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ORIGINAL ARTICLE

Nature and history of the CIOMS International Ethical Guidelines and implications for local implementation: A perspective from East Africa

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Abstract

The theme of the 10th Annual Research Ethics Conference organized by the Uganda National Council for Science and Technology (2018) was "Evolution of Research Ethics in Uganda and the Region: Past, Present and Future". We were asked to address the topic: "The History of CIOMS and the recent changes in the international ethics guidelines: implications for local research". The thrust of the conference was to track progress in ensuring ethical conduct of research, highlight challenges encountered, and to propose strategies for effective and meaningful implementation of international ethical guidelines in local contexts. Consequently, the purpose of this paper is to comment on the implications of the history of CIOMS ethical guidelines and suggest strategies for their effective and meaningful implementation in the East African region, and perhaps the whole of Sub-Saharan Africa. Inferring from the 'evolutionary', 'flexible', and 'general' nature of the CIOMS guidelines, we proposed a six-point strategy for ensuring their effective and meaningful implementation in local contexts. This strategy is in the form of obligations for local research regulators and researchers, the fulfillment of which will go a long way towards their smooth and meaningful implementation in local contexts. These obligations are: ensuring evidence-based adaptation of each individual guideline; ensuring sufficiently judicious and motivated RECs membership; acting proactively to ensure harmony between bioethics and local legal regimes; cultivating a 'bioethics culture' among the public; moving towards regional bioethics governance; and playing an active and meaningful role in future revisions of these guidelines.

KEYWORDS

CIOMS Ethical Guidelines, health-related research, local contexts, bioethics, research ethics

1 | BACKGROUND

Since 2009 it has now become a tradition for the Uganda National Council for Science and Technology (UNCST) and other stakeholder agencies in health-related research in Uganda[1], to convene a conference each year to reflect on a number of ethical issues in the conduct of research, especially health-related research in Uganda and the East African region. Participants are usually mainly drawn from Uganda, Kenya, Rwanda, South Sudan Tanzania, Burundi, and a few more Sub-Saharan African countries outside the East African region.

Abbreviations: ANREC, Annual Research Ethics Conference; CE, Community Engagement; CIOMS, Council for International Organizations of Medical Sciences; CSOs, Civil Society Organizations; EAHRC, The East African Health Research Commission; HRA, Health Research Act; PABIN, The Pan-African Bioethics Initiative; POPIA, Protection of Personal Information Act; RECs, Research Ethics Committees; UNSCT, Uganda National Council for Science and Technology; WHO, World Health Organization.

[1]Uganda National Drug Authority; Uganda National Health Research Organization and the European Developing Countries Clinical Trials Partnerships (EDCTP).

The theme for the 10th Annual Research Ethics Conference (ANREC) held in 2018 was "Evolution of Research Ethics in Uganda and the region: Past, Present and Future"[2]. We (the authors of this paper) were asked to guide participants in reflecting on the history of CIOMS (Council for International Organizations of Medical Sciences) and the recent changes in these international ethical guidelines[3] and their implications for local research. In undertaking this task, we based on the 'evolutionary,' 'flexible', and 'general' nature of these guidelines to propose a six-point strategy for ensuring effective and meaningful implementation of these guidelines in local contexts. This strategy is in the form of obligations for local research regulators and researchers, fulfillment of which, in our opinion, will go a long way towards smooth and meaningful implementation of these guidelines in local contexts. These obligations are, 1) putting more effort on evidence-based adaptation of each individual guideline to ensure they are more local need- and cultural-sensitive; 2) ensuring sufficiently judicious and motivated Research Ethics Committees (RECs) membership; 3) ensuring harmony between bioethics and local legal regimes to enable continuous and smooth conduct of research, especially international collaborative health research; 4) cultivating a 'bioethics culture' among the general public to facilitate wide compliance with the ethical norms of research; 5) moving towards regional bioethics governance; and, 6) playing an active and meaningful role in future revisions of these guidelines. To do this, we reflect on the history of CIOMS ethical guidelines for health research and their nature from which we infer our proposed strategy.

In 1982 the CIOMS in conjunction with the World Health Organization (WHO) produced ethical guidelines for health-related research involving human participants, especially in low-resource settings. A more elaborate guidance document, the CIOMS guidelines were issued to complement the ethical principles for medical research involving human subjects issued by the World Medical Association.[4] Since then (1982), the CIOMS guidelines have had at least three substantive revisions making the latest version the fourth in about three and a half decades.[5] It is important to note that the latest revision of CIOMS guidelines came at the peak of calls for context-sensitive and responsive bioethics in Africa in which a number of African authors in this field question the validity and authenticity of Western-conceived ethical principles and norms in Africa.[6] From our study of the history and current nature of the CIOMS ethical guidelines along with the above-cited reactions to them by some African scholars, we observe that misgivings about these guidelines' application in our local contexts are somewhat overstated. In part, it seems, these misgivings are due to these guidelines being categorically described as "universal ethical principles".[7] This claim to universality has for long been, in our view, misinterpreted as their dogmatic outlook, in what has been sometimes regarded as 'ethical imperialism'.[8] Below we provide a brief analysis of this predicate (universal) with intention of easing this misinterpretation. Unfortunately, so far these criticisms have persisted and are widely reflected in recent bioethics scholarly works in Sub-Saharan Africa.[9] This has generally led to worries about the applicability of not only the CIOMS guidelines in non-Western societies as suggested by the theme of this conference, but all other relevant international instruments that play a complementary role to the CIOMS guidelines.[10] However, it is important to note that some recent critical analyses of these views by some authors of African origin and/or inclination and with which we agree, have suggested that these worries could be a consequence of doubtful methodologies employed in assessing the growth of bioethics on the continent.[11] Further, we acknowledge and highly recommend a general framework which has been proposed for understanding and implementing universal research ethics without worry about ethical imperialism or dogmatism.[12]

In addition to the above views, as a backdrop against which our proposed obligations can be appreciated, below we provide a brief analysis of the nature of the latest version of CIOMS guidelines, emphasizing their 'evolutionary' 'flexible' and 'general' nature. Our view is that in the wake of an ever-growing imperative for the decolonization of bioethics in Africa as cited above, a clearer understanding of the nature of the CIOMS guidelines is crucial for the stakeholders in the region, for the sake of smooth, effective and meaningful implementation of these guidelines in local contexts, especially in international collaborative research. Our consequent position is that their temporal and geographical flexibility,

[2]UNCST. Annual National Research Ethics Conference, 2009 to Date. (2019). Retrieved May 30, 2019, from https://www.uncst.go.ug/anrec/#.

[3]WHO & CIOMS. (2016). International ethical guidelines for health-related research involving humans. Geneva: Council for International Organizations of Medical Sciences.

[4]World Medical Association. (2015). Declaration of Helsinki—ethical principles for medical research involving human subjects. 2013. Google Scholar.

[5]WHO & CIOMS. *op. cit.* note 2.

[6]Behrens, K.G. (2013). Towards an indigenous African bioethics. S Afr J Bioeth Law 6(1):32 - 5. https://doi.org/10.7196/SJBL.255; Behrens, K.G. (2017). Hearing sub-Saharan African voices in bioethics. Theor Med Bioeth 38:95 - 9. https://doi.org/10.1007/s11017-017-9406-z; Fayemi, A.K., Macaulay-Adeyelure, O.C. "Decolonizing bioethics in Africa." BEOnline: journal of the West African bioethics training program 3. 2016; 4 (68); Ssebunnya, G.M. (2017). Beyond the Sterility of a Distinct African Bioethics: Addressing the Conceptual Bioethics Lag in Africa. Developing World Bioeth 17(1):22-31; Tangwa, G.B. (2017). Giving voice to African thought in medical research ethics. Theor Med Bioeth 38(2):101-10.

[7]WHO & CIOMS.o*Op. cit.* note 2.

[8]Andoh, C.T. (2011). Bioethics and the challenges to its growth in Africa. Open J. Philos 1(02):67; Angel,l M. (1988). Ethical imperialism? : Mass Medical Soc; Benatar, S.R. (1998). Imperialism, research ethics and global health. J Med Ethics 24(4):221; De Zulueta, P. (2001). Randomised Placebo-controlled trials and HIV-infected Pregnant Women in Developing Countries. Ethical Imperialism or Unethical Exploitation. Bioethics 15(4):289-311; Garrafa, V., Lorenzo, C. (2008). Moral imperialism and multi-centric clinical trials in peripheral countries. Cadernos de Saúde Pública. 24(10):2219-26; Tangwa, G.B. *op. cit.* note 5.

[9]Barugahare, J. (2018). "'Bioethical Realism': A Framework for Implementing Universal Research Ethics. Dev World Bioeth https://doi.org/10.1111/dewb.12207; Metz, T. (2010). An African theory of bioethics: reply to Macpherson and Macklin. Dev World Bioeth 10(3):158-63; Behrens, K.G. Towards an indigenous African bioethics; Behrens, K.G. *op. cit.* note 5; Fayemi, A.K., Macaulay-Adeyelure, O.C. *op. cit.* note 5; Ssebunnya, G.M. *op. cit.* note 5; Tangwa, G.B. Giving. *op. cit.* note 5.

[10]UNESCO. (2005). Universal Declaration on Bioethics and Human Rights; World Medical Association. (2016). Declaration of Taipei on ethical considerations regarding health databases and biobanks; WMA. *op. cit.* note 3;

[11]Barugahare, J. (2018). African bioethics: methodological doubts and insights. BMC Medical Ethics 19(1):98.

[12]Ibid.

imply a number of responsibilities and obligations for local researchers and research regulators, fulfillment of which will go a long way towards their effective and meaningful implementation in local contexts. For clarity, we need to emphasize the concepts of 'meaningfulness', 'effectiveness' and 'temporality'. By 'effective implementation' of the CIOMS ethical guidelines, we mean simple compliance with the various provisions of the guidelines. On the other hand, by 'meaningful implementation' we mean that the guidelines need to be cautiously implemented to the extent that they make their intended impact. For example, such impact can be, respect for communities and their cultural beliefs and norms, ensuring that studies address needs and priorities of communities in which research takes place as well as protection and promotion of other fundamental interests of individual participants, communities and the region at large. On the other hand, describing these guidelines as 'temporal' in nature we intend to underscore their potential for change with, or adaption to new ethical challenges *over time*. Generally, we hope that an appreciation of the flexibility of these guidelines in time and space will go a long way towards easing worries about their applicability in various local contexts.

2 | ANALYSIS

2.1 | Nature of the CIOMS guidelines

In order to identify the implications of the 2016 CIOMS guidelines for local research, it is important to remind oneself of the guidelines' nature as inferred from their history and current tenor. First, the history of their revisions reveals that they are 'evolutionary' or 'temporal' by nature. This temporality can be understood as their mechanism for adapting to new developments as well as addressing continuously emerging ethical concerns. Our view is that the evolutionary nature of these guidelines gives an opportunity to local stakeholders, such as RECs, researchers and research regulators at both national and regional levels, to play a more active and meaningful role in their subsequent revisions. Through this way, they can ensure that the resulting international guidelines address concerns raised during the implementation of the preceding version.

Our second comment is motivated by the implications that can be drawn from misgivings about the authenticity of Western-conceived ethical theories, principles and norms.[13] Some of these misgivings directly imply that at present ethical norms such as the CIOMS guidelines do not offer significant opportunity, if any at all, to accommodate an African voice in the growth of bioethics in Africa.[14] In our view, the point of contention in the debate of applicability of CIOMS guidelines in local contexts is on how these guidelines should be understood. That is, whether they ought to be construed as 'universalistic' to a point of demanding perfectly uniform implementation of the four ethical principles (justice, beneficence, non-maleficence and respect for individual autonomy) in all societies irrespective of differences in existential realities in local contexts; or, as 'general normative statements on how these ethical principles which are widely understood as' "common morality"[15], should be implemented in local contexts. Our discussion favors and illustrates the latter view. In his analysis of the concept of "common morality" Tom L. Beauchamp clarifies that it is possible to "consistently deny universality to some justified moral norms and claim universality for others" since "Universality is located in the common morality and non-universality in other parts of the moral life, called "particular moralities".[16] Our two potential interpretations of the CIOMS guidelines contrasted above, give rise to different implications for local implementation of these guidelines. The former would wrongly imply that the guidelines are meant to *always* dictate specific decisions for local RECs. On the other hand, the latter and our preferred interpretation, implies that the guidelines are of such nature that they allow nuanced implementation of the ethical principles in regulating local research, hence, their geographical flexibility. It is from this understanding that we draw their implications for local research. In what follows, we provide brief evidence of the guidelines' flexibility.

2.1.1 | Temporal flexibility of CIOMS guidelines

The evolutionary nature of the CIOMS ethical guidelines is ascertained from the number of times they have been revised. According to the preface to their current version, "The aim of the guidelines was (and still is) to provide internationally vetted ethical principles and detailed commentary on *how universal ethical principles should be applied*, […]"[17] (our emphasis). However, it is important to note that even though the guidelines themselves have changed a number of times, the four core ethical principles they are intended to promote and protect as listed above, have remained intact. The preface to these guidelines also indicates that this temporal flexibility is partly because of the need to keep at par with other important instruments to which they are complementary, such as the Declaration of Helsinki which has also undergone a number of revisions,[18] the latest version of which being that of 2013.[19] The fact of historical changes in the guidelines in addition to the reasons offered for the latest changes[20], constitute evidence of their evolving character or temporal flexibility. More appreciation of the temporal flexibility of these guidelines comes from acknowledging the constantly changing variables to

[13] Ssebunnya, G.M. *op. cit.* note 5; Tangwa, G.B. *op. cit.* note 5; Andoh, C.T. *op. cit.* note 7; Angell, M. *op. cit.* note 7; Benatar, S.R. *op. cit.* note 7; De Zulueta, P. *op. cit.* note 7; Garrafa, V., Lorenzo, C. *op. cit.* note 7.

[14] Behrens, K.G. *op. cit.* note 5; Tangwa, G.B. *op. cit.* note 5.

[15] Beauchamp, T.L. (2003). A defense of the common morality. Kennedy Inst Ethics J 13(3):259-74.

[16] Ibid. p. 259.

[17] WHO & CIOMS. *op. cit.* note 2:p. viii

[18] Ibid.

[19] World Medical Association. *op. cit.* note 3.

[20] van Delden, J.J., van der Graaf, R. (2017). Revised CIOMS international ethical guidelines for health-related research involving humans. Jama 317(2):135-6; WHO & CIOMS *op. cit.* note 2.

which they are intended to apply; such as changing health needs and challenges that motivate research, as well as constantly evolving science and technology which raise unprecedented and significant ethical concerns. For example, an increase in genetic-related conditions and the availability of effective scientific and technological knowledge, skills and products with which to prevent, diagnose and treat them, has led to an increase in genomics-related research, giving rise to unique ethical worries.[21]

2.1.2 | The Guidelines' geographical flexibility

As opposed to viewing guidelines as too rigid to accommodate voices from local setting during their application, the CIOMS guidelines ought to be understood as 'geographically flexible' in nature. Even though in their preface they are categorically described as "universal ethical principles"[22] they are designed to accommodate local voices during their interpretation and application. Their inherent ability to accommodate local voices is what we call 'geographical flexibility', a feature that is widely implied in their current version, as we will demonstrate below. It is this understanding of the guidelines that potentially allays worries raised about their authenticity and an absence of an African voice in them (guidelines) as seen in works such as: *Giving voice to African thought in medical ethics*[23]; *Hearing sub-Saharan African voices in bioethics*[24]; *Towards an Indigenous African bioethics*[25]; *Decolonizing bioethics in Africa*[26], among many others.

The very concept of 'guidelines' as used to describe these ethical norms for conducting research, should itself be enough to allay worries about these norms' applicability in different cultural and other contexts. This is so because guidelines are not static rules but well-intended recommendations of how certain processes should or could go, assuming other factors constant. However, for emphasis and clarity, we shall briefly demonstrate how the mentioned worries are allayed in other ways, by citing a few examples from these guidelines. First, according to Commentary on Guideline One, "Researchers, sponsors, and research ethics committees and relevant authorities such as the [local] regulators and policy-makers, must ensure that a study has sufficient social value to justify its associated risks, costs and burdens".[27] Further, under Guideline Six, particularly regarding the provision of ancillary care, Commentary to this guideline states that "[…] How to provide ancillary care in this situation is a complex issue and decisions will need to be made on a case-by-case basis following discussions with research ethics committees, clinicians, researchers and representatives of government, and health authorities *in the host country*"[28] (our emphasis). Further evidence of acknowledging the primacy of local context is seen in cautions about local legal regimes. For example, under Guideline Twelve on the *Collection, Storage, and use of Data in Health-related Research*, and particularly Commentary on the *limits of confidentiality*, partly states that the releasing of personal data can be required by law in some jurisdictions. Similar cautions are found in decisions regarding informed consent and virtually each guideline and Commentary to it. Further, and more generally is the new emphasis of the critical importance of 'Community Engagement' in health-related research.[29] One of the explicitly stated reasons for the revision of the guidelines to produce the current (2016) version was to articulate and emphasize the importance of 'Community Engagement' in health-related research.[30] According to CIOMS guidelines 7 "Researchers, sponsors, health authorities and relevant institutions should engage potential participants and communities in a meaningful participatory process that involves them in an early and sustained manner in the design, development, implementation, design of the informed consent process and monitoring of research, and in the dissemination of its results." The intended goals of this process are ensuring respect for the host community's traditions and the norms they share; ensuring the relevance of proposed research to the affected community; to ensure the ethical and social value and outcome of the proposed research; among others.[31] These are some of elements in the guidelines that provide room for the African voice to influence the application of these guidelines in local contexts.

2.1.3 | 'Universality' Vs. 'Generality' of CIOMS guidelines

The clarity of the distinction between the 'universality' and 'generality' of the CIOMS guidelines is important. This is so because one of the major concerns about their authenticity in local contexts seems to be their explicit claim to 'universality'. In our discussion so far we have elected to emphasize the understanding of these guidelines as 'general' as opposed to 'universal', although without denying the universal nature of the principles on which they expound. That is, we distinguish between the universal ethical principles mentioned above, from 'the various normative statements or suggestions (guidelines) on how these

[21] De Vries, J., Bull, S.J., Doumbo, O., et al. (2011). Ethical issues in human genomics research in developing countries. BMC medical ethics 12(1):5; Greely, H.T. (2001). Human genomics research: new challenges for research ethics. Perspectives in Biology and Medicine 44(2):221-9; Gulcher, J.R., Stefansson, K. (1999). Ethics of population genomics research. Nature 400(6742):307; McCarty, C.A., Nair, A., Austin, D.M., Giampietro, P.F. (2007). Informed consent and subject motivation to participate in a large, population-based genomics study: the Marshfield Clinic Personalized Medicine Research Project. Public Health Genomics. 10(1):2-9; McGuire, A.L., Beskow, L.M. (2010). Informed consent in genomics and genetic research. Annual review of genomics and human genetics 11:361-81; Tindana, P., de Vries, J. (2016). Broad consent for genomic research and biobanking: perspectives from low-and middle-income countries. Annual review of genomics and human genetics 17:375-93.

[22] WHO & CIOMS. *op. cit.* note 2:p. viii

[23] Tangwa, G.B. *op. cit.* note 5.

[24] Behrens, K.G. *op. cit.* note 5.

[25] Behrens, K.G. *op. cit.* note 5.

[26] Fayemi, A.K., Macaulay-Adeyelure, O.C. *op. cit.* note 5.

[27] WHO & CIOMS. *op. cit.* note 2.

[28] Ibid.

[29] Ibid. Guideline 7.

[30] Angell, M. *op. cit.* note 7.

[31] WHO & CIOMS. *op. cit.* note 2.

principles ought to, or could be implemented'. This is what it means to say, as we mentioned above, that whereas the guidelines have themselves changed a number of times, the principles they promote have not. However, for emphasis, there is need to reiterate e that in the preface to the 2016 CIOMS guidelines, the guidelines themselves are categorically described as 'universal ethical principles', instead of, in our view, being described as 'guidelines on how to implement universal ethical principles'. These guidelines' claim to universality is further reinforced in Commentary on guideline Two, *Research conducted in low-resource settings*: "[….]. The ethical standards applied should be no less stringent than they would be for research carried out in high-resource settings [….]". This particular guideline and the description of the CIOMS guidelines as "Universal ethical principles"[32] appear to be responsible for the charge of 'ethical imperialism'[33] and the consequent decolonization imperative, specifically among some African bioethicists[34]. In our view, these charges threaten continuous smooth implementation of these guidelines in our local contexts. However, as the examples cited above show, even though the guidelines are intended to ensure upholding of universal ethical principles, the guidelines themselves are flexible normative statements of how, these principles can be protected and, or adhered to.

In everyday speech, sometimes the concepts 'Universal' and 'General' are used interchangeably, as in, for example, when stating requirements everybody must fulfill to qualify for something. In this case, to say that a certain qualification is general is to say that it applies to every candidate without exception; that is, it is a universal requirement. However, our view is that this usage is not the one intended in the context of ethical guidelines. To demonstrate this point, below we identify the *primary connotations* of each of these concepts and point out the possible ways in which each applies to the CIOMS ethical guidelines. To craft this distinction we used insights from the online Merriam Webster Dictionary, according to which the term 'Universal' is defined as "including or *covering all or a whole* collectively or distributively *without limit or exception*"; while 'General' is defined as "relating to, determined by, or *concerned with main elements rather than limited details*" (our emphases). In other words, the key distinction between the concepts 'Universality' and 'Generality' is that the former *always* implies a 'hard generalization', while the latter is more of a 'soft generalization'[35]. Hence, describing CIOMS guidelines as 'universal ethical principles' implies that they are relevant to all societies *without limit or exception*, while the manner of upholding the universal ethical principles they promote and protect partly depends on local nuances as implied in the goals of Community Engagement mentioned above. We need to emphasize that our proposed distinction between the concepts of 'Universality' and 'Generality' as they apply to the *ethical principles* and *ethical guidelines* respectively, is intended to ease worries about ethical imperialism. But, it is possible for some people to argue that even the ethical principles themselves are not universal, and, therefore, our intention in making the above distinction seems to beg the question. We admit that there is not yet consensus on the universality of these ethical principles and we do not have enough space to pursue this debate here. So, our point in this distinction should be appreciated against the backdrop of the assumption that all societies value virtues of respect of persons; justice; no, or minimal harm; and beneficence (the ethical principles), and the only thing that is relative is 'how each of these virtues is defined and implemented' (ethical guidelines).

By and large, without denying the essence of the claim to the 'universality' of the principles on which existing CIOMS ethical guidelines expound[36], the CIOMS guidelines are of such a nature that they are consistent with Nicholas Christakis' contention that in health-related research, "Ethics are local [….]".[37] In his view, the point of bioethics being local is that even though "Western research ethics should apply universally", in order to effectively engage ethical differences across cultures, during their implementation the local perspective ought to take precedence[38]. On the basis of this understanding, a framework has recently been proposed for implementing universal research ethics without worrying about ethical imperialism and the lack of an African voice in existing bioethics norms and theories.[39] In complement to this general framework, and in consideration of comments we have made above about how the CIOMS ethical guidelines ought to be understood, below we state the implication of the history and nature of the CIOMS guidelines for local research in the form of a six-point strategy for their effective and meaningful implementation in the East African region and potentially other local contexts.

3 | DISCUSSION

3.1 | Implications of CIOMS guidelines for local research

From the analysis above, our view is that the CIOMS guidelines for health-related research are a set of *general* and *evolving normative statements* on how to promote and protect universal ethical principles in the conduct of health-related research. Their characteristics

[32] Ibid.

[33] Macklin, R. (1999). International research: Ethical imperialism or ethical pluralism? Accountability in research. 7(1):59-83.

[34] Andoh, C.T. *op. cit.* note 7; Behrens, K.G. *op. cit.* note 5; Behrens, K.G; *op. cit.* note 5; Fayemi, A.K., Macaulay-Adeyelure, O.C. *op. cit.* note 5; Ssebunnya, G.M. *op. cit.* note 5; Tangwa, G.B. *op. cit.* note 5; De Zulueta, P. *op. cit.* note 7.

[35] A hard generalization is one in which the implication is that it is impossible to find exceptions. It uses exclusive quantifiers such as: 'All', 'Always'; 'None', 'Every', 'Never' and the like. On the other hand, a soft generalization is one in which it is possible to find exceptions, but still maintaining good reasons to accept the generalization. The quantifiers used are such as: 'Usually', 'Generally', and other possible ones that simply denote that something is the 'default'.

[36] National Commission for the Proptection of Human Subjects of Biomedicaland Behavioral Research B, Md. The Belmont Report. (1978). Ethical principles and guidelines for the protection of human subjects of research. Superintendent of Documents.

[37] Christakis, N.A. (1992). Ethics are local: engaging cross-cultural variation in the ethics for clinical research. Social science & medicine 35(9):1079-91.

[38] Ibid.

[39] Barugahare, J. *op. cit.* note 8.

make them flexible enough to be smoothly, effectively and meaningfully implemented in our contexts. One of the general implications of acknowledging the universality of the ethical principles that underlie the guidelines is that we have strong moral obligations to devise strategies for their successful implementation in our contexts, and to the effect they are intended – ensure no, or minimize harms in research; maximize research benefits to concerned communities; ensure justice through equitable distribution of burdens and benefits of research; and generally respecting traditions and ethical norms and values of concerned communities. On the other hand, their generality implies that their implementation partly depends on realities in local contexts, while their flexibility implies that they are always open to constructive criticism and eventually enrichment and improvement on the basis of evidence from different local contexts and other pieces of evidence. Below we propose and explain six obligations for local regulatory agents, agencies, researchers, bioethicists and all relevant stakeholders. We believe and contend that the fulfillment of these obligations will go a long way towards effective and meaningful implementation of CIOMS guidelines in our local contexts.

3.1.1 | Cautious localization of the CIOMS guidelines

One of the tasks for local bioethics stakeholders is to conscientiously examine the applicability of each of the guidelines in their local contexts and, where necessary, adapt them to local legal regimes, cultural beliefs and values, plus other relevant existential realities. It should be noted that some of the ethical norms are still deliberately stated in a *seemingly* commanding and absolute tone to a point of raising worries about cultural differences. For example, in the preamble to the current version of the CIOMS ethical guidelines, there is a clarification that "As a general rule, 'must' has been used to attach greater moral weight to requirements when compared to 'should'.[40] This can potentially be interpreted to mean that where guidelines are stated with 'must', then this precludes the possibility of having such ethical requirements modified or waived in consideration of local nuances. This is the interpretation we have diametrically differed from because it misses the spirit of the CIOMS guidelines, especially their agreement with the view that that primarily "Ethics are local [….]"[41] as supported by the new emphasis of the practice of Community Engagement and other examples cited earlier from the guidelines in support of their flexibility. Generally, to say that in health-related research ethics are local is to say that in order to effectively engage ethical differences across cultures in international collaborative research,[42] there is a need to allow local voices to inform, enrich and shape bioethics principles and guidelines as they apply in those contexts.[43] Hence, the emphasis marked by the use of "must" in the CIOMS guidelines can be interpreted as simply intended to raise the bar for proof if individual guidelines to which it applies are to be modified or waived. So, on account of this clarification, the use of "must" is consistent with our contention that the CIOMS guidelines are flexible enough to accommodate differences in ethical views across cultures.[44] So, the obligation to *cautiously* localize each guideline, implies that one of the responsibilities of local stakeholders is to ensure that there is *compelling justification and evidence* for whatever waivers, modifications or interpretations that are made for effective implementation of the guidelines in local contexts.

However, some countries have already developed their own national guidelines and the same applies to the relevant institutions therein. Hence, this fact may seem to render our current point/obligation redundant. On the contrary, however, the emphasis of this obligation lies not in *mere* localizing ethical guidelines, but in doing so *cautiously*. Some recent reflections on views on bioethics in Africa by authors from the continent have suggested that the process of localizing bioethics on the continent are generally at a risk of distorting the essence of bioethics. These works reveal that in attempt to grow bioethics on the continent a number of views are inattentively obsessed with departing from the so-called Western ethical theories, principles and norms as opposed to focusing on identifying ethical principles and practices that can effectively address Africa's contemporary bioethical issues, irrespective of the provenance of such ethical principles and norms.[45] In this case, conscientious adaptation of international ethical guidelines should be guided by a vision of protecting and promoting the four universal ethical principles mentioned above. Secondly, the localization of international ethical norms for research needs to be undertaken in a manner that facilitates continuous and smooth conduct of research, including international collaborative research.

3.1.2 | Ensure sufficiently judicious RECs

Another stringent obligation for local bioethics stakeholders which is both explicitly stated in CIOMS Guideline 23, as well as widely implied throughout the guidelines, is establishing and maintaining sufficiently judicious RECs. 'Judiciousness' in this context can be understood as the ability to identify, interpret and appropriately apply universal and general ethical norms in different contexts as well as provide moral guidance on aspects of some studies on which guidelines may be silent.[46] CIOMS Guideline 23 partly recommends that RECs members must be duly qualified and regularly update their knowledge of ethical aspects of health-related research. This obligation is further widely implied in the CIOMS

[40] WHO & CIOMS. *op. cit.* note 2: p. xii

[41] Christakis, N.A. *op. cit.* note 35.

[42] Ibid.

[43] Behrens, K.G. *op. cit.* note 5; Tangwa, G.B. *op. cit.* note 5.

[44] WHO & CIOMS. *op. cit.* note 2.

[45] Barugahare, J. *op. cit.* note 10; Fayemi, A.K., Macaulay-Adeyelure, O.C. *op. cit.* note 5.

[46] WHO & CIOMS. *op. cit.* note 2.

guidelines by the fact that all final decisions on the ethical design of specific studies and their implementation are primarily left to the discretion of local RECs. In light of this obligation, for example, the Uganda National Council for Science and Technology recently initiated a Credit Point System. According to this system, RECs' members are required to prove their continuous improvement of their ethics knowledge through an accumulation of certain minimum continuing education credits if they are to keep their membership to RECs.[47] This is important because generally, bioethics scholarship and practice are relatively new in the region and, in varying degrees, all parts of the world. In these circumstances, paying attention to judiciousness is crucial because, as our analysis above has shown, these guidelines are simply general suggestions that need to be applied conscientiously in local contexts. The ability of RECs to effectively do this depends on the REC members' ability to, among other things, engage in abstract moral reasoning as well as practical moral decision-making with a reflective attitude. This suggests that on top of requiring mastery of ethics policies and guidelines, local research regulatory authorities such as UNCST in the case of Uganda, need to equally strongly encourage (or even require) as well as facilitate the acquisition of the skills needed to exercise judiciousness. It is for a similar reason that a number of critically-minded bioethics commenters have explicitly called for the teaching (or learning) of critical thinking to all bioethicists.[48] For wide fulfillment of this obligation in the region and beyond, we strongly recommend the UNCST Credit Point System to other countries in the region as well as devising related innovative strategies for ensuring that RECs' members are sufficiently judicious and motivated. This may require relevant bodies to actively support and encourage bioethics education and appropriately motivate REC members as opposed to these members working entirely on a voluntary basis as is the case in Uganda today.

3.1.3 | Harmonizing Bioethics and Law

The third obligation is that the relevant stakeholders in the region should act proactively to ensure sustained harmony between ethical and practical demands of health-related research and local legal regimes. Like in other fields, in promoting and protecting interests and rights of research participants, ethical principles and guidelines on the one hand, and the law on the other, are expected to play complementary roles. However, some new developments in some countries in Sub-Saharan Africa suggest that this is not always the case.[49] This particular concern was recently raised in reference to the impending implementation of South Africa's 2013 Protection of Personal Information Act (POPIA) beginning the year 2020, which prohibits broad consent in research (Chapter 3, Section 13(1).[50] Further, Zambia's 2013 Health Research Act (HRA) (Sections 47(2) and 48) out rightly prohibits the use of broad consent in research.[51] However, even though these laws strictly prohibit broad consent, there are some recent empirical studies in Africa (one of them in Zambia) which have suggested that the populations may, even though conditionally, be happy with maintaining the option of broad consent.[52] These contradictions need to be appreciated in light of the fact that even though in theory, ethics is supposed to inform legislation, in practice generally, law takes precedence over ethics. There are two major worries that come with these emerging contractions that call for an obligation to harmonize law and bioethics in a proactive manner. The first worry is about the impact of these laws on the autonomy of research participants especially those that are potentially desirous of broad consent in these countries. The second worry is about how these laws, if strictly implemented, will affect the conduct of international collaborative health research in those countries. However, it should be noted that here we are neither arguing for nor against the legality or social acceptability of broad consent in health-related research. We are simply exemplifying the unfortunate disharmony between law and bioethics and recommending that bioethics stakeholders in the region bear an obligation to act proactively and forestall such contradictions.

3.1.4 | Cultivating a public bioethics culture

In order to further ensure effective and meaningful implementation of the CIOMS guidelines in local contexts, local stakeholders in bioethics need to spearhead, encourage and facilitate the thriving of a bioethics culture in their local contexts. This obligation is based on our observation that effective implementation of these guidelines does *not entirely* depend on the goodwill of research sponsors, researchers, RECs and the other official regulatory institutions (such as UNCST). Rather, in addition to these formal agents' and agencies' commitments to adhering to the relevant guidelines, effective implementation also highly depends on public vigilance. It is for this reason that, for example, the UNCST guidelines acknowledge and encourage the whistle-blowing role by any members of the communities (general public) in case of perceived ethical misconduct in research.[53] However, it is important to note that UNCST's

[47] Uganda National Council for Science and Technology. (2016). Credit Point System for Members of Research Ethics Committees in Uganda: Better Ethics, Better Research.

[48] Arnason, V. (2015). Toward Critical Bioethics. Camb Q HealthC Ethics 24:154-64. https://doi.org/10.107/S0963180114000462; Bosch, G. (2018). "Train PhD students to be thinkers not just specialists." Nature 554.7692:277; Tangwa, G.B. *op. cit.* note 5; Andoh, C.T. *op. cit.* note 7.

[49] Nordling, L. (2019). South African law may impede human health research. American Association for the Advancement of Science.

[50] Republic of South Africa. (2013). Protection of Personal Information Act. Retrieved October 8, 2019, from http://www.justice.gov.za/inforeg/docs/InfoRegSA-POPIA-act2013-004.pdf.

[51] Republic of Zambia (2013). The National Health Research Act No. 2 of 2013 (2013).

[52] Mweemba, O., Musuku, J., Mayosi, B.M., et al. (2019). Use of broad consent and related procedures in genomics research: Perspectives from research participants in the Genetics of Rheumatic Heart Disease (RHDGen) study in a University Teaching Hospital in Zambia. Global Bioethics 1-16; Tindana, P., Bull, S., Amenga-Etego, L., et al. (2012). Seeking consent to genetic and genomic research in a rural Ghanaian setting: a qualitative study of the MalariaGEN experience. BMC medical ethics 13(1):15.

[53] Uganda National Council for Science and Technology. (2014). National Guidelines for Research involving Humans as Research Participants.

acknowledgment of the role of the general public in ensuring compliance with research's ethical standards assumes basic bioethics knowledge in the general public. Our contention is that within our region, such knowledge is still too scanty to reasonably enable the expected public vigilance. It is certainly an uphill task to attempt to educate the general public about bioethics, or even specifically research ethics and what sort of conduct the public ought to expect of researchers, including where to report in case of need. However, in addition to taking seriously the practice of Community Engagement through which communities will get an idea of what sort of conduct to expect of researchers, there are other more feasible routes through public vigilance can be achieved in the long run. Encouraging and supporting wide bioethics education in higher institutions of learning, particularly in all health-related disciplines, is critical. Additionally, local regulatory authorities can encourage and support civil society's watchdog and activism roles on related concerns. The role of Civil Society Organizations (CSOs) is important, especially that ethical issues in health-related research usually involve human rights and social justice concerns, concerns around which most CSOs' work is organized in this region. Besides, CSOs have been particularly noted to be effective in contributing to the ethical conduct of research.[54] Even in cases of clashes between the law and bioethics, or need for proactive strategic legislation, the activist role of CSOs cannot be overestimated.

3.1.5 | Regional bioethics governance

Partly, effective and meaningful implementation of the CIOMS and other international ethical standards for research in local contexts will be better with an existence of a regional bioethics governance framework. This is crucial for at least three reasons. First, it will encourage and ease South-South collaboration within the region, both in health-related research and bioethics research and training. Second, it will increase the region's bargaining power in an attempt to influence international bioethics using insights from local (regional) contexts; and third, it will potentially enable easy ethical regulations especially in multi-site North-South collaborative studies taking place in different countries in the same region. In fulfilling this obligation, an existence of the East African Health Research Commission (EAHRC) might provide a steppingstone in this direction. Other organizations such as the Pan-African Bioethics Initiative (PABIN), may work along with inter-governmental organizations towards this goal beyond the East African region to the whole of Sub-Saharan Africa.

Whereas for a long time both the concept and practice of international collaborative health-related research has been narrowly construed in terms of North-South collaborations, there is a growing emphasis of South-South collaboration. However, as a matter of self-evident principle, international collaborative research is possible *if, and only if*, researchers from different countries agree on what is to be regarded as morally acceptable research.[55] For a related reason (disagreement on ethical designs of studies), an important study was abandoned in Tanzania[56]; and for the same reason, now it would be difficult for Zambian (and South African, from the year 2020) research institutions to collaborate with any other research institutions within that region (and Sub-Saharan Africa generally) in a study in which foreign collaborators prefer to use broad consent, especially if such study is intended to take place in Zambia or South Africa. Consequently, we envision that successful harmonization of regional bioethics governance will go a long way towards ensuring effective and harmonious implementation of the CIOMS and other international ethics guidelines in local contexts without jeopardizing the ethical and practical necessities for smooth continuity of health-related research.

3.1.6 | Active and meaningful participation in future revisions of the CIOMS

Finally, and equally essential, local bioethicists, researchers and regulatory authorities bear an obligation to play active and meaningful roles in future revisions of CIOMS guidelines. As mentioned above, one of the most common challenges faced in implementing CIOMS guidelines in local contexts is the feeling that they are not sufficiently reflective of and responsive to local ethical variations. However, our analysis above has shown that in view of the history and nature of 2016 CIOMS guidelines, this worry ought to be treated as a thing of the past. But presently, there persists a related genuine concern about the lack of sufficient African voice, not necessarily in the implementation, but in the framing and revisions of these guidelines. This worry is compelling since moreover these guidelines are primarily intended to guide research in low-resource settings and typical of which is sub-Saharan Africa. For example, in the revision that produced the 2016 version of these guidelines, we noted that apart from reviewing some literature referring to Africa, documented participation shows that only three countries from Sub-Saharan Africa (South Africa, Senegal, and Burkina-Faso) were represented, with no active voice from the rest of East and Central Africa.[57] The intention of producing this evidence is to underscore the contention that effective implementation of these guidelines would be much easier if voices from the local contexts are widely represented at the point of their framing and revisions. This representation can be in the form of expressing views on the drafts of these guidelines in the process of their revision. Fulfilling this obligation would ensure that most of the crucial local ethical nuances and experiences are already integrated into the general guidelines, where possible.

[54]"AIDS drug trial turned away." (2006). Protests by prostitutes in Cambodia ended. The Washington Post A 10; Mills, E.J., Singh, S., Singh, J.A., Orbinski, J.J., Warren, M., Upshur, R.E. (2006). Designing research in vulnerable populations: lessons from HIV prevention trials that stopped early. BMJ 331(7529); Singh, J.A., Edward, M.J. (2005). The abandoned trials of pre-exposure prophylaxis for HIV: what went wrong? PLoS medicine 2(9):e234.

[55]Barugahare, J. *op. cit.* note 8.

[56]Christakis, N.A. *op. cit.* note 35.

[57]WHO and CIOMS. *op. cit.* note 2.

But that being said, lack of sufficient voice in the framing and revision of the CIOMS guidelines cannot entirely, and arguably not majorly, be blamed on the constitution (membership) of the governance structures of the CIOMS and the WHO (authors of the guidelines) or, specifically, to the composition of the Working Group revising the guidelines. Whereas the issue of representation from East and Central Africa can equally be addressed, there is evidence that drafts of these guidelines are usually published online for comment by all stakeholders. However, we noted that in the latest revision there is no single documented comment from the whole of our region (East Africa). This precludes us (East Africans) from attributing the whole or even major part of the problem of lack of an African voice to lack of representation on the relevant governance structures. As part of the preparation for undertaking this task, in the process of implementing existing guidelines, the local stakeholders have an obligation of gathering evidence of what is locally acceptable and what is not. In turn the resulting body of evidence can be used to influence future revisions of the CIOMS and other relevant international instruments. This is one of the ways of further guarding against potential ethical imperialism or mere perceptions of it, and increasing an African voice in global bioethics. In our opinion, fulfilling these and potential more obligations will go a long way towards effective and meaningful implementation of international ethical guidelines for health-related research in our local context.

4 | CONCLUSION

One of the issues that stands out prominently in recent scholarly works in bioethics in sub-Saharan Africa is that of the extent to which the CIOMS guidelines ought to be implemented in local contexts due to perceptions of ethical imperialism and lack of context-sensitivity. To resist and attempt to correct this unfortunate viewpoint, this paper has begun with comments on how the 'universal ethical principles' and 'ethical guidelines for their implementation' ought to be understood if they are to be effectively and meaningfully implemented in local contexts. Our view has been that even though these guidelines are categorically described as "universal ethical principles", their actual spirit does not make them dogmatic or imperialist in character. Instead, their tenor is that of general and evolving ethical principles, implementation of which depends on realities in the local contexts. It is this understanding that has led us to a conception of a list of obligations on the part of the local bioethics stakeholders as listed above, the fulfillment of which, we hope, will significantly ease their meaningful implementation in regulating health-related research in our local contexts.

DECLARATIONS

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Not Applicable

COMPETING INTERESTS

No competing interests to declare.

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AUTHOR CONTRIBUTIONS

John Barugahare and Paul Kutyabami discussed the topic which was assigned to them by the conference organizers and agreed on the major elements that should be included in the manuscript. John Barugahare drafted the manuscript and shared it with Paul Kutyabami who added content to the manuscript. The two co-presented the paper at the conference for which it was written, and the manuscript kept moving back and forth between the two until the current version was produced.

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