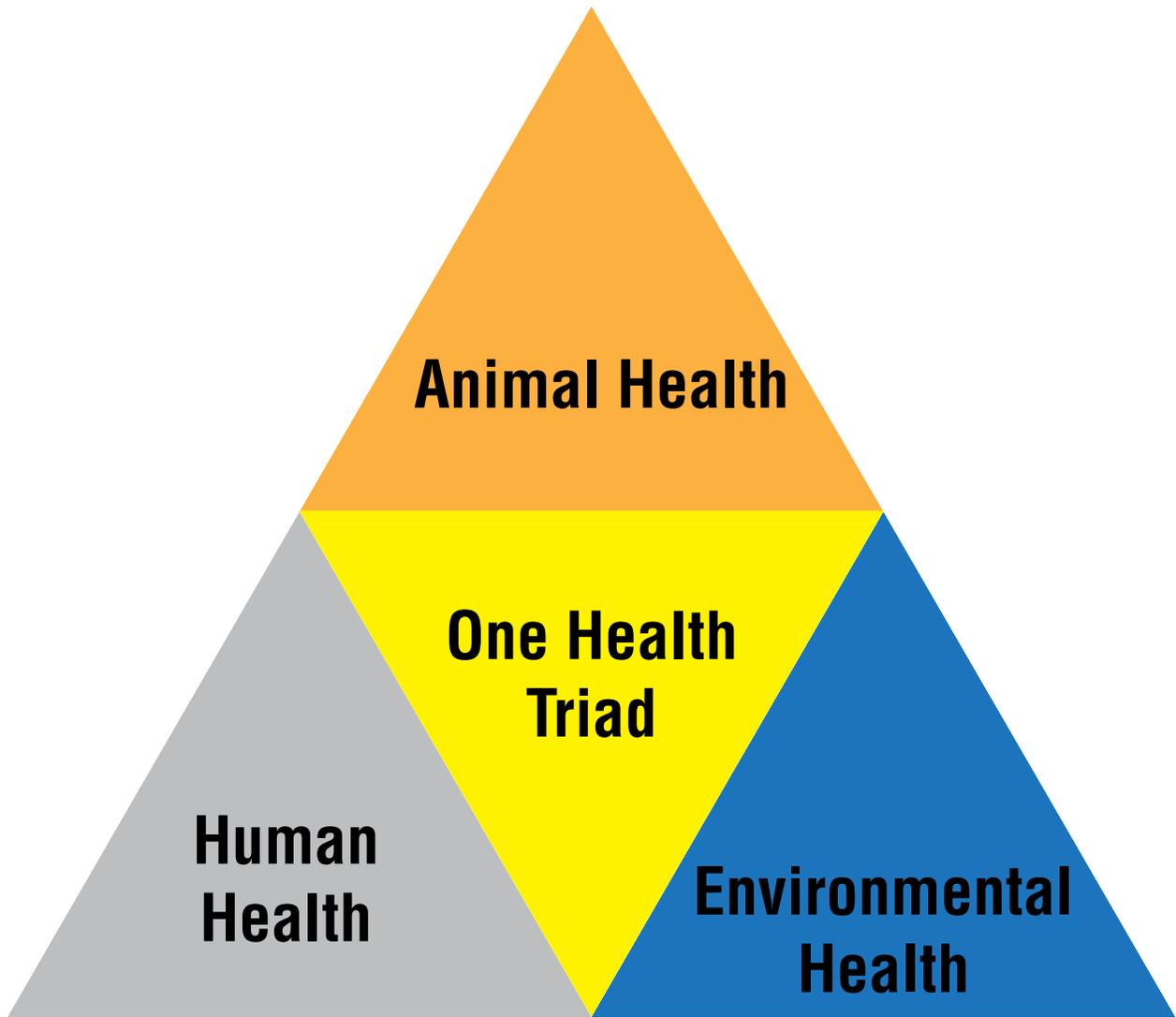


**B.S.K**



**News**



# Bioethics and One Health

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The BSK NEWS is a quarterly newsletter of the Bioethics Society of Kenya. We welcome a wide variety of submissions, including short articles in all areas of bioethics (broadly construed), opinion pieces, previews, latest news and relevant announcements.

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# From the Editors

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Warm greetings to the contributors and readers of the BSK News

We are pleased to present to you the 2021 issue of the BSK News. The theme of this issue is “Bioethics and the One Health Approach”. It is especially timely in view of the ongoing COVID-19 pandemic. Indeed, the pandemic is a reminder that human health is closely connected to the health of animals and the environment. Despite its appeal, however, the One Health approach has been accused of anthropocentrism for not paying sufficient attention to animal and environmental health. Mainstream bioethics itself has also been accused of anthropocentrism and in the recent past, there have been calls for extending the moral circle to include animals and the environment.

The BSK has continued to flourish in spite of the immense challenges arising from COVID 19 which has made face-to-face meetings impossible. Early this year we held a very successful virtual conference that attracted over 50 participants. We also held Bioethics Cafes at Moi University, University of Kabianga, and African International University. In addition, we provided training for members of the Kijabe Hospital Ethics Committee.

You may also have noted that our website has been revamped. Thanks to the great work of our IT officer and the BSK Secretariat, we have been able to continue providing a website that is interesting, informative, and resourceful. Please feel free to send us your comments on how we can improve further.

We would like to take this opportunity to invite you to our upcoming 2022 BSK annual conference that will take place on 10th March 2022. The conference will be held as an in-person event with an option to attend virtually. Please check our website for more details.

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# BIOETHICS SOCIETY OF KENYA

Be a member now- Open for all to Join

The Bioethics Society of Kenya is a self-governing organization whose main objective is to foster the development of bioethics in Kenya. The BSK is a not-for-profit, non-political, non-discriminatory, multidisciplinary organization. The society seeks to promote ethics in research, medicine and health care. Membership in the BSK is open to all Kenyans or persons residing in Kenya who shares the objectives of the BSK. Our mission is to support the development of ethics in the life sciences and diffusion of knowledge for equity and progress in health care.

**NB- 20% discount on registration and annual retention fee will be granted for IRBs that register as a group**

CATEGORY	REGISTRATION FEES KSH	ANNUAL MEMBERSHIP FEES	TOTAL
STUDENT	500	1000	1500
INDIVIDUAL	1000	2500	3500
INSTITUTIONAL(IRB)MEMBERS	1000	2500	3500

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Account Name: Bioethics Society of Kenya.

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## Each One Needs the Other

*Esther Muiruri*

A story is told of a farm in which dwelt a mouse, a chicken, a pig, and a cow . One day, the farmer's wife brought home a mouse-trap, to the great distress of Mouse, who was peeping into the kitchen through a small hole in the wall. Alarmed, Mouse ran to the chicken coop to announce the sad news. Hen, on receiving the news, said, "Mouse, there is no need for such commotion!" She proceeded to scratch the ground, and continued feeding. Mouse ran to the pig-sty, hoping for consolation from Pig. Pig sympathized somewhat, but said, "I'm sorry, there's nothing I can do." On ran Mouse to the barn, where he repeated his news. Cow said, "Well, just be careful when walking around." One night, something got caught in the trap, and the farmer's wife on hearing the snap, rushed out to check. Since it was dark, she failed to see that what was caught was a poisonous snake, which bit her. She was hospitalized for three days. Eventually, she came home. Farmer realized that she needed chicken soup, and proceeded to slaughter Hen. Neighbors came round to see the patient, and food needed preparing – so Pig was quickly converted into chops and sausages. Unfortunately, Farmer's wife passed on, and the numerous attendees at the funeral had to be fed – only Cow was large enough to fit the bill.

Thus ends the story of how seemingly distant actions (and inaction) that we might think only affect others out there, eventually touch us all. We are all interconnected; and in the world in which we live, what affects other human beings, animals, plants, and our shared environment, has an impact on the whole. Perhaps in no other more forceful way has this reality been made starker than through the COVID-19 pandemic. According to the World Health Organization ('WHO'), SARS-CoV-2, the virus that causes COVID-19, "has a zoo-

notic source ." Zoonotic diseases are caused by harmful germs that spread between animals and people . The devastation wrought by COVID-19 around the globe in terms of lives and livelihoods lost and diminished is testament to the urgent need for us to act in a concerted and collaborative manner to ensure the health and well-being of not just humans, but animals, plants, and the environment.

The One Health approach seeks a trans-disciplinary and multi-sectoral approach at the local, national, regional and global levels for a safer and healthier world. Through a cross-cutting approach involving collaboration, communication and co-ordination of programmes, policies, legislation and research, One Health seeks to ensure optimal outcomes for human beings, animals, plants, and the environment we all occupy . The imperative to do this is clear: Environmental degradation and pollution contribute to climate change, with the consequent ripple effects including loss of habitats for human beings, animals, and plants. These inhospitable environments then necessitate the movement of human beings and animals into other areas for survival; and these movements and settlements into other areas can be triggers for human-wildlife conflict, as well as conflicts between people; more so if there is a perceived or actual scarcity of resources to support healthy life. It goes without saying that constant conflicts and persistent insecurity are ingredients for a recipe of ill-health, loss of opportunities, and a lack of thriving.

Trees, plants, soil, and oceans act as carbon sinks; purifying the atmosphere and keeping the carbon cycle at optimum. The cutting down of trees and polluting of oceans and soils compromises this cycle; leading to adverse outcomes including acidification of the oceans , loss of biodiversity, poor crop yields,

diminishing of coastal protection, and of course, loss of livelihoods for communities which rely on oceans and farming for living.

Thus concludes our snapshot of the interdependence that exists between living things and their environment. A One Health approach is critical for our mutual well-being and survival; and we must realize that inasmuch as one might have power over the other, we are paradoxically also eventually at the mercy of the other. Inaction and uncaring is not an option.

1. This story has been adapted from Dag Heward-Mills's book, *He That Hath, to Him Shall be Given: And Him That Hath Not, From Him Shall Be Taken Even That Which He Hath*. London: Parchment House, 2012.
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3. Centres for Disease Control and Prevention (CDC) (2021). Zoonotic Diseases. At: <https://www.cdc.gov/onehealth/basics/zoonotic-diseases.html> [Accessed 15 Nov 2021].
4. This particular definition of the One Health approach is an amalgamation of definitions from the CDC, United Nations Environment Programme (UNEP), and Africa CDC.
5. United States Environmental Protection Agency (2021). Effects of Ocean and Coastal Acidification on Ecosystems. At: <https://www.epa.gov/ocean-acidification/effects-ocean-and-coastal-acidification-ecosystems> [Accessed 16 Nov 2021].

————— **The End** —————

# Bioethics and One Health: We all have a role

John Weru,  
Aga Khan University (Kenya)

Bioethics has traditionally focused on clinical and research ethics. Apart from animal experimentation prior to human studies in the development of biomedical resources, nonhuman ethics is often seen as an outsider in the realm of bioethics. However, this view is changing and one of the ways to have a broader view is via One Health. The One Health approach views human health as being an integral part and interdependent with animal and environmental health. This means a multidisciplinary collaboration between professionals from the disciplines of human medicine, veterinary medicine, and environmental protection. This is because, under One Health, the ethos of these disciplines are similar and aimed at one main objective: the wellbeing of that which is in existence. Contemporary global health issues concerning infectious diseases such as Ebola and COVID-19 underscore the need for a One Health approach. These diseases are majorly zoonotic spreading from animals to human beings as a result of environmental degradation. To prevent the emergence of these diseases all stakeholders, including policymakers, scientists, bioethicists, and the community at large take into consideration all the determinants of health at the human-animal-environment interface. This will be in tandem with UNESCO's Universal Declaration on Bioethics and Human Rights, which states that "Due regard is to be given to the interconnection between human beings and other forms of life, to the importance of appropriate access and utilization of biological and genetic resources, to respect for traditional knowledge and to the role of human beings in the protection of the environment, the biosphere and biodiversity" Thus the interrelationship between human beings and animals within the ecosystem that they exist, is critical to overcoming many health issues.

Whereas medical professionals, veterinarians, and environmentalism will be expected to lead the way, we all have a role to play in ensuring the best health outcomes for people, animals, and

our shared environment. We must protect the environment and minimize livestock-wildlife interaction. A clean environment will ensure that germs that eventually may lead to diseases will not have a safe haven to reproduce. Further, this will also ensure that the "good" bacteria that decompose waste thrive in their natural habitat and thus do their activities as needed. At the end of it all, this will decrease the environmental degradation that forms a nidus for zoonotic diseases to flourish and be transmitted. Furthermore, keeping animals healthy will help reduce future risk of zoonotic disease emergence as they will be more strengthened to deal with the diseases early and thus prevent contagious reproduction.

Faced with the complex and rapidly changing patterns of pandemics, and many other human maladies, the inextricable interconnection of humans and animals within the context of their social and ecological environment evidently requires a One Health approach. There are no losers in this approach. If properly implemented it will protect the lives of people, animals, and the environment.

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# Beneficence: The difference in clinical practice, Research and Public Health Practice

*Dr Stephen Ombok Muhudhia,*

## Introduction

The ethical principle of beneficence is well known in clinical practice and research. Beneficence is one of the four principles of biomedical ethics in the ethical approach of principlism advocated by Beauchamp and Childress. It is also one of the principles of biomedical ethics of the Belmont Report. This article discusses the underlying epistemic and philosophical basis for beneficence in clinical and research settings. The essence of beneficence is traced from the Hippocratic Oath through the post-world war two Nuremberg Code, to the Declaration of Helsinki and the International Code of Medical Ethics of the World medical Association. The discussion aims to clarify the practical application of the concept of beneficence and to explain the difference of its use in clinical services, public health practice and research.

A fundamental difference of clinical care and research is that in clinical care the patient comes to the health care professional or institution and requests for clinical services. In research, the researcher looks for participants.

## Beneficence in the Hippocratic Oath and other codes of medical ethics

The Hippocratic Oath requires physicians act always in the best interest of the individual patient under their care. The code is specifically for physicians treating patients and addresses beneficence from the aspect of the minimum expectation that "above, all first do no harm". Its emphasis is that in the provision of clinical care, harm to the patient should be avoided. The physician has an obligation to act always in the interest of the patient. In practice, harm may be unavoidable and therefore, acceptable if the net benefit of the treatment or intervention is worthwhile compared to the harm anticipated. In practical terms, the physician makes a benefit and harm analysis to determine if the harm done is worthwhile for the expected benefit. In clinical care, the benefit and harm refer

to the individual under the care of the physician. There is no reference of benefit to society or to generation of knowledge.

In clinical work, the primary aim is to benefit the individual patient. Beneficence in clinical practice refers to the doctor-patient relationship whose primary focus is the best interest of the patient. The care provided to the patient should "do no harm" to the patient and if harm is unavoidable then it must be minimized and weighed against the benefits. The treatment, intervention or care provided must be intended to benefit the patient. The physician should have the attitude and aim to benefit the health of the patient. Benefit to knowledge or to the community may be realized but it would not be the primary goal for clinical care. In clinical care the benefits relate to individual patients and the society or community is not taken into consideration.

## Beneficence in research and public health

It is important to note that the primary aim of research is generation of generalizable knowledge. Research must demonstrate potential benefit in respect to the primary aim, which is generation of new knowledge. Research may not benefit the individual participants but may result in overall benefit by generation of useful generalizable knowledge, or development of medicines, treatment procedures, or technology that may benefit others in society. In research, beneficence is one of the key principles covered by the Belmont Report, the Principles of Biomedical Ethics and the Declaration of Helsinki. These documents refer to conduct of research involving human participants and aim to protect research participants from harm. Researchers have an ethical obligation to maximize benefits and minimize harm to research participants. Human participants in research should not be harmed, but if harm is unavoidable then it should be minimized. The risk of harm must be weighed against benefits in order to find justification for proceeding with the research.

The beneficence principle in research may be applied to advocate for benefit of research participants through the research intervention or from other activities related to or incidental to the research activity such as better health care provided by the research team.

In public health interventions, the concept of beneficence applies, but the main beneficiary is the society or community. The individual may benefit as a member of the society but he or she is not the primary focus for beneficence in public health interventions. Prevention or minimizing harm refers to both the community and the individual participant. However, in public health some degree of harm to the individual may be acceptable for the overall benefit to the society.

It is therefore important to understand that the principle of beneficence holds for clinical care, public health and research but there are differences in the recipients of the benefit. In clinical care, benefit is primarily to the individual patient, while in public health it is to the society. However, in research, the primary aim of research is generation of generalizable knowledge and it is in this respect that the benefit should be judged. The other im-

portant component of beneficence, avoidance of harm, is very important in all the three areas of biomedical activities; research, public health and clinical care. Harm to participants or the community must be avoided and if inevitable must be minimized. Careful consideration of the benefits against possible harm is a mandatory obligation of the physician, researcher and public health practitioner. The welfare of individuals should never be sacrificed in the interest of research, but in public health, the interest of the individual may be sacrificed for the benefit of society.

### **Conclusion**

The concept of beneficence is important in research, clinical care and public health. It is however, important to understand the differences in application of the principle in various aspects of biomedical activities. Careful interpretation is necessary where research is done concurrently with clinical care. Research Ethics Committees and protocol reviewers need to understand the differences in the target of beneficence in when reviewing research protocols.