
Navigating the Contours of Ethical Research in Higher Education: An African Perspective

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Abstract

This study explores the plethora of challenges encountered in ensuring that research conducted in higher education institutions (HEIs) in Africa is ethical and morally unobjectionable. The study reflects on the roles and accountabilities of various stakeholders in contributing to the various challenges, either directly or indirectly. Data were collected using a narrative review of literature. Several challenges militate against the conduct of ethically sound research. The challenges can be categorised at two levels: the individual level and the system level. They include but are not limited to the lack of ethical awareness among emerging researchers, researchers not embracing ethics as their full responsibility, and the prevalence of a wide knowledge gap between researchers and participants. On the part of HEIs, challenges such as the lack of functional ethics committees, institutions' failure to improve ethical literacy among emerging researchers, and a lack of mechanisms to monitor researchers' conducts during the course of studies, particularly in empirical research, have been identified. A focus on the wider African research space illuminates such challenges as language barriers, diverging cultural and religious practices, rules and regulations of the land, and lower literacy levels in some parts of the continent. To mitigate these challenges, we recommend that HEIs should prioritise the conduct of ethical research through increased funding, through the institution of monitoring mechanisms, and through ensuring that highly and appropriately qualified personnel are constitutive of ethics committees to ensure best practice.

Keywords: *ethics challenges in Africa; ethical literacy; higher education institutions; monitoring mechanisms; research ethics committees; social research*

Introduction

Ethics has become such a buzzword that it features in most discourses that revolve around research matters (Ribeiro, Smith, and Millar, 2017). Despite the popularity and centrality of ethics in the field of research, particularly in social research, defining the term *ethics* is one daunting task that one can, given the option, wish away, not least because there are inconsistencies in terms of how the term is used and the way it is conceptualised (Fisher, 2004; Hammersley, 2015). We acknowledge that defining ethics is beyond the scope of this study. To stay clear from the long-standing confusion and difficulty of attempting to define such an elusive concept, we give a disclaimer that our definition is merely rudimentary. Obviously, the definition we use in this study is not meant to provide a universally acceptable definition or 'gold-standard', but it gives the reader an idea of what ethics entails.

We adopted a definition commonly used in the field of management, offered by Schermerhorn (2002: 146), who frames ethics as:

...the code of moral principles that sets standards of good or bad; right or wrong, in one's conduct and thereby guides the behaviour of a person or group.

While this definition may appear simple and straightforward, further scrutiny can reflect on yet another elusive term, which is morality. The 'big question' which emanates from that revelation is whether there is a distinction between ethics and morality. The distinction is based on the argument that while morality refers to human conduct and values, ethics is the study of morality (Shaw 2008). However, in everyday parlance, the terms are often used interchangeably. Some scholars draw a distinction between ethics and morality or ethical and moral (Fisher, 2004; Williams, 2012). However, others view this as a futile exercise. Grace and Cohen (1998: 4) argue:

...there is no reason to make a distinction in meaning between "ethical" and "moral". There is certainly no difference in meaning which could be attributed to their etymological roots. Sometimes, some moral philosophers or "ethicists" distinguish them from each other, but not all philosophers do; and those who do distinguish them from each other do not all distinguish them in the same way. It is recommended here that the words be considered as synonymous.

Clearly, the debate is inconclusive. Understanding the definitions of ethics and morality is critical to the entire research fraternity, particularly given that ethics must be at the core of social research. Researchers are always obliged to scrupulously uphold the injunction *primum non nocere* – first, do no harm (Neuman, 2014). Focusing on ethics from this perspective, the conduct of ethical research was affirmed after the Tuskegee syphilis study (Reverby, 2012). Between 1932 and 1972, Afro-American men participated in a clinical public health research that became controversial (Neuman, 2014). The Tuskegee syphilis study suits the description 'the worst breach of ethics in history'. Decades after what turned out to be the 'greatest collusive swindle' in the history of ethics in social research, issues of ethics remain a subject for debate and further research. Davies and Dodd (2002: 281) argue that "ethics are an essential part of rigorous research...not to be treated as a separate part of our research – a form filled in for the ethics committee and forgotten". Similarly, Marshall and Rossman (2011) assert that trustworthiness is essentially intertwined with ethical considerations observed during the execution of a study. As such, these authors advance an argument that judging trustworthiness using 'traditional' canons for judging the soundness of a study such as credibility, dependability, confirmability, and transferability is not adequate. Thus, researchers must constantly sustain a keen commitment to sensitive 'ethics in practice' issues. For example, emphasising that participants are free to withdraw from the study is an ethical concern, yet it also impacts on data quality in that those who take part are less likely to lie because they voluntarily participate (Shenton, 2004).

The role of ethics in academic research is paramount. Ethics serve a myriad of purposes. These range from the obvious and glaring ones such as the need to safeguard human subjects from blatant abuse as exemplified by the infamous Tuskegee experiment to more subtle ones that are inclusive of falsification of data, power dynamics between the researcher and participants, and mitigating researcher bias among others (Bell and Wray-Bliss, 2009; Banks, 2018). The aim of this study is to explore the domain of ethical research challenges in the context of higher education institutions in Africa. The following objectives were addressed:

- To identify the various challenges that militate against the conduct of ethical social research in higher education institutions in Africa.

- To explore possible options for mitigating the various challenges related to the conduct of ethical social research in higher education institutions in Africa.

Methodology

A literature search was conducted on Google Scholar, PubMed, and EBSCO electronic databases using the following keywords: ethics challenges in Africa, research ethics committees, ethical literacy, higher education institutions, monitoring mechanisms, and social research. Primary, secondary and tertiary literature were retrieved and synthesised. The language used in the search was only English. A total of 221 publications were identified from the databases and the bulk of them were in the medical field and only a few were in the humanities and social sciences. Effort was made to minimise the use of studies in the medical field because our investigation was not specific to this field. Mainly, the empirical studies reporting on research ethics challenges in Africa were included and the context was limited to the higher education sector. Letters or editorials about published articles were not eligible for inclusion. A further review of the identified studies culminated in 27 studies that met our inclusion criteria.

Findings and Discussion

Researchers not embracing ethics as their full responsibility

Ethics is a set of moral principles governing one's behaviour (Fisher, 2004) and plays an indispensable role in research. The implication is that it is the full responsibility of the researcher to behave in a way that is ethically relevant and acceptable. Findings suggest that emerging researchers do not embrace ethics as their full responsibility. Only a few aspects of ethics in research can be documented and communicated and the rest are dictated by the moral values of the researcher in the field (Banks, 2018). In addition to having the decisions informed by ethical guidelines and shared experiences, the guidelines may simply inform the individual researcher's ethical judgements. Guidelines as provided by the institution and imposed on the individual may produce less impact than when the individual assumes ethics as his or her full responsibility (Neuman, 2014). If ethics are not considered as the researcher's full responsibility, certain aspects of the guidelines may be ignored by the researcher and that could lead to unethical practice. Consequently, the researchers should not have any misconception that by being ethical, they are serving the interests of the institution, but realise that they are pursuing what is morally right in the sight of various stakeholders such as the institution they are affiliated to, participants, government, other researchers, and themselves (Parveen and Showkat, 2017. Essack *et al.* (2010) indicate that contextual factors that impact on ethical principles' implementation should however be noted by stakeholders. We argue that both parties are obliged to ensure that ethical conduct of research is promoted.

Not adequately informing participants

Participants may not be adequately informed that they are taking part in a research study (Neuman, 2014). In case of minors, the families concerned may agree to their children taking part in research without requesting enough information about the study and its potential risks. For example, in 2001, eleven children died after trials of a trovafloxacin antibiotic drug that was intended to treat meningitis. Other children were left with paralysis and permanent brain damage. Further investigations revealed that the families were not well informed that their children were engaging in research and that they had not been given an indication on possible risks that could emanate from participation (Singh and Stuckeberger, 2017). This is one example of a research that culminated in litigation and researchers paying substantial amounts of money to compensate the grieved participants and their families.

The wider knowledge gap between the participants in African settings and the researchers may see the participants working on trust that the researcher will ensure their safety and will take care of possible risks and consequences (Stahl, 2016). Some participants do not have the courage to question the learned researcher whom they believe is not there to cause any harm to their well-being (Neuman, 2014). It turns unethical when someone highly esteemed and well trusted and respected fails to meet the expectations of the participants by ensuring that they are well informed, potential risks are minimised and the information about their possible occurrence disclosed (Banks, 2018). This is not the case when dealing with minors only; even adults themselves must be protected by the researcher (Singh and Stuckeberger, 2017). A study conducted in South Africa to solicit the views of REC members revealed that most participants in HVT trials did not understand the consent form as well as the risks of taking part in those trials (Silaigwana and Wassenaar, 2015). Louw and Delport (2006) noted that in South Africa, ensuring that most people sufficiently understand the research to make informed decisions is difficulty to achieve.

In extreme cases such as when dealing with clinical trials involving a risky drug or process, the participants who are not medical experts may fail to understand the information even though sufficient efforts were made to disclose the potential risks (Kruger, Ndebele, and Horn, 2014). The onus to ensure that the safety of participants is not compromised lies mainly on the researcher who knows the product or procedures of the trial better and who is also able to prevent or minimise risks (Neuman, 2014). The chances are high that participants may consent to something that they are not too sure of. However, the fact that someone has given consent does not mean that due diligence must not be exercised when dealing with such individuals. The researcher must ensure that participants are well informed that they are taking part in a research, potential risks must be highlighted, that they are well protected, and due diligence is exercised to minimise risks. Essack (2010) argues that although there are these speculations that research in developing countries such as in Africa face special ethical challenges such as these, no issue identified in his study that was never anticipated in popular frameworks, literature as well as in international guidelines.

Inadequate ethics education at the undergraduate level

Marzouk *et al.* (2014) highlight that some countries in the Middle East have grown their awareness to research ethics to the extent that they are now teaching research ethics to both their undergraduate and postgraduate students in certain disciplines such as medicine. To better prepare our undergraduate students in Africa for conducting ethical research, research ethics training should be mandatory for students, supervisors, research committees and the examiners who are going to award a mark for that academic work. However, this is easier said than done as substantial amounts of resources are required, coupled with greater commitment by all parties involved. Further, this may take ages before a level ground is prepared but it is worth taking a few steps towards achieving this ideal. Other countries like Canada have managed to make research ethics training mandatory and they do not have many ethical issues arising from the way they conduct research. Molyneux and Geissler (2008) assert that it is an ethical priority to strengthen the capacity of research ethics in Africa and to consider local, national, and international concerns and priorities.

Failure to improve ethical literacy among emerging researchers

While on the one hand, more effort is being invested in mastering research methodologies in various disciplines on the other hand, less effort has been put on ensuring research integrity. However, the concept of research integrity is fast gaining traction (Banks, 2018). An emerging researcher may have the misconception that as long as the right methodologies are used, ethical considerations automatically follow, or the endeavour is simply a tick-box exercise (Davies and Dodd, 2002). As a result, novice researchers may conduct research with limited knowledge of ethical awareness and possible consequences. Research Ethics Committees (RECs) at African HEIs must ensure that clear

ethical guidelines are developed and communicated to researchers and supervisors. Both researchers and supervisors or promoters must possess sound knowledge of ethics and how it must be ensured in a study (Parveen and Showkat, 2018). Moodley and Singh (2016) add that capacity development aimed at equipping all stakeholders, including RECs, with the requisite knowledge on research ethics, will enhance efficiency and ethical standards in Africa.

Lack of ethical awareness among emerging researchers

It is the responsibility of RECs or Institutional Research Boards (IRBs) to provide ethical awareness or ethical literacy to their emerging researchers. The dos and don'ts should be clearly communicated and documented so that researchers are fully guided. Silaigwana and Wassenaar (2019) suggest that more awareness and education on actual ethical issues can help to improve the outcomes and solve many ethical problems. However, not everything can be documented or communicated because ethical issues are not universal in an environment characterised by diversity such as Africa. Under such circumstances, the main responsibility lies with the researcher to ensure that human participants, the research, and other researchers are also protected (Neuman, 2014). The application of ethical principles will depend to a greater extent on the subjective judgement of the researcher who is able to exercise his/ her discretion and do what is ethical under prevailing conditions. While HEIs can strive to provide ethical awareness, the researcher should take a step further and not only rely on what is stipulated in the guidelines. Therefore, researchers have the obligation to ensure that their research is ethical by taking care of the dignity, well-being, safety, and rights of the participants (Parveen and Showkat, 2018).

Lack of capacity in research ethics committees (RECs)

RECs in Africa are still facing a plethora of challenges in delivering their mandate (Pirard *et al.*, 2019). In most African states, HEIs are not well developed, poorly resourced, and staffed, and lack the relevant expertise. Nyika *et al.* (2009) report that over a third of REC members in Africa did not receive any form of training. Thus, the level of expertise among members of RECs needs to be upgraded. Often, RECs face scarcity of resources, limited capacity to monitor studies, limited national ethics guidelines and low membership diversity. The members of these committees must be well versed with research ethics principles for them to provide robust oversight of the research system (Moodley and Singh, 2016). Silverman *et al.* (2013) reported lack of ethics training among most RECs members. Thus, the need for ongoing capacity development among different stakeholders is an imperative (Singh and Moodley, 2021).

If RECs lack the requisite expertise, they may inadvertently approve ethically risky studies that culminate in violation of ethical principles and putting the image of the institution in disrepute. Most RECs in HEIs in Africa are still developing, hence, institutional research ethics guidelines at certain institutions are generally sketchy and not well communicated to researchers who largely rely on their general knowledge and guidelines from other sources. Silaigwana and Wassenaar (2015) found the lack of systematic data on African RECs as a major setback in promoting ethical research. Given that the amount of research and researchers from Africa are increasing in recent years, research ethics discussions must be taken to higher levels, robust guidelines and monitoring systems must be implemented, national laws and regulations be formulated and reinforced, and researchers be educated on ethical awareness.

Davies (2020) observed an increase in workload at a South African university's Business Faculty. This may compromise the quality of work done to uphold ethical conduct in research at that university. Marzouk *et al.* (2014) suggest that some guidelines and structure of RECs in Africa should be revised and improved. There is a dearth of information on the functioning, structure, and outcomes of

research ethics committees in Africa (Silaigwana and Wassenaar 2015). Although RECs are available in African HEIs, their composition, structure, funding, and operations need to be improved.

Language barriers

Local languages are very important as some are rich in meaning and are understood by the majority. The norm is that the research instrument should be translated into the local language understood by the majority (Perry, 2011). However, it should be the other way round where the instrument is prepared in the local language understood by the researcher and the participant, and later, translated to English or another language for reporting purposes. Monolingual participants are discriminated against should the dominant language happen to be challenging and there is no room for accommodating indigenous languages. The use of indigenous languages should not be interpreted as a sign of incompetence but simply as a point of difference. Adebamow *et al.* (2018) admitted that language barriers presented challenges to their genomic research that was conducted in Africa.

Diverging cultural and religious practices

Given that ethics in research differ from one method to another, ethics may also vary from region to region or from place to place. Adebamowo *et al.* (2018) noted that underappreciation of cultural norms posed as challenges to their study that was conducted in Africa. African cultures basically vary from city to city and even within a city. In most cases, there are diverging cultural practices within a typical city in Africa, especially in South Africa, due to the high numbers of immigrants in the country. Traditional beliefs and practices are also upheld in many parts of the continent, and these also have a bearing on the understanding of ethics and what is considered ethical. What is considered as an ethical practice in an African country like Zimbabwe, for example the paying of lobola or bride price, is an unethical practice in a country like India. Consequently, researchers working in Africa should have deep knowledge of the various cultures and dynamics in the environment in which they are working.

However, from a practical standpoint, it is challenging to understand different cultures, especially for the sole reason of conducting research, because culture is complex and can take time to be understood by an outsider. Molyneux *et al.* (2016) assert that community engagement is an important way of solving certain ethical challenges, especially those dealing with sensitive issues in a community. Following from that idea, in those situations, it is more ethical to have people of a particular cultural group as part of the research team to advise on issues that may lead to cultural conflict (Kruger, Ndebele and Horn, 2014). Researchers in Africa should therefore consider religiosity and the diversity of cultures within Africa. Traditions, cultures, and religious beliefs should not be despised, but rather accommodated. Thus, community engagement constitutes an integral component to enhance ethical standards (Moodley and Singh, 2016).

Regulatory and ethical issues must have policy frameworks that integrate with local environments (Ali *et al.*, 2021). Ethical guidelines must reflect the dynamics in the African continent rather than simply adhering to international guidelines that were dictated by others who possibly have never set foot in Africa. This implies that there are elements of ethical guidelines which need to be decolonised and be developed from an African perspective. For example, in a study conducted in Sudan, Perry (2011) reported on the case of a participant that refused to participate because the researcher was obliged to use a pseudonym, yet the participant wanted to be identified. The differences in cultures and beliefs, rules of the land, local regulations, level of development and civilisation, as well as literacy rates between developing and developed nations indicate that applying the same ethical standards throughout the world may be more relevant and ethical in one part of the globe and the same standard can lead to unethical practice in another part of the globe where conditions are different. In that vein, the same international standard cannot be a one-size-fits-all strategy, but local research oversight systems must be able to allow positive adjustments to those standards (Denzin,

2010). This can be applicable to the African context, given the diversity that characterises the continent. Some members of the population, though advanced in age and considered to be adults but due to their conditions, may need to be treated as minors. Munung *et al.* (2016) recommended that further innovative informed consent approaches be developed in Africa. This can be achieved through consultations with researchers, RECs, and research participants in Africa.

The dominance of Western ethics standards in Africa

Although some studies are conducted in Africa by Africans, the ethical guidelines used are either basically Western oriented or are of international origin (Neuman, 2014). This is good for ensuring that international standards are met and there is consistency in terms of how ethics are ensured. However, ethics are something which should not be dictated by anyone and must conform to the local ethics patterns. The people that face a possible risk and those that must be protected are local and there is always a localised way of judging between right and wrong. On the contrary, Marzouk *et al.* (2014) argue that international guidelines should be reflected in the research ethics guidelines and the way in which the research is conducted. This is important, given that research is not for private or local consumption as others may also benefit from it.

Research ethics is one of the areas where decolonisation must be promoted to allow African standards to dictate directions on what is considered ethical and what is not (Chaury, 2020). It is unethical to disrespect the ethical principles of the environment in which one operates in pursuit of an international standard that is not even relevant in that socio-cultural milieu. However, Marzouk *et al.* (2014) suggest that the quality of research in Africa can be improved through enhancing international cooperation and sharing scientific information. As such, international cooperation should not be downplayed by focusing on local guidelines. At the end of the process, international competitiveness is also necessary and must be promoted.

The lack of ethical guidelines in some countries

A dearth of national ethics guidelines was reported in some African countries (Matar and Silverman 2013). Tindana *et al.* (2019) observed a lack of sufficient ethical frameworks and regulations that guide certain research types in Africa. A study by Nyika *et al.* (2009) found that 10 out of 31 RECs surveyed were operating without ethics guidelines. Consequently, there was no uniformity or consistency in terms of how ethical standards were set and pursued. Where these guidelines existed, they were primarily developed for health research. All research are therefore judged using the same ethical principles even though the methodologies and approaches may differ. The same principles, however, are not equally applicable to all fields and the level of risk or danger posed to human participants is not necessarily the same.

Further, some studies which were not in the medical field seemed to borrow from medical research ethics guidelines, even though some of the borrowed principles were not applicable to their fields (Louw and Delpont, 2006). It is essential to have ethics guidelines developed specifically for different research fields and for all fields to also take research ethics more seriously (Khumalo and de Klerk, 2018). However, ethics guidelines in African countries should be formulated, standardised, and aligned to international guidelines. Louw and Delpont (2006) note that RECs for humanities and social sciences in South Africa were just recent and this posed challenges to academics and researchers in these fields. However, researchers must be careful when they borrow from international guidelines to ensure that local and pressing ethics issues should be able to stand out in order to be ethical in the local context as well. Rules of the land must be respected, and it is only ethical to abide by the rules. Further, Moodley and Singh (2016) add that such regulations and guidelines should be robust.

Improving the capacity of oversight systems

HEIs in Africa, like any other institution of higher learning in developed countries, must improve the capacity of research oversight systems, by ensuring that they are well resourced, well-staffed, and manned by competent individuals with a thorough understanding of ethical principles. Ali *et al.* (2021) indicated that while many countries have oversight systems, but their researchers still struggle with ethical challenges. Marzouk *et al.* (2014) argued that developing countries in Africa as well as in North America could improve the quality of their research by competing for international funding, exchanging scientific information, and enhancing international cooperation. Funding is an important variable that can enhance the quality of research but given the scarcity of resources, especially in developing countries, research funding is not readily available. Many researchers from Africa compete for funding from developed countries. However, the funding is often inadequate for the growing population of researchers from Africa. The lack of funding has impacted negatively on the success of certain research projects and on the quality of outcomes from those studies (Singh and Stuckeberger, 2017).

The establishment of monitoring mechanisms

Monitoring the implementation of approved research is part of the REC's responsibilities but mostly this is not done especially in Africa due to the lack of capacity of research committee members (Kruger, Ndebele, and Horn 2014). After the initial review by REC, further evaluations to assess deviations from what was approved are necessary for certain studies which are considered risky and can cause harm to human participants (Davies, 2020). RECs can use the system of annual reviews or periodic reviews to monitor adherence to the research protocol that was approved. After the initial approval of the proposal, RECs still have the responsibility of protecting human participants until the study has been successfully completed (Kruger, Ndebele, and Horn, 2014). Most RECs seemingly end the process with granting the initial approval and do little monitoring thereafter. Oftentimes, the RECs do not have a mechanism in place to monitor ongoing research, to receive progress reports, or to review completed research (Davies, 2020). Silaigwana and Wassenaar (2015) suggest that ongoing efforts from various stakeholders must be made to develop and enhance RECs in Africa.

Among RECs, there is a tendency to review and approve the proposal as ethically sound and then do less thereafter (Davies and Dodd, 2002). When the proposal passed the ethical assessment stage, there is no guarantee that the actual research and the final report are not in any way deviating from what was proposed. Naturally, the reality or actual experience in the field may face certain challenges that were not anticipated at the proposal stage, which may force the researcher to make necessary adjustments within ethical guidelines (Perry, 2011; Denzin, 2010). Given that scenario, it is worthwhile for the final report to be evaluated on ethical grounds. The evaluation would help to identify certain unethical practices that could have taken place when the study was conducted. The reporting of the results must also adhere to ethical standards. As such, the work of the RECs or their sub-committees can stretch from the conception of the study to the reporting of results and how the results are disseminated. However, the researcher is equally responsible throughout this process and must perform a bigger part as guided by institutional guidelines (Parveen and Showkat, 2018). Given the critical nature of ethical considerations in ensuring research integrity and preserving the reputation of HEIs, monitoring of the research process on ethical grounds is an invaluable process (Singh and Stuckeberger, 2017).

Conclusion

We identified a plethora of challenges that militate against conducting ethical research. The RECs in the HEIs in Africa are still developing, hence, institutional research ethics guidelines at certain

institutions are generally sketchy and not well communicated to researchers. The RECs also lack the requisite expertise and as a result, may inadvertently approve ethically risky studies that culminates in the violation of ethical principles and affect the image of the institution. The issues we raised in this study are invaluable to all researchers, novice and experienced, students, academics, and Institutional Review Boards (IRBs) in HEIs, among other stakeholders. Recommendations to mitigate the various challenges were offered.

References

- Adebamowo, S. N., Francis, V., Tambo, E., Diallo, S. H., Landouré, G., Nembaware, V., Dareng, E., Muhamed, B., Odutola, M., Akeredolu, T., Nerima, B., Ozumba, P. J., Mbhele, S., Ghanash, A., Wachinou, A. P. and Ngomi, N. 2018. Implementation of genomics research in Africa: challenges and recommendations. *Global Health Action*, 1(11): 1419033-6.
- Ali, J., Cohn, B., Mwaka, E., Bollinger, J. M., Kwagala, B., Barugahare, J., Sewankambo, N. K., and Ochieng, J. 2021. A scoping review of genetics and genomics research ethics policies and guidelines for Africa. *BMC Medical Ethics*, 22(1): 1-15.
- Banks, S. 2018. *Cultivating researcher integrity: virtue-based approaches to research ethics. Virtue ethics in the conduct and governance of social science research*. Bingley: Emerald.
- Bell, E. and Wray-Bliss, E. 2009. *Research ethics: Regulations and responsibilities*. In: Bryman, A. and Buchanan, D. eds. *Sage Handbook of Organizational Research Methods*. London: Sage, 78-92.
- Davies, S. E. H. 2020. The introduction of research ethics review procedures at a university in South Africa: review outcomes of a social science research ethics committee. *Research Ethics Review*, 16(1-2): 1-26.
- Davies, D. and Dodd, J. 2002. Qualitative research and the question of rigor. *Qualitative Health Research*, 12(2): 279-289.
- Denzin, N. K. 2010. *The qualitative manifesto: A call to arms*. California: Left Coast Press.
- Essack, Z., Koen, J., Barsdorf, N., Slack, C., Quayle, M., Milford, C., Lindegger, G., Ranchod, C. and Mukuka, R. 2010. Stakeholder perspectives on ethical challenges in HIV vaccine trials in South Africa, *Developing World Bioethics*, 10(1): 11-21.
- Fisher, J. 2004. Social responsibility and ethics: clarifying the concept. *Journal of Business Ethics*, 52(4): 381-390.
- Grace, D. and Cohen, S. 1998. *Business ethics: Australia's problems and Cases*. 2nd edition. Oxford Press: Melbourne.
- Hammersley, M. 2015. On ethical principles for social research. *International Journal of Social Research Methodology*, 18(4): 433-449.
- Kruger, M., Ndebele, P. and Horn, L. 2014. *Research ethics in Africa: a resource for research ethics committees*. Stellenbosch: African Sun Media.
- Louw, B. and Delport, R. 2006. Contextual challenges in South Africa: The role of a research ethics committee. *Journal of Academic Ethics*. 4: 39-60.
- Marshall, C. and Rossman, G. B. 2011. *Designing qualitative research*. Los Angeles: Sage.

- Marzouk, D., Abd El Al, W., Saleh, A., Sleem, H., Khyatti, M., Mazini, L., Hemminki, K. and Anwar, W. A. 2014. Overview on health research ethics in Egypt and North Africa, *European Journal of Public Health*, 24(1): 87-91.
- Molyneux, S. and Geissler, P. W. 2008. Ethics and the ethnography of medical research in Africa. *Social Science and Medicine*, 67(5): 685-695.
- Molyneux, S., Sariola, S., Allman, D., Dijkstra, M., Gichuru, E., Graham, S., Kamuya, D., Gakii, G., Kayemba, B., Kombo, B., Maleche, A., Mbwambo, J., Marsh, V., Micheni, M., Mumba, N., Parker, M., Shio, J., Yah, C., van der Elst, E. and Sanders, E. 2016. Public/community engagement in health research with men who have sex with men in sub-Saharan Africa: Challenges and opportunities. *Health Research Policy and Systems*, 14(1): 40-40.
- Moodley, K. and Singh, S. 2016. "It's all about trust": Reflections of researchers on the complexity and controversy surrounding biobanking in South Africa. *BMC Medical Ethics*, 17(1): 57-57.
- Munung, N. S., Marshall, P., Campbell, M., Littler, K., Masiye, F., Ouwe-Missi-Oukem-Boyer, O., Seeley, J., Stein, D. J., Tindana, P. and de Vries, J. 2016. Obtaining informed consent for genomics research in Africa: Analysis of H3Africa consent document, *Journal of Medical Ethics*, 42(2): 132-137.
- Neuman, W. L. 2014. *Social research methods: Qualitative and quantitative approaches*. 7th ed. Boston: Pearson.
- Nyika, A., Kilama, W., Chilengi, R., Tangwa, G., Tindana, P., Ndebele, P. and Ikingura, J. 2009. Composition, training needs and independence of ethics review committees across Africa: Are the gatekeepers rising to the emerging challenges? *Journal of Medical Ethics*, 35(3): 189-193.
- Parveen, H. and Showkat, N. 2017. Data Collection. Pathshala Quadrant-I (e-Text), 17-18.
- Perry, K. H. 2011. Ethics, vulnerability, and speakers of other languages: How university IRBs (do not) speak to research involving refugee participants. *Qualitative Inquiry*, 17(10): 899-912.
- Pirard, V. 2019. Africa ethics excellence network: A network of national research ethics committees engaged in the reinforcement of their capacities. *BMJ Global Health*, 4(3): 2059-7908.
- Reverby, S. M. 2012. *Tuskegee's truths: rethinking the syphilis study*. North Carolina: UNC Press Books.
- Ribeiro, B. E., Smith, R. D. and Millar, K. 2017. A mobilising concept? Unpacking academic representations of responsible research and innovation, *Science and Engineering Ethics*, 23(1): 81-103.
- Schermerhorn, J. R. 2002. *Management*. 7th edition. Wiley: New York.
- Shaw, W. 2008. *Moral issues in business*. 6th ed. Belmont: Wadsworth Publishing.
- Singh, S. and Moodley, K. 2021. Stakeholder perspectives on the ethico-legal dimensions of biobanking in South Africa. *BMC Med Ethics*, 22(1): 84.
- Silaigwana, B. and Wassenaar, D. 2015. Biomedical research ethics committees in Sub-Saharan Africa: A collective review of their structure, functioning, and outcomes, *Journal of Empirical Research on Human Research Ethics*, 10(2): 169-184.
- Silaigwana, B. and Wassenaar, D. 2019. Research ethics committees' oversight of biomedical research in South Africa: A thematic analysis of ethical issues raised during ethics review of non-expedited protocols, *Journal of Empirical Research on Human Research Ethics*, 14(2): 107-116.

Silverman, H., Edwards, H., Shamoo, A. and Matar, A. 2013. Enhancing research ethics capacity in the Middle East: Experience and challenges of a Fogarty-Sponsored Training Program. *Journal of Empirical Research on Human Research Ethics*, 8(5): 40–51.

Singh, D. and Stuckelberger, C. 2017. *Values-driven Leaders for the Future*. Geneva: Globethics.

Stahl, G. 2016. Relationship-building in research: Gendered identity construction in researcher-participant interaction. In: Ward, M. R. M. ed. *Gender identity and research relationships*. Bingley: Emerald Group Publishing Limited, 145-165.

Tindana, P., Yakubu, A., Staunton, C., Matimba, A., Littler, K., Madden, E., Munung, N. S., de Vries, J. 2019. Engaging research ethics committees to develop an ethics and governance framework for best practices in genomic research and biobanking in Africa: the H3Africa model. *BMC Medical Ethics*, 20(1): 69-69.

Williams, B. 2012. *Morality: An introduction to ethics*. Cambridge: Cambridge University Press.