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Considerations for stakeholder engagement and COVID-19 related clinical trials' conduct in sub-Saharan Africa

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ABSTRACT

The aim of this study is to determine how stakeholder engagement can be adapted for the conduct of COVID-19-related clinical trials in sub-Saharan Africa. Nine essential stakeholder engagement practices were reviewed: formative research; stakeholder engagement plan; communications and issues management plan; protocol development; informed consent process; standard of prevention for vaccine research and standard of care for treatment research; policies on trial-related physical, psychological, financial, and/or social harms; trial accrual, follow-up, exit trial closure and results dissemination; and post-trial access to trial products or procedures. The norms, values, and practices of collectivist societies in Sub-Saharan Africa and the low research literacy pose challenges to the conduct of clinical trials. Civil-society organizations, members of community advisory boards and ethics committees, young persons, COVID-19 survivors, researchers, government, and the private sector are assets for the implementation and translation of COVID-19 related clinical trials. Adapting ethics guidelines to the socio-cultural context of the region can facilitate achieving the aim of stakeholder engagement.

KEYWORDS

SAR-COV-2, COVID-19, GPP-EP, sub-Saharan Africa, stakeholder engagement

1 | INTRODUCTION

The number of clinical trials to be conducted in sub-Saharan Africa after the current COVID-19 pandemic likely will grow exponentially. As of 2nd of June 2020, eight countries – Gambia, Nigeria, Senegal, South Africa, Sudan and Zambia – in sub-Saharan Africa had registered 53 COVID-19-related clinical trials of Bacille Calmette Guerin vaccine, chloroquine, hydroxychloroquine, antiretrovirals, and Remdesivir.[1] As of May 28, 2020, 224 COVID-19 treatment and 145 COVID-19 vaccine research programs were underway, with some countries in sub-Saharan Africa conducting phase 2 and/or phase 3 trials.[2] Lessons learnt from the successful implementation of HIV prevention and treatment clinical trials,[3] the successful clinical trials conducted during the West Africa Ebola epidemic,[4] and the COVID-

[1]Clinicaltrial.gov. COVID-19 vaccine studies. Retrieved June 6, 2020, from https://clinicaltrials.gov/ct2/results?cond=COVID-19&term=Vaccine&cntry=&state=&city=&dist=.

[2]Milken Institute. (2020). COVID-19 treatment and vaccine tracker. Retrieved May 29, 2020, from https://milkeninstitute.org/covid-19-tracker; Wealth Management. (2020, 17 April). The hunt for COVID-19 treatments and vaccines. Retrieved May 28, 2020, from https://www.rbcwealthmanagement.com/gb/en/research-insights/the-hunt-for-covid-19-treatments-and-vaccine/detail/.

[3]Baker, L-G., & Mizrahi, V. (2020). COVID-19 research in Africa. Science. 368(6494), 919.

[4]Henao-Restrepo. A.M., Camacho, A., Longini, I.M., et al. (2017). Efficacy and effectiveness of an rVSV-vectored vaccine in preventing Ebola virus disease: final results from the Guinea ring vaccination, open-label, cluster-randomised trial (Ebola Ça Suffit!). Lancet. 389(10068), 504; Dunning, J., Sahr, F., Rojek, A., et al. (2016). Experimental Treatment of Ebola Virus Disease with TKM-130803: A Single-Arm Phase 2 Clinical Trial. PLoS Med. 13(4), e1001997. Sissoko, D., Laouenan, C., Folkesson, E., et al. ; JIKI Study Group. (2016). Experimental treatment with favipiravir for Ebola virus disease (the JIKI Trial): a historically controlled, single-arm proof-of-concept trial in Guinea. PLoS Med. 3, e1001967.

19-related clinical trials will likely pave the way for more clinical trials of national and regional importance.

There is a critical need for competency to conduct clinical trials in sub-Saharan Africa because the biological, economic, and sociopolitical factors associated with the emergence of diseases, epidemics, and pandemics are overrepresented in many countries of the region.[5] Biological factors include human susceptibility to infection, microbial adaptation and change, and changes in ecosystems. Economic and sociopolitical factors include changing human demographics and behavior; economic development and land use, as noticed with transitioning economies; international travel and commerce; breakdown of public health systems and measures; poverty and social inequality; and war and famine. Over 1770 outbreaks/epidemics of 38 known and 2 unknown diseases were reported in the 5250 administrative units in Africa between 1970 and 2016.[6] Those outbreaks include diseases with no known treatment and/or preventive vaccines, e.g., Lassa, Crimean Congo, Marburg, Rift Valley fever, Dengue, West Nile virus, Chikungunya, Zika virus, and plague. Lessons learnt from the COVID-19-related clinical trials will likely inform the design and implementation of clinical trials of therapies and vaccines for pathogens that are responsible for causing these outbreaks/epidemics.

Pandemics and epidemics of international concern often require vaccines for public health prevention and concurrent treatment to reduce the morbidity and mortality of persons affected. Ethical considerations require that research conducted during epidemics be integrated into the national emergency response in ways that do not draw away critical resources, with further negative impact of the epidemic on trade, tourism, national security, gross domestic product, developmental indicators, and citizen well-being.[7] The research should also have scientific and social value: respect for the rights and dignity of study participants and their welfare should be a core concern. The research also should have a favorable risk-benefit balance: there should be justice in the distribution of benefits and burdens, and post-trial access to tested agents that had been proven effective should be ensured and community engagement facilitated.[8]

Ethically the rigor of and scientifically valid clinical trials must be continued during epidemics. Active stakeholder engagement may reduce this risk, as illustrated with HIV,[9] malaria, tuberculosis, genetics and genomics, mental health, biobanks and nanotechnology research.[10] Critical factors stemming from stakeholder engagement include prompt translation of research findings into policies and programs, and the fostering of collaborative partnership and social value of the study for the participant communities.[11]

The Good Participatory Practice Guidelines for Emerging Pathogens (GPP-EP) provides guidance for developing systems that can guide stakeholder engagement in the design, financing, and implementation of prevention and treatment trials during health emergencies. The guidelines recognize that stakeholder engagement in the clinical trials could strengthen the epidemic response, and[12] stakeholder engagement in research conducted during epidemics is an ethical imperative. A collaborative approach to research blends the lived experiences and expertise of interested laypersons with the expertise of the research enterprise, the power of policymakers, and rigorous science. As we have argued elsewhere,[13] stakeholder engagement in the design and implementation of trials during epidemics is an ethical imperative; the urgency to respond to emergencies and the nature of these emergencies should not preclude engaging stakeholders in the design, implementation, and monitoring of clinical trials.

This study reviews application of the nine essential stakeholder engagement practices enumerated in the GPP-EP when planning COVID-19-related clinical trials in sub-Saharan Africa. It also discusses how to lessen the gaps identified and makes recommendations on facilitating adherence to the guidelines.

2 | GOOD PARTICIPATORY PRACTICES GUIDELINES FOR CLINICAL TRIALS DURING COVID-19 PANDEMIC

Formative research is required to be conducted by the research team for formal collection of information on the sociocultural norms, practices, perceptions, traditions, and local history of research that may influence the recruitment and retention of community members as study participants.[14] The fears, myths, and misconceptions about COVID-19 make the conduct of formative research an important pre-requisite for the planning and implementation of clinical trials. Misinformation about COVID-19 vaccine trials is rife in the region, and it may be a barrier to the recruitment and retention of study participants. There is

[5]Fenollar, F., & Mediannikov, O. (2018). Emerging infectious diseases in Africa in the 21st century. New Microbes New Infect. 26, S10–S18.

[6]World Health Organization. Regional Office for Africa. ([2016]). Mapping the risk and distribution of epidemics in the WHO African Region: a technical report. World Health Organization. Regional Office for Africa. Retrieved May 30, 2020, from https://apps.who.int/iris/handle/10665/206560.

[7]World Health Organization. (2016). Good participatory practice guidelines for trials of emerging (and re-emerging) pathogens that are likely to cause severe outbreaks in the near future and for which few or no medical countermeasures exist (GPP-EP). World Health Organisation, Geneva.

[8]Edwards, K.M., & Kochhar, S. (2020). Ethics of Conducting Clinical Research in an Outbreak Setting. Annu Rev Virol. https://doi.org/10.1146/annurev-virology-013120-013123.

[9]West Slevin, K., Ukpong, M., & Heise, L. (2008). Community Engagement in HIV Prevention Trials: Evolution of the Field and Opportunities for Growth. Aids2031 Science and Technology Working Group, No 11; Philpott. S., Heise, L., McGrory, E., et al. The challenge of defining standards of prevention in HIV prevention trials. J Med Ethics https://doi.org/10.1136/jme.2010.037176.

[10]Gesell, S.B., Klein, K.P., Halladay, J., et al. (2017). Methods guiding stakeholder engagement in planning a pragmatic study on changing stroke systems of care. J Clin Transl Sci. 1(2), 121-128.

[11]Reynolds, L., & Sariola, S. (2018). The ethics and politics of community engagement in global health research. Critical Public Health. 28(3), 2570268.

[12]World Health Organization, op. cit. note 7.

[13]Folayan, M.O., Allman, D., Haire, B., et al. (2018). Considerations for community engagement when conducting clinical trials during infectious disease emergencies in West Africa. Dev World Bioeth. 1–10.

[14]Folayan, M.O., & Haire, B. (2016). History, culture and social norms: implications for ebola drug and vaccine clinical trials in affected region. In: Ebola's Message: Public Health and Medicine in the 21st Century. MIT Press; World Health Organization, op. cit. note 7.

misinformed fear that the rapid development of a vaccine could compromise the safety of any vaccine developed;[15] conspiracy theories that the vaccine would be used for human population control;[16] and backlash from racist comments made by two French researchers.[17] Understanding how these fears, myths, and misconceptions may disrupt study implementation, and how to address them (message and medium), is critically important in sub-Saharan Africa, where research literacy is low.[18]

A stakeholder engagement plan and a communications and issues management plan developed by the research team, should be based on the findings of the formative research. These plans aim to consolidate and promote relationships with a broad range of local, national, and international stakeholders such as members of representative organizations of populations eligible for the clinical trials, community leaders at clinical trial sites, civil society organizations and policy makers. The plan creates a supportive and conducive environment for the conduct of trials; and anticipate and address issues that may arise during the trials. Research teams that plan to implement COVID-19-related clinical trials in sub-Saharan Africa should use audiovisuals, rather than pure text, to build literacy about COVID-19 clinical trials.

The stakeholder and communication management plan for COVID-19-related clinical trials will need to be developed through close collaboration between community stakeholders and the risk-communication and community engagement programmers for the COVID-19 response in the countries hosting the trials. Whereas the programmers are invested in educating the public about COVID-19 control, stakeholder and communication management for trials should be focused on education about the trial. It is important to work closely with the risk-communication and community engagement programmers to ensure that the COVID-19-related messages align with and jointly promote an optimal public-health response. The research and public health team, working in tandem to achieve the national goal, must also ensure that communication about research is clear, so that the research is not mis-assumed to be a public health program.

The stakeholder engagement and communications plan should focus on building a relationship of clear accountability in communities where the research will be conducted, and not focus on the more nebulous process of building trust. While trust is a core value when planning and conducting collaborative research[19] and is a goal to pursue through stakeholder engagement,[20] it is difficult to define and even more difficult to monitor and document. Trust takes time to build, can be breached, and cannot be monitored objectively. At a time like this, measures to ensure that research teams are transparent and accountable to research plans and commitments are important. Transparency and accountability are important in sub-Saharan Africa, where ethics guidelines are limited in their ability to address power inequalities that lead to voice erasures and respect for local competencies.[21] Advocates and civil-society organizations can facilitate stakeholder engagement and communication management in ways that empower community members to work with researchers, monitor research practices,[22] and prevent crisis in communicating the results of clinical trials.[23]

Protocol development by the research team should be shaped by the findings from formative research with stakeholders. These findings should shape the rationale, objectives, design, methodology, statistical considerations, ethical considerations, and implementation of the trial.[24] Cultural norms and practices must determine the design and conduct of clinical trials. The importance of cultural considerations in protocol development are highlighted by the debates that occurred during the conduct of clinical trials of vaccines and treatment of Ebola, and of the resolution that a placebo-controlled randomized clinical trial, though scientifically rigorous, was not appropriate for a collectivist society like that of West Africa. During the Ebola outbreak, it was agreed that offering experimental therapy for some community members and a placebo to others, when they all faced the same risk of death, was not acceptable. In a communal society with collective values, a clinical trial that randomizes individuals within the same community to different arms of a clinical trial may be considered as pitting individuals against each other; this situation is especially problematic in the face of a deadly epidemic.[25] The step-wise design of the Ebola ca Suffit (or 'ring') vaccine clinical

[15]Royal Society for Public Health. (2020, 17 April). One in five public unsure about getting coronavirus vaccine, if available. Retrieved May 28, 2020, from https://www.rsph.org.uk/about-us/news/one-in-five-public-unsure-about-getting-coronavirus-vaccine-if-available.html.

[16]Lee, B.L. (2020). Bill Gates Is Now A Target Of COVID-19 Coronavirus Conspiracy Theories. Forbes. Retrieved May 28, 2020, from https://www.forbes.com/sites/brucelee/2020/04/19/bill-gates-is-now-a-target-of-covid-19-coronavirus-conspiracy-theories/.

[17]SciDevNet. (2020). COVID-19 trials at risk after Africa 'racism' backlash. Retrieved May 28, 2020, from https://www.scidev.net/global/health/news/covid-19-trials-at-risk-after-africa-racism-backlash.html; QuartzAfrica. (2020, 26 April). African scientists must make sure they are part of the search for a coronavirus vaccine. Retrieved May 28, 2020, from https://qz.com/africa/1845883/african-scientists-must-take-part-in-coronavirus-vaccine-research/; Africa CDC. (2020, 9 April). Statement of the Africa CDC on the Potential Clinical Trial of a Tuberculosis Vaccine Protective Against COVID-19 in Africa. Retrieved May 28, 2020, from https://africacdc.org/news-item/statement-of-the-africa-centres-for-disease-control-and-prevention-on-the-potential-clinical-trial-of-a-tuberculosis-vaccine-protective-against-covid-19-in-africa/.

[18]Afolabi, M.O., Okebe, J.U., McGrath, N., et al. (2014). Informed consent comprehension in African research settings. Tropical Medicine & International Health, 19 (6), 625-642.

[19]Kerasidou, A. (2017). Trust me, I'm a researcher!: The role of trust in biomedical research. Med Health Care Philos. 20(1), 43–50.

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[21]Folayan, M.O., & Peterson, K. (2020). HIV prevention clinical trials' community engagement guidelines: inequality, and ethical conflicts. Global Bioethics.

[22]Folayan, M.O., Nganga, J., Mburu, R., et al. (2020). Stakeholders' engagement and advocates' role in biomedical HIV prevention clinical trials – perspectives of advocates working in Africa. Pan African Journal of Medicine (21144-57112019301149).

[23]Robinson, E.T., Baron, D., Heise, L.L., et al. (No date). Communications Handbook for Clinical Trials: Strategies, Tips, and Tools to Manage Controversy, Convey Your Message, and Disseminate Results. FHI 360.

[24]World Health Organization, op. cit. note 7.

[25]Akkuş, B., Postmes, T., & Stroebe, K. (2017). Community Collectivism: A social dynamic approach to conceptualizing culture. PLoS ONE. 12(9), e0185725; Zvonareva, O., Engel, N., Ross, E., et al. (2005). Engaging diverse social and cultural worlds: perspectives on benefits in international clinical research from South African communities. Developing World Bioethics. 15, 8-17.

trial was rigorous enough to contribute data towards the vaccine licensure, yet did not take away communal access to the experimental product during the life of the intervention.[26] Early and meaningful engagement of community members to make what seems like difficult decisions about a clinical trial is possible,[27] and this important involvement is needed before the protocol is finalized.[28]

The informed consent process requires that study participants fully understand the information needed for them to decide whether to participate in research, which must be free of coercion, undue influence or inducement, or intimidation.[29] A key consideration in the informed consent process in sub-Saharan Africa, is the engagement of third parties, who are important in the decision-making processes of individuals – husbands, mothers-in-law, community leaders.[30] While care should be taken to ensure that this decision making does not undermine the autonomy of women and young people, not planning for third-party consent could be a major encumbrance for research conducted in sub-Saharan Africa; permission of third-party figures should be sought where needed for recruitment into trials. The permission should, however, not preclude obtaining informed consent from study participants.[31] Care should be taken that the third party does not coerce participation of another person or persons. Consideration should be given also to facilitating the participation of eligible participants who are willing to give consent to study participation in the absence of permission from third-party figures. The informed consent document and process are best developed in collaboration with community representatives to ensure that community nuances are taken into consideration.

Standard of prevention for vaccine research and standard of care for treatment research are critical to ensure that study participants have equal access to the best-proven standard.[32] This is a thorny issue for a novel pandemic like COVID-19 since it is a new disease with no standard of prevention (other than public health measures) and care (other than intensive supportive care). In the absence of standardized regimens, the management of COVID-19 patients has been pragmatic and individualized. The standard prevention package consists of washing hands with soap and running water for at least 20 seconds or use of hand sanitizer that contains at least 60% alcohol, where soap and water are not available; avoiding touching of eyes, nose, and mouth; physical distancing of at least 6 feet (2 meters); avoiding crowds and high- risk individuals; covering cough and sneezes; and covering mouth and nose with a facemask.[33] The standard of prevention package for healthcare workers and home-based carers involved in pre-and or post-exposure prophylaxis trials should include personal protective equipment. Standards of prevention and care packages for trial participants should be negotiated with community members while the protocol is being developed, and consensus should be reached on what is the best study based on evolving evidence.[34] It is also important that the trial be flexible enough to make changes to these standards as research evidence evolves. The Phambili HIV vaccine clinical trial is a best practice in this respect: its prevention package included medical male circumcision for study participants as soon as evidence emerges of its effectiveness.[35] Access to prevention and care packages for partners and family members also is important, as the risk for family members becoming infected during a vaccine trial, if the study participants become infected, is high.[36] For sub-Saharan Africa, it is important to have ancillary care available for study participants who may have fever but are screened out of participating in COVID-19 treatment trials. Research protocols should explicitly highlight consensus reached with stakeholders on the access of study participants to ancillary care and where possible, the report of the meeting with stakeholders on the decision-making process submitted along with the research protocol for ethics committee consideration.

Policies on trial-related physical, psychological, financial, and/or social harms should be negotiated with attention paid to individuals or groups who may be vulnerable, marginalized, and/or stigmatized.[37] When the protocol is being developed, researchers and stakeholders should discuss the responsibilities of local health institutions and the commitments of trial sponsors and implementers to finance trial-related disability. The health systems in many countries in sub-Saharan Africa are weak,[38] with difficulties in meeting the care needs of COVID-19 trial participants who may have trial-related injuries, including social and psychological harm. The implications of positive viral antibody tests for individuals who participate in COVID-19 vaccine trials should be discussed. Also, if COVID-19 immunity passports become operational,[39] their implication for the overwhelming interest in research to acquire immunity will have to be considered, The implications for health insurance and third party trial-related injuries also should be discussed.

[26] Haire, B.G., & Folayan, M.O. (2016). Ebola "ring" vaccine trial was ethically innovative. Am J Public Health. 106(9), e1.

[27] Folayan, M.O., Haire, B., Allman, D., et al. (2018). Research priorities during infectious disease emergencies in West Africa. BMC Research Notes. 11(1), 159.

[28] World Health Organization, op. cit. note 7.

[29] World Health Organization, op. cit. note 7.

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[32] World Health Organization, op. cit. note 7.

[33] Centre for Disease Control and Prevention. (2020, 24 April). How to protect yourself and others. Retrieved June 6, 2020, from https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html.

[34] Haire, B., Folayan, M.O., Hankins, C., et al. (2013). Ethical considerations in determining standard of prevention packages for HIV prevention trials: Examining PrEP. Developing World Bioethics. 13(2), 87-94.

[35] De Bruyn, G., Melisana, K, Metch B. (2009). P14-07. Offering new prevention modalities in HIV vaccine trials: experience with male circumcision in the Phambili trial. Retrovirology. 6: P195.

[36] World Health Organization, op. cit. note 7.

[37] World Health Organization, op. cit. note 7.

[38] Kirigia, J.M., & Barry, S.P. (2008). Health challenges in Africa and the way forward. Int Arch Med. 1(1), 27.

[39] Phelan, A.L. (2020). COVID-19 immunity passports and vaccination certificates: scientific, equitable, and legal challenges. Lancet. 395(10237), 1595-1598.

Trial accrual, follow-up, exit trial closure, results dissemination, and post-trial access to trial products or procedures should be discussed with stakeholders, who can provide pertinent information on how to design socially and culturally acceptable strategies.[40] Plans for disseminating the results of trials and strategies to manage expectations about trial results should be laid. Lessons from research on biomedical HIV prevention have shown how planning for the dissemination of trial results to stakeholders can endear continued public support for the research, despite multiple failures. At trial closure, community members are taken through possible trial outcomes, open discussions about the implications of the results are held, and consensus is reached on the next line of action. This approach has helped prevent the proliferation of negative stories about failed HIV prevention trials and, rather, helped maintain support for investment in trials.[41] For COVID-19, agreement on post-trial access to products or diagnostics – produced with the national government as a stakeholder – are critical and pertinent, as the region has no manufacturing capacity for these items. Access to effective products can be a challenge for countries in sub-Saharan Africa when there is a crisis of demand, as there may be for COVID-19 diagnostic tools, which are not produced in Africa.[42] Discussions with government may facilitate planning for production of study products in collaboration with regional partners, international stakeholders, and the Africa Centers for Disease Control and Prevention. Many countries are preparing to manufacture COVID-19 vaccines, but with little of the discussions emanating from Africa.

3 | DISCUSSION

The nine essential stakeholder engagement practices enumerated in the GPP-EP are applicable to the planning and conduct of COVID-19-related clinical trials in sub-Saharan Africa, but the culture of the societies in the region may require adapting the practices while in the field. The collectivism/communitarian nature of the societies will influence the choice of clinical trial design; considerations for informed consenting; the development of stakeholder engagement; communications and issues management plan; and decisions about third-party access to standard of care and/or prevention. Policies on the management of trial-related physical, psychological, financial, and/or social harms should recognize the limited access of trial participants to health insurance and the limited capability of the region's weak public and clinical health systems to deal with these challenges. Finally, the procedures of trial closure, dissemination of results, and post-trial access to trial products or procedures can benefit from the biomedical HIV prevention and treatment research on managing expectations for results; plans must be made upfront for post-trial access to trial products. The formative research will help identify cultural 'landmines' that should be negotiated when planning COVID-19-related clinical trials in sub-Saharan Africa, and stakeholder engagement prior to conclusion of the study protocols will help reach consensus on trial implementation.

Although Ethics Committees can play important roles in facilitating community engagement, they cannot be a means to an end in promoting community engagement in COVID-19 research in Sub-Saharan Africa. Competencies of ethics committees in many countries in the region for protocol review and monitoring are weak, and access to regular training is poor.[43] The risk for erasure of community voices is high, since researchers are the ones who interact with the ethics committee.[44] The power imbalance between researchers and community members in sub-Saharan Africa makes voice erasure possible.

Community monitoring of clinical trials, including COVID-19 trials, should therefore be encouraged. Through community monitoring, community members collect and analyze data about the clinical trial being implemented and use the information to advocate for change if it is needed. The community monitoring will help fill the gap created by the inability of ethics committees to conduct field monitoring of clinical trials. Many civil societies in Africa have developed competencies to conduct community-led monitoring programs for HIV, tuberculosis, and malaria programs in the region.[45] This civil-society role should be applied to the monitoring of COVID-19 clinical trials, but it is not discussed in the GPP-EP, nor was it identified in the primary reference document for the GPP-EP. Civil-society organizations have, however, shared their interest in performing this role.[46] Support for civil societies to monitor COVID-19 clinical trials and regularly report their findings to ethics committees should enable them to determine that clinical trials are important and should be pursued.

Engagement of civil societies in the conduct of clinical trials should not preclude engagement of community members in the trials. Members' engagement in COVID-19 research will help address the many myths and misconceptions about that research. Efforts must be taken to prevent rumors from impeding well-designed studies. The formation of community advisory boards (CAB), made up of representatives from the communities that are targeted for research and who serve as liaisons between the research team and the community,[47] is a population approach for trials of HIV vaccine and treatment. The CAB can strengthen

[40] World Health Organization, op. cit. note 7.

[41] Hasunira, R. (2010). Community involvement in HIV prevention research: Experiences and perceptions of communities participating in the MDP 301 microbicide trial in Masaka, Uganda. Retrieved June 6, 2020, from https://www.avac.org/sites/default/files/resource-files/CommunityInvolvementinHIVPreventionResearch.pdf.

[42] Nkengasong J. (2020). Let Africa Into the Market for COVID-19 Diagnostics. Nature. DOI: https://doi.org/10.1038/d41586-020-01265-0.

[43] Milford, C., Wassenaar, D., & Slack, C. (2006). Resource and needs of research ethics committees in Africa: preparations for HIV vaccine trials. IRB. 28(2), 1-9.

[44] Folayan, & Peterson, op. cit. note 22.

[45] Healthgaps. (2019). Community led monitoring of health services: building accountability for HIV service quality white paper. Retrieved June 6. 2020, from https://healthgap.org/wp-content/uploads/2020/02/Community-Led-Monitoring-of_Health-Services.pdf.

[46] Adhikari, Pell, & Cheah, op. cit. note 20.

[47] Mlambo, C.K., Vernooij, E., Geut, R., et al. (2019). Experiences from a community advisory Board in the Implementation of early access to ART for all in Eswatini: a qualitative study. BMC Med Ethics. 20, 50.

relationships between researchers and the community;[48] educate community members about the research;[49] and review research protocols, study materials, and informed consent tools, with the aim of ensuring that socio-cultural contexts and concerns are addressed when designing and conducting the studies and disseminating the findings.[50]

The CAB structure has, however, been criticized for many reasons. One is that of inadequate attention to the research literacy needs of the community and lack of legitimacy given to research, regardless of whether the recommendations of the CAB are reflected in the research design and conduct.[51] The CAB may still function as a bridge between the community and the research if its members are designated by the community, not picked by the research team, who often have no allegiance to a community.[52] Also, community education about COVID-19 and the trial should be conducted through channels accessible by the community members and not only by community advisory board members.

Two critical community populations who should be members of the board are COVID-19 survivors and representatives of youth groups. The median age of the population in Africa is 19.7 years, whereas in China it is 38.4 years, and in Europe it is 43.1 years.[53] The younger persons in Africa could play a significant role in containment of the epidemic (the low risk of young persons to COVID-19 may be responsible for the low incidence and prevalence of COVID-19 in the region).[54] The population of survivors is large enough to provide insight into the design of trials. As of May 30, 2020, there were 39,204 COVID-19 survivors in sub-Saharan Africa,[55] and they could be members of CABs for COVID-19 clinical trials, as Ebola survivors were.[56]

Finally, stakeholder engagement should not exclude scientists in the country or region who have experience leading clinical trials during health disasters, such as those involved with the design and implementation of the Ebola ring vaccine trial in West Africa in 2014, which proved a game changer in ending the outbreak. Stakeholders should also include the private sector and philanthropists who have played significant roles in the containment of the COVID-19 pandemic in the region.[57] Africa is not new to the conduct of clinical trials, and it has made successes of many of the clinical trials conducted on the continent through robust stakeholder engagement.[58]

4 | CONCLUSION

Stakeholder engagement in the designing, implementing, monitoring, and disseminating COVID-19 clinical trials is an important ethical consideration for collective societies like those in sub-Saharan Africa, and the stakeholder engagement needs to be promoted and monitored by clinical trial regulators. The GPP-EP is a good framework for guiding stakeholder engagement in COVID-19 clinical trials. Guidelines that are cognizant of the sociocultural context of the region increase the stakeholder engagement. Documented successes with COVID-19 clinical trials will help in achieving stakeholder engagement in future trials to be conducted in the region.

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