how prepared the institution is, then put biosafety measures in place with strict infection control measures, at personal and institutional levels;
- \* **Train the students:** Train the students on biosecurity and biosafety issues with an emphasis on use of complete PPE. Aim to provide correct knowledge about COVID-19 using different platforms which do not bring them to normal lecture halls. The offered knowledge should focus on aetiology, diagnosis, case suspicion and handling, isolation, sample collection, information transfer about the suspected, managements and preventive measures at health facilities levels and public preventive measures to the general public;
- \* **Ensure there is coordination and build partnerships:** Develop mechanisms for networking with different actors and for ensuring close coordination and support of the Ministry of health. Once recruited, students must be properly supervised and protected; and
- \* **Educate the public:** Implement preventive health education on a wider scale through awareness campaign in order to reduce the infections so that students can be relieved sooner from the emergency roles and be able to resume classes.

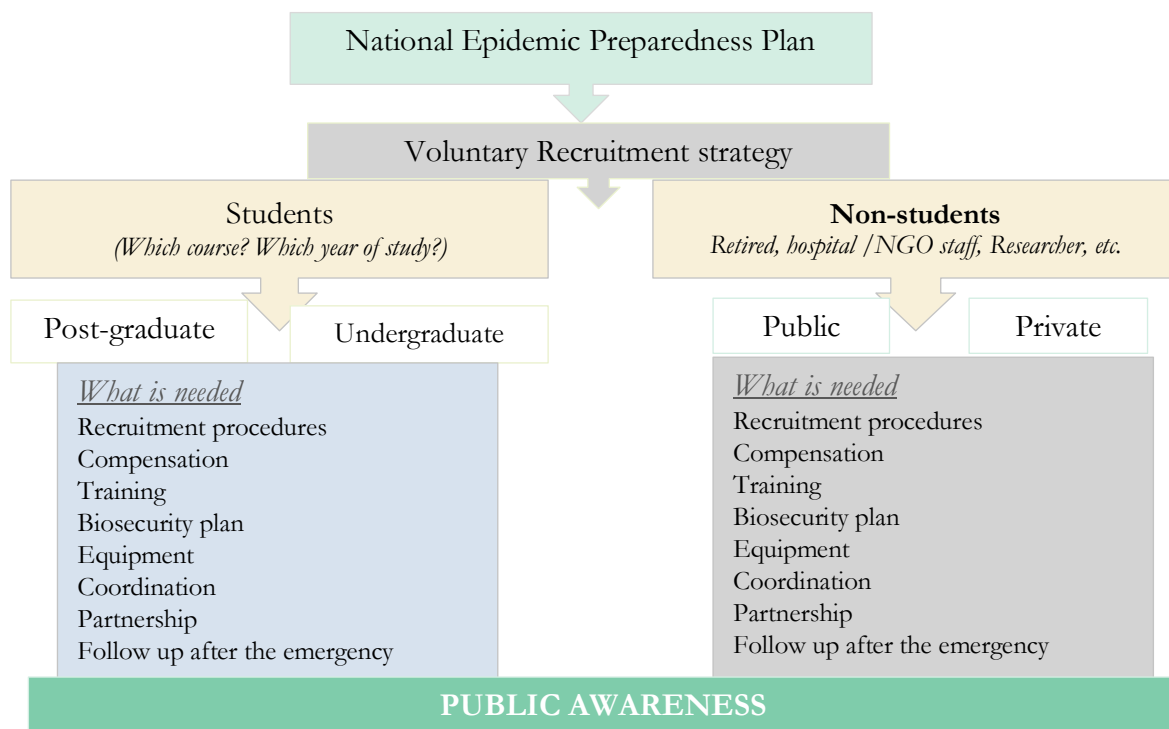


Fig: #1: Voluntary recruitment of emergency responders: Intervention areas

## ANNEX 1: Country responses by questions

### QN1: Does your institution train medical students, nursing students or other health care workers?

Q#1: Does your institution train medical students, nursing students or other health care workers?	
COUNTRY	RESPONSE
Botswana	YES, The University of Botswana – train nursing students, medical students, medical laboratory scientists at both undergraduate and graduate levels.
Ghana	YES
Kenya	KWTRP does not provide formal training for any cadre of health worker or clinician by virtue of not being an academic institution. Nonetheless, we work directly with the county hospital in Kilifi and primarily manage the Paediatric ward in the hospital.
Rwanda	YES.
South Africa	
Sudan	YES.
Tanzania	YES. The Catholic University of Health and Allied Sciences-Bugando, Mwanza, Tanzania, is working collaboration with NIMR in the TIBA Consortium. The University offers undergraduate and postgraduate degree focusing on health Sciences Diploma courses (Diploma in Medical Laboratory Sciences, Diploma in Radiology and Medical Imaging, Diploma in Pharmaceutical Sciences, Diploma in Nursing), (Medical Doctor-MD, Bachelor of Pharmacy, Bachelor of Laboratory Sciences, Bachelor of Sciences in Medical Imaging and Radiology, Bachelor in Nursing), Masters/postgraduate courses (Masters in Public Health, Master in Medicine-Internal medicine, Paediatrics and child health, Surgery, Orthopaedics).
Uganda	YES
Zimbabwe	YES. As a University College of Health Sciences, we do.

### QN2: Is there provision for your students to be mobilized during a public health emergency?

Q#2: Is there provision for your students to be mobilised during a public health emergency?	
COUNTRY	RESPONSE
Botswana	Undergraduate students won't be involved but Post Graduate students may be involved.
Ghana	YES.
Kenya	No answer.
Rwanda	This may happen as part of an outreach activity.
South Africa	
Sudan	YES.
Tanzania	YES. During any epidemics whenever health workers are needed to add workforce in the pool, the university gives permission for students to participate. Example, students have been participating in mass drug administration campaigns against schistosomiasis in remote hard to reach areas in a form of campaigns or part of the community fieldwork.
Uganda	YES
Zimbabwe	YES

**QN3: Are there plans for this to happen during the COVID-19 emergency?**

Q#3: Are there plans for this to happen during the COVID-19 emergency?	
COUNTRY	RESPONSE
Botswana	YES, the plan is in place.
Ghana	NO. There has not been the need because there are only few cases.
Kenya	Our clinicians have been involved in developing the overall epidemic preparedness plan of the county. In addition, a number of our researchers work closely with the national government as part of various advisory teams on universal health coverage and are now focusing their attention on the preparedness of the health system at national level.
Rwanda	NO. This is because students have been sent home as the University hostels are closed. However, before the closure, some final year medical students were independently involved at airport screening.
South Africa	
Sudan	YES.
Tanzania	YES. Currently, the university is adhering to government directives and at present, university students have been directed to vacate the university premises especially those taking Diploma and undergraduate courses. Masters students, those in-residence programme will remain to add on the workforce in case any need will arise.
Uganda	YES.
Zimbabwe	YES.

**QN4: How many students are/might be involved?**

Q#4: How many students are/might be involved?	
COUNTRY	RESPONSE
Botswana	The majority of our post graduate students are part time students and employed by the Ministry of Health and Private Sector, so they will be in the national plans like all other health workers. A few who are on full time training may be called when need arise and would have to go through emergency response training first.
Ghana	Not applicable.
Kenya	
Rwanda	Not applicable.
South Africa	
Sudan	Ten (10) students.
Tanzania	The University has a total of 70 residents remaining in the university and the hospital, depending on the need and request from the government, this number is available for any call to help in the COVID-19 outbreak.
Uganda	Not sure.
Zimbabwe	At least 50 students.

**QN5: What role will the students play?**

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COUNTRY	RESPONSE
Botswana	These are qualified registered nurses and midwives, regarding the role they would play would be determined by the emergency response team. The MMED are also qualified medical officers doing their specialization. Both nurses and doctors will be assuming their roles as per protocols.
Ghana	Not applicable.
Kenya	
Rwanda	Not applicable.
South Africa	
Sudan	Sample collection and analysis.
Tanzania	The residence group is made up of qualified medical doctors, the group will be available for case identification, preventive services, case management, sample collection, and offering public health preventive education to the public.
Uganda	Public awareness.
Zimbabwe	Health education, distribution of awareness campaign material.

**QN6: What arrangements are in place for continuing their studies after the emergency?**

Q#6: What arrangements are in place for continuing their studies after the emergency?	
COUNTRY	RESPONSE
Botswana	Like all health workers who will be involved in the emergency response, after the emergency everybody resume their normal duties or activities. Plans have been put in place to provide emotional support to frontline health workers during this pandemic hope. Training is ongoing.
Ghana	Not applicable.
Kenya	No response.
Rwanda	Not applicable.
South Africa	No Response.
Sudan	The students are working on their post graduate degrees and will continue their studies.
Tanzania	For students who are currently outside the university will wait for government directives and for the resident doctors, they will continue with their studies as per arrangement within the respective department after the emergency.
Uganda	Continue with studies.
Zimbabwe	The University is aiming at suspending classes and reopening after the emergency where students will continue with their studies.

**QN7: How are the students paid or otherwise compensated for their time?**

Q#7: How are the students paid or otherwise compensated for their time?	
COUNTRY	RESPONSE
Botswana	The University of Botswana, the Ministry of Health and Wellness and the Ministry of Tertiary Education, Research, Science and Technology work together on logistics of execution of the response plan.
Ghana	Not applicable.
Kenya	No response.
Rwanda	When students are involved in outreach activities, they are usually not paid but transport, accommodation and meals are covered for them.
South Africa	No response.
Sudan	Financial compensation is provided to support their thesis research such as provision of support for field work and lab supplies. A few are financially support by cash payment.
Tanzania	The compensation of the students is paid as per government guidelines. For resident doctors, they receive US\$ 40 – US\$ 60 for 12 hours of working. Undergraduate and diploma students receive US\$ 20-US\$ 30 for 12 hours of working.
Uganda	No response.

Zimbabwe	Difficult to answer but most students will do voluntary work.
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**QN8: Do you have any other cadres of people that could assist during an emergency?**

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COUNTRY	RESPONSE
Botswana	YES, Medical Laboratory personnel & Pharmacists.
Ghana	Research personnel are helping with testing samples and sequencing positive samples.
Kenya	No response
Rwanda	Professional teaching staff
South Africa	No response
Sudan	YES, we have MD and Ph.D. trained personnel who are working as post doctors.
Tanzania	YES, Intern- medical doctors, laboratory scientists, pharmacists and nurses. The other groups are clinicians with diploma in clinical medicine, nurses with diploma in nursing, can help during this emergency. This group may not within the government payroll but available at any time when needed.
Uganda	YES.
Zimbabwe	All health professionals in the country are expected to contribute.

**QN9: Have you any advice to other institutions thinking of implementing a similar scheme?**

**Q#9: Have you any advice to other institutions thinking of implementing a similar scheme?**

COUNTRY	RESPONSE
Botswana	YES, just to emphasise training on use of complete PPE and very strict infection control measures, at personal level and at institutional level.
Ghana	Not applicable.
Kenya	No response.
Rwanda	No response.
South Africa	No response.
Sudan	<ul style="list-style-type: none"> <li>• Biosecurity and biosafety training are needed;</li> <li>• Networking with stakeholders;</li> <li>• Close coordination and support of the Ministry of health;</li> <li>• Community awareness.</li> </ul>
Tanzania	The most important is to plan for offering correct knowledge about COVID-19 to students using different platforms which do not bring them to normal lecture halls. The offered knowledge should focus on aetiology, diagnosis, case suspicion and handling, isolation, sample collection, information transfer about the suspected, managements and preventive measures at health facilities levels and public preventive measures to the general public.
Uganda	Have biosafety measures in place.
Zimbabwe	<ul style="list-style-type: none"> <li>• Assess the preparedness level of the institutions;</li> <li>• Put biosafety measures in place;</li> <li>• Implement preventive health education on a wider scale through awareness campaign.</li> </ul>