

#### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

### ETHICAL GUIDELINES FOR PUBLIC HEALTH EMERGENCIES IN THE RESPONSE TO COVID-19 PANDEMIC IN KENYA

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#### ABBREVIATIONS AND ACRONYMS

CEC - Clinical Ethics Committees

CIOMS - Council for International Organizations of Medical Sciences

COMEST - Commission on the Ethics of Scientific Knowledge and Technology

COVID-19 - Coronavirus Disease

ECC - Emergency Communication Center

GoK - Government of Kenya

GPS - Global Positioning Systems

IBC - International Bioethics Committee

IC - Informed Consent

ICT - Information and Communications Technology

ICU - Intensive Care Unit

IERC - Institutional Ethics Review Committee

NBC - National Bioethics Committee

NERC - National Emergency Response Committee

NPI - Non-Pharmaceutical Interventions

PPE - Personal Protective Equipment

SARS - Severe Acute Respiratory Syndrome

SOPs - Standard Operating Procedures

TV - Television

UDBHR - Universal Declaration on Bioethics and Human Rights.

UNESCO - United Nations Educational, Scientific and Cultural Organization

USA - United States of America

WHO - World Health Organization

#### **DEFINITION OF TERMS**

The following terms used in these guidelines are drawn from the World Health Organization unless otherwise specified:

Bioethics: A discipline that addresses ethical issues related to medicine, life sciences and associated technologies as applied to human beings, taking into account their social, legal, and environmental dimensions. (UNESCO, 2005)

Cultural pluralism: A sociological term which refers to a condition in which minority groups within a larger society maintain their unique cultural identities, and their values and practices in such a way that they are acceptable by the wider dominant culture provided they are consistent with the laws and values of the wider society. (Collins Dictionary)

Cultural relativism: A situation where judgments are based on experience, and experience is interpreted by each individual in terms of his own enculturation (*The Stanford Encyclopedia of Philosophy*). It implies that a person's beliefs, values, and practices are best understood from a person's own culture rather than being judged against the criteria of another.

Dendrogram: A branching chart showing the number of people who can be in contact with an infected person, to show the possibility of direct transmission of an infectious agent. (Wheeling Jesuit University)

Disasters: Situations or events, which overwhelms local capacity, necessitating a request to national or international level for external assistance. (World Health Organization)

Emergencies: A term describing a state that requires a decision and follow-up in terms of extra-ordinary measures. An emergency is declared or imposed by somebody in authority, who, at a certain moment, will also lift it and hence is defined in time and space, it requires threshold values to be recognized, and it implies rules of engagement and an exit strategy. (World Health organization)

Epidemic: The occurrence in a community or region of cases of an illness, specific health-related behavior, or other health-related events clearly in excess of normal expectancy. (World Health organization)

Expedited: An accelerated or sped up: promptly executed. (Merriam- Webster Dictionary)

Expedited Review Process: The processing of protocols that must present no more than minimal risk to subjects. In this context "minimal risk" is the probability and magnitude

of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests; and that protocol procedures must qualify for an expedited review process. (John Hopkins Medicine)

H1N1: A virus that is a subtype (H1N1) of the orthomyxovirus (species Influenza A virus of the genus Influenza Virus A) causing influenza A, that infects birds, pigs, and humans, and that includes strains which may occur in seasonal epidemics or sometimes pandemics. (Merriam-Webster Medical Dictionary)

Healthcare workers: All people engaged in actions whose primary intent is to enhance health. (World Health organization)

Outbreak: An increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area often used for a more limited geographic area. (Center for Disease Control)

Pandemic: The worldwide spread of a new disease. (World Health organization)

Public Health Emergency: A situation that is extraordinary, serious, unusual, or unexpected; carries implications for public health beyond the affected State's national border; and may require immediate international action. (IHR, 2005).

Public health emergency is defined as "an occurrence or imminent threat of an illness or health condition such as epidemic or pandemic disease or (a) novel and highly fatal infectious agent that poses a substantial risk of a significant number of human facilities or incidents. (World Health Organization)

#### 1.0 INTRODUCTION

Despite the preparedness and measures put in place by the global community and individual states, disease outbreaks and emergencies may overwhelm public health, health care systems and community responses. States have the responsibility to put in place preventive, diagnostic and therapeutic interventions to mitigate negative effects. Sometimes responses raise ethical issues for those involved such as public health specialists, healthcare workers, law enforcement forces and policy makers. Ethical guidelines are essential for dealing with unforeseen consequences and the most vulnerable victims of public health emergencies. The responses to pandemics such as COVID-19 create extraordinary circumstances such as isolation, quarantining, limited

freedom, compassionate use of drugs and clinical trials among other measures some of which raise ethical issues and dilemmas. Ethical questions arise from the responses hence creating a gap upon which these guidelines have been developed. These guidelines provide a framework that can be used in outbreaks, emergencies and disasters by examining every process through the lens of bioethics. Human rights, respect for human dignity and global ethical principles are the premise upon which the guidelines have been developed.

#### 1.1 Target Group

The ethical guidelines are meant for state agencies involved in public health emergency response, health care workers, lawyers, scientists, researchers, research ethics committees and policy makers.

#### 1.2 Purpose

The purpose of these guidelines is to provide a framework regarding ethical issues related to the entire landscape of prevention, diagnosis, therapeutic interventions and rehabilitation in relation to extraordinary circumstances created by public health emergencies, taking into account the social, legal and environmental dimensions of the persons infected and/ or affected.

### 2.0 ETHICAL GUIDELINES FOR SCREENING, DIAGNOSIS AND MANAGEMENT OF COVID-19 AND OTHER DISEASE PANDEMICS

Medicine as a practice is guided by medical ethics, which is a system of moral principles that apply values to the practice of clinical medicine and scientific research. It is reinforced by four main ethical principles, namely, Autonomy, Beneficence, Non maleficence and Justice. Responses to COVID-19 pandemic and other public health disease emergencies require a multidisciplinary and multiagency approach. Key stages in the responses include planning, prevention, screening, diagnosis, management and rehabilitation.

Within the framework of the Global Humanitarian Response Plan for COVID-19 pandemic, health cluster teams and partners are concentrating on containing the spread of the pandemic and decrease morbidity and mortality as a key strategy among others. During pandemics such as COVID-19, health care workers are the initial responders because of their technical capacity to address health needs. The extraordinary circumstance created by the rapid spread of the disease and the counter response mechanisms require the application of ethical principles.

#### 2.1 Challenges Posed by Pandemics such as COVID-19

As demonstrated in the past, disease emergencies such as the 2003 outbreak of the Severe Acute Respiratory Syndrome (SARS), the 2009-2010 H1N1 influenza pandemic, and the 2014-2016 Ebola outbreak in West Africa, bring with them major challenges to health care systems due to significant increases in the clinical demands beyond the existing capacities. Surges in the COVID-19 pandemic have resulted in increased numbers of patients, some of whom have complications requiring supportive care.

During pandemics, Ministry of Health and supporting agencies should be guided by normative and legal instruments such as the WHO International Health Regulations and national health laws and policies. While healthcare providers are responding to COVID-19 pandemic they are obliged to address other disease conditions, respect individuals, and uphold human dignity.

At all stages of pandemics, health workers continue to make decisions and take actions on screening, diagnosis and treatment. The decisions and actions are dependent on the availability of appropriate and adequate testing, diagnostic materials, equipment at the point of care, triaging of patients and prioritization of care, provision of treatment with drugs and machines as well as post discharge rehabilitative care.

As healthcare providers attend to patients infected with COVID-19 and other diseases during pandemics, they may be required to work long hours and sometimes spend several days at the health facilities away from their homes and families. This not only creates fatigue and stress but also increases the risk of getting infected.

There are challenges of dealing with significant and rapid increases in cases. Increased clinical demands are likely to go beyond the existing capacities and culminate in severe shortages of resources and subsequent limited access to health care, inequity in provision of care and marginalization particularly among populations who already had preexisting barriers to accessing care.

### 2.2 Ethical Concerns and Mitigating Measures when Responding to COVID-19 and Other Pandemics

There are ethical concerns in testing, diagnosis and patient management that are likely to arise and should be addressed for common good. This section addresses these ethical concerns and recommend mitigating strategies.

#### 2.2.1 Testing and Diagnosis

The ethical concerns during testing and diagnosis include: Obtaining informed consent for testing; Safeguarding confidentiality, respect, human dignity, privacy and safety of persons/patients during testing, diagnostic procedures, storage of test results, communication of test results and diagnosis; and Ensuring equity, justice and safety during prioritization and actual testing and procedures.

To address these concerns, healthcare providers should:

- a. Ensure that people/patients understand and consent to testing and diagnostic procedures without any coercion;
- b. Observe privacy and confidentiality of individual persons/patients during testing and/or diagnostic procedures;
- c. Ensure privacy and confidentiality of individual patient's medical information, including charts in public viewable areas and avail and/or discuss these only with those colleagues who are caring for the particular patient.

#### 2.2.2 Patient Management

During patient management, the ethical concerns include: obtaining informed consent from patients for physical examination and treatment; confidentiality, respect, dignity, privacy and safety of patients during physical examination and treatment; truthful and timely communication to individual patients about their clinical status and prognosis; equity and justice for non-discrimination during patient triaging and provision of utilities, medicines, supplies and equipment such as ventilators.

To mitigate negative effects, healthcare workers should:

- a. Uphold their professions' ethical responsibilities. This includes ensuring that the care needs of individual patients are assessed based on clinically relevant data and that no one is discriminated on the basis of demographic characteristics, social or financial status;
- b. Ensure patients understand and consent to physical examination and the specific treatment modalities
- c. Always observe confidentiality, respect, dignity, privacy and safety of patients during physical examination and treatment
- d. Embrace equity, including use of Standard Operating Procedures (SOPs), during provision of services such as triaging of patients, prioritization of patient care for various levels of severity of the disease, distribution and provision of utilities, medicines, supplies and equipment such as ventilators

- e. Provide truthful communication timeously to individual patients, and where appropriate to families and guardians, about their clinical status/ medical information and prognosis
- f. Consult with colleagues and where indicated institute patient referrals in a timely manner
- g. Where available involve Clinical/Hospital Ethics Committees in decision making in accordance with the facility policies and procedures.

#### 2.2.3 Healthcare Workers Scope of Practice and Safety

There are imperative ethical concerns and mitigation factors with regard to healthcare workers' scope of practice and safety. These include: altering standards of care (offering care beyond one's scope); offering care to save large numbers of lives versus focus on individual care; working for long hours without rest and optimality of their outputs; risk of abandoning families; and risk of being abandoned by families.

Ethical issues regarding safety include: individual safety and risk of exposing oneself to infection at the workplace and subsequently exposing family members to infection; stigma for handling infected patients; psychological effects due to handling many critically ill and dying patients, sometimes with inadequate resources; availability of care and treatment if infected; and compensation in case of death from pandemic work-related causes.

To alleviate repercussions of the disease on the safety of health workers, the Government and other employers should:

- a. Prioritize welfare of healthcare workers and demonstrate appreciation for their enormous contribution to societal well-being during COVID-19 pandemic and other disease emergencies; provide incentives to motivate and encourage healthcare workers in their work;
- b. Provide appropriate and adequate resources (human, equipment and supplies) for testing, diagnoses and patient management to uplift and sustain health care workers' morale,
- c. Prevent burn-out and optimize their outputs;
- d. Put in place mechanisms to protect healthcare workers against litigation for acts and decisions during exercise of duty of care.
- e. Provide appropriate and adequate personal protective equipment (PPE) and appropriate training for its use, to safeguard against infection during service delivery.

f. Provide appropriate and priority care for health care workers and their families who are infected and affected by the pandemic, including having in place and implementing mechanisms for health care workers compensation for death or disability resulting from pandemic-related causes.

### 3.0 ETHICAL GUIDELINES IN ALLOCATION AND USE OF HEALTHCARE RESOURCES

Access to care and health equity during a pandemic is a matter of ethical concern. Large numbers of patients especially those with severe illness can overwhelm the health system resulting in shortages of supplies, equipment and healthcare workers.

Healthcare institutions ought to show commitment to fair access to care for all people in need of it. The COVID-19 pandemic, like other pandemics, places pressure on a healthcare system, particularly where there are pre-existing shortages in staff, drugs, equipment and care guidelines. Patient populations experiencing barriers in accessing care prior to any pandemic are likely to be even more disadvantaged during pandemics. There is the likelihood of inadequate capacity for screening, testing and diagnostic services as well as limited access to life-sustaining equipment. Fair-mindedness is needed when limited health workers, emergency vehicles and lifesaving equipment and treatments have to be shared by seriously ill patients from diverse backgrounds.

In the face of limited resources, decisions have to be made about who will have access to what care, and at what point. For instance, which patient should get priority when allocating limited ventilators or intensive-care unit beds? If a vaccine is developed, who should receive the first batches? Why them? While rationing of health resources is inevitable, fairness and justice are paramount in the face of upholding human dignity.

#### 3.1 Ethical Considerations in Distribution of Scarce Health Resources

Healthcare should be upheld as an essential human good that should be accessed by all irrespective of health insurance status and other financial barriers. All individuals, irrespective of age, race, social or economic status should be facilitated to access all the levels of care they need. Containment efforts should strive to ensure that the outbreak does not aggravate those already experiencing marginalization.

Healthcare workers ought to uphold their ethical responsibilities by ensuring each patient's care needs are assessed based on clinically relevant data and that no discrimination happens to any individual or their care givers on the basis of their social and demographic characteristics, or any other considerations.

In the event of large numbers of patients becoming critically ill, health facilities within any one county should implement a uniform triage process and cooperate when critical care resources become scarce, including considering the need for inter-hospital patient transfer. A plan to ensure all facilities comply with a prescribed process, and that the plan is routinely updated to keep abreast with realities on the ground, will promote the most effective allocation of resources for mass critical care. Hospitals should be supported to establish independent, interdisciplinary and multidisciplinary Clinical Ethics Committees where there are none.

Implementation of isolation or quarantine conditions require a uniform in-coming and out-going procedure with appropriate SOPs to be followed. When the demand for these facilities becomes high, and critical resources become scarce, all stakeholders need to cooperate in finding an appropriate solution, including considering client transfers within county facilities.

To the extent possible there should be a plan to ensure all isolation or quarantine facilities comply with prescribed minimum quality conditions and processes, and that such a plan is routinely updated to meet changing realities. Use of a stakeholder informed criterion would make the allocation for these resources explicit in an environment of extreme scarcity. Combining strict requirements and applying distributive justice when allocating the limited resources to each facility are fundamental.

An ethical and cautious approach is vital for distribution of available healthcare resources. Such a move requires transparency, stakeholder engagement, and a conscious effort to develop concrete tools for implementing these suggestions.

Collaborations will enhance social responsibility and solidarity during emergencies to alleviate human suffering. This calls for contributions towards the common good at all tiers of society – international, national, county, sub-county and village levels. Any funding donated to the country should be used equitably to fill gaps while ensuring proportionate sharing of resources within counties, populations, health facilities and patients. Although outbreaks are generally not covered by insurance, there can be provisions for exclusion and consideration on a case-to-case basis. This should be done in a transparent and non-discriminatory manner.

#### 4.0 ETHICAL GUIDELINES IN ENFORCEMENT OF CONTAINMENT MEASURES

Some of the preventive non-pharmaceutical measures in the management of the pandemic are isolation, physical and social distancing and restricted movement. Other containment measures include quarantine of individuals thought to have been exposed, closure of schools and public institutions, cancellation of public events such as sporting events, concerts, closure of public venues such as shopping malls, restaurants, museum galleries, and theaters. Restricted access to public venues such as grocery stores, public transportation, and gasoline stations, provision of guidance on office practices and/or flexible work scheduling as well as restricted travel are deemed essential for decreasing potential exposure. The containment measures are meant to decrease physical contact and proximity of individuals that may lead to spreading of the disease.

Important ethical issues arising from enforcement of containment measures that need to be addressed are right to freedom and autonomy.

#### 4.1 Right to Freedom

The right to freedom during public health emergencies is contestable for everyone's good. However, enforcement should be within the confines of human rights and common good. Sensitization, education and counselling will promote individuals will to comply voluntarily and reduce the need for coercion and infringing on individual rights such as right to freedom. Voluntary action can be enhanced by basing decisions on scientific data.

#### 4.2 Autonomy

During public health emergencies individual autonomy ceases to hold and limited autonomy takes precedence. Restricted movement and containment measures are allowable for preventing the spread of disease and common good.

#### 5.0 ETHICAL GUIDELINES IN RESEARCH PROCESSES DURING PANDEMICS

Ethical principles for clinical and biomedical research are universal but the application must be contextualized for local applicability. They provide a framework for conducting research during outbreaks and epidemics. Drug and vaccine development should be conducted with the safety concerns of study participants duly considered without losing

the importance of scientific and technological developments. Research and development actions should be guided by, at the very least, the ethical principles of autonomy, beneficence, non-maleficence, and justice and other principles as stipulated in the global normative ethics instruments such as the Universal Declaration on Bioethics and Human Rights (UDBHR).

#### **5.1 Respect for Autonomy**

Individual autonomy should be respected, patients and healthy volunteers must be involved in the decision-making process regarding their participation in research. Their ability to make informed decisions should be assessed and full disclosure must be done while ensuring privacy and confidentiality of patient information. Informed consent should be obtained from individuals before their personal information or biological samples are collected and processed for research purposes. Informed consent should be clearly documented whether obtained in person or remotely.

#### 5.1.1 Informed Consent

Informed Consent is an invaluable process in research. The decision to participate must be made free from coercion or undue influence or inducement by a competent person who can comprehend the information given and appreciate the associated risks. The information given to the participant should be in a language and format that is easily comprehensible.

#### 5.1.2 Privacy and Confidentiality

Privacy is concerned with the setting in which a person's health-related information is acquired. Researchers shall take precautions to interview victims of an emergency in private places ensuring all safety ethical precautions are adhered to in relation to the prevailing emergency/ pandemic/disaster. Confidentiality ensures that identifiable information is kept out of reach of others.

All identifiable information about individuals, whether recorded, written, computerized, visual, audio or simply held in the memory of study participants, is subject to the duty of confidentiality. It is the duty of researches to ensure that identifiable data from surveillance activities are secured and not accessed by unauthorized persons regardless of the prevailing situations.

#### 5.2 Beneficence

Researchers have the ethical obligation to maximize benefit and minimize harm. The bare minimum consideration of this ethical principle should be to ensure benefit from and access to a new vaccine, medicine or technology for all during and in a post-pandemic/emergency/disaster situation.

#### 5.3 Non-maleficence

Researchers have a moral duty not to deliberately cause harm to others through interventions. In this regard, the safety of the research participants must be given priority at all times during the study.

#### 5.4 Justice/ Research benefits

Distributive justice requires equitable distribution of benefits and burdens. No segment of the population should be unduly burdened by the harms of research or denied the benefits of the knowledge generated from it. Drugs and vaccines found to be effective from conducted research shall be made available to the country at affordable costs. In this regard, researchers should ensure agreements with Sponsors prior to initiation of the clinical trials.

#### 5.5 Vulnerability

Children, mentally and/or physically disabled individuals, prisoners, refugees, stateless persons, undocumented migrants, terminally ill patients and expectant mothers are often cited as the prime vulnerable groups. Special precaution should be taken to protect these groups and they should only be included in a COVID-19 and other disease emergency research after careful assessment of the need for this by an IERC.

#### 5.6 REVIEW OF RESEARCH PROTOCOLS: Expedited/Quick turn-around Review

An expedited joint review process will be considered for any new research studies such as clinical trial reviews and approvals for new preventive, diagnostic and therapeutic interventions relating to pandemics such as COVID-19 as follows:

- a. The researcher will complete the full Institutional Ethics Review Committee (IERC) review forms, ensuring that all questions are answered and all supporting documents are attached to the application.
- b. The researcher must submit the completed form to the relevant IERC and provide justification as to why the project requires urgent ethical review. Ethical justifications should include the public health grounds for the study to be conducted and the rationale for conducting the study at this time. The subject header of the document should include: the specific Disease Emergency (e.g. COVID-19) Expedited /quick turn-around request for Review.

c. The request will be reviewed by the secretariat of the IERC and a decision in relation to whether the project is eligible for expedited review will be confirmed via email within 24 working hours. If approved the application will be reviewed by the IERC within a maximum period of ten (10) working days and a decision made. If the request for expedited review is denied the application will be handled in accordance with the guidelines of the particular IERC. Under the guidance of the National Bioethics Committee, NACOSTI may consider constituting a joint review committee to coordinate review of pandemic, disaster or emergency related proposals.

#### 5.7 Clinical Trials and Observation Studies

With increased research activities to discover a cure and a vaccine during public health emergencies and disasters, IERCs should accelerate review and approval of novel approaches so as not to unnecessarily delay research.

All IERCs under NACOSTI are responsible for research oversight of all emergency research in the country and where there are difficulties they refer to NBC. Guidance for expedited reviews by IERCs is critical, considering the nature of the global threat. Ethical principles should not be transgressed. Transparency, sharing of data, and sharing of benefits of research such as discovery of novel drugs and vaccines should be availed to all nations at an affordable price. Data sharing will be done in accordance with the data sharing guidelines and agreement as prescribed by NACOSTI. ( can a reference be provided as to which specific document to refer to )

#### 5.8 Collaborative Partnerships

The rapid spread of the disease results in instituting barriers across borders between countries, communities, and individuals in an attempt to prevent transmission. Such extreme measures should not impair international collaboration in the fight against the pandemic nor instigate or perpetuate xenophobia and discrimination.

The State has a social responsibility to build solidarity and co-operation rather than find refuge in exclusivity and isolation because human beings are survived and progressed by co-operation.

Co-operation is essential at international, cross-government levels; regional organizations, state, public and private sectors, civil society, and non-governmental organizations. However, all the necessary agreements such as material transfer agreement (MTA) and data transfer agreement (DTA) should be observed irrespective of the emergency situation.

#### 5.9 Community Engagement

Pandemics showcase the dependency between states in terms of availability of reagents to be able to perform diagnostic tests, protective masks and ventilating machines The International Bioethics Committee (IBC) and Commission of the Ethics of Scientific Knowledge and Technology (COMEST) call for international co-operation and solidarity, instead of narrow national interest, underlining the responsibility of rich countries to help poor nations during this time of international public health emergency.

There should be no forms of trafficking and/or corruption that might be associated with individuals or groups trying to undermine the needed solidarity and dis-engage the communities. Communities shall be appropriately engaged in research related activities.

### 6.0 ETHICAL GUIDELINES IN RELATION TO SOCIAL AND PSYCHOLOGICAL PERSPECTIVES OF RESPONSES TO COVID-19 AND OTHER PANDEMICS

The Interim Guidelines of COVID-19 in Kenya provide recommendations for prevention and case management. They are meant for healthcare workers taking care of patients suspected or confirmed to have COVID-19. Guidance is provided on management of visitors, surveillance, management of healthcare personnel, stewardship of personal protective equipment and antivirals as well as environmental infection control (KMA, 2020). These guidelines are important for managing COVID-19. Additionally, in the wake of COVID-19, mental health must be safeguarded because of the anxiety brought about by occurrences surrounding the pandemic. The National Emergency Response Committee guidelines on Public Health Education during COVID-19 Pandemic explicates the importance of taking care of mental health, how to remain mentally healthy and reduce stigma against persons suffering from COVID-19 and their caregivers (National Emergency Response Committee, 2020). Due to the containment measures there is the potential significant demand for mental health needs, this is addressed by the Interim Guidance on Continuity of Mental Health Services during the COVID-19 Pandemic and County Referral Hospitals are required to optimize to provide these services (Ministry of Health, 2020).

The COVID-19 pandemic and other disease emergencies have multiple effects on healthcare workers, individuals and families. There have been psychological repercussions on persons leading to fear, stress and distress. A holistic multidisciplinary

and multiagency approach is essential for managing individual needs to help cope with the ramifications of the crises.

The principles of human dignity and human rights, benefit and harm, autonomy and individual responsibility, consent, respect for human vulnerability and personal integrity, equality, justice and equity, respect for cultural diversity and pluralism, social responsibility and health, and protection of the environment, the biosphere and biodiversity apply in social and psychological dimensions of responses to COVID-19 and other pandemuics. It should be noted that these principles are interrelated and complementary.

Pandemics call for responses that will provide innovative psychosocial support that do not require physical contact. Virtual contact should be allowed during isolation, quarantine and ICU admission.

#### 6.1 Psychological Needs of Front-line Workers, Patients and Families

The difficulties that arise due to measures taken to prevent the spread of the COVID-19 and other pandemics can result in emotional distress. Health professionals, patients and families require psychological assistance and support to deal with the emotions experienced.

Healthcare workers may be required to work long hours and sometimes spend several days living at the hospital or away from home. They should try to sleep well and take short breaks from ICU.

Healthcare professionals need peace, nourishment and support for their psychological, mental and spiritual needs during this period of emergency. In the spirit of social responsibility and solidarity collaborative efforts can be made to provide for these needs. Virtual psychosocial support groups and counselling can help in managing stress. Mental healthcare workers should develop programs that cater for psychological and mental health and people who lose businesses and employment due to the pandemic and recovering patients should be provided with psychosocial support to help in mitigating effects of loss and stigmatization.

To help in up scaling acceptance, information needs to be shared in a structured manner, in a language that is comprehensible to reach the majority if not all. Updates need to be given as often as possible and decisions made based on scientific facts. Strategic communication that recognizes cultural diversity and pluralism can help in compliance to containment measures.

People who are suffering from other ailments require medical attention even at the time of healthcare emergencies. Patients should be encouraged to seek medical treatment and facilities separated from those handling patients who are infected by the virus for common good.

#### 6.2 Advanced Care Planning

Advanced care planning will help in managing patients during advanced illness and help the families to cope with eventualities.

Hospitals are encouraged to develop policies and guidelines or review where in existence but inadequate, for handling patients to help deal with consenting issues and end-of-life care. Multidisciplinary teams are essential for handling salient issues such as decision making and stress while reducing suffering and pain for patients and families.

#### 6.3 Palliative Care

There is a need for palliative to cater for needs of all patients and their families for lifelimiting illness. To ensure treatment of patients with respect and dignity, plans for palliative care will be part of the management process during pandemics and disasters. Clinical ethics committees should be strengthened or established where they do not exist, to help in dealing with ethical dilemmas arising from diagnosis, treatment and care of patients during different stages of illness.

#### 6.4 Social Distancing, Isolation and Quarantining of Offenders

Offenses committed against pandemic containment measures should not be treated as criminal. A legal framework should be developed to guide handling of such cases. Those who are sent to quarantine centers require safe living conditions, information, testing and support. There shall be a deliberate effort by the enforcers to convince the affected individuals to accept the measures for containment as civic responsibility meant for their own good, their families and for the general public.

Vulnerable people under lockdown should be supported to access basic needs while vulnerable populations such as refugees and prisoners need information and control measures. Inmates may be released to the extent that they do not increase risks of infection and security.

## 6.5 Management of COVID-19 and other Epidemics Confirmed Dead Bodies and Disposal of Protective Personal Equipment

Dignified and respectful treatment shall be given to the dead body during preparation, transportation and final destinations. Environmental ethics is a concern during epidemics

and disasters. If the beliefs of the family allow, then cremation is preferred over final destination. The personnel involved in handling the dead bodies shall be insulated from all forms of potential and real harm during the period of conducting their duties. They shall be provided with the personal protective equipment (PPEs) in line with the Ministry of Health (MoH) guidelines.

#### 6.5.1. Right to Final Farewell

The World Health Organization in its interim guidance made pertinent considerations relating to the dignity of the dead and respect for their traditions and for their families. Interment of persons who succumb to COVID-19 and other disease pandemics should be conducted in accordance with the MOH guidelines and directives on handling and burial of deceased persons, particularly allowing for the participation of close family members in the burial process.

Human dignity calls for respect even in death. Ministry of Health Guidelines apply in the consideration of the safety of the healthcare givers, those handling bodies, and the community. The guidelines shall conform to ethical principles and shall be applied within cultural and religious perspectives. Virtual contact will be allowed for close family members to reduce suffering and pain.

Opportunities for expression of patient's and family beliefs, values and preferences may be provided to the extent possible. There is need to assist families psychologically and spiritually notwithstanding the beliefs and values of healthcare providers. This calls for involvement of psychologists, psychiatrists and spiritual leaders.

#### 6.5. 2 Safe Disposal of Personal Protective Equipment to avoid exposure to the Disease

An integral part of the response to COVID19 and other disease emergencies is the right of medical practitioners to use PPEs and the need for the public to use facemasks. PPEs are disposal material and the risk of exposure from these materials is high. Disposal procedures should be developed to prevent the spread of the pandemic and protect the environment degradation. A protocol should be developed for safe disposal of PPEs for the protection of the environment to give due regard to the interconnection between human beings and other forms of life.

### 7.0 ETHICAL GUIDELINES IN UPHOLDING THE RULE OF LAW DURING THE COVID-19 PANDEMIC AND OTHER DISEASE EMERGENCIES

To promote public health and wellbeing individual rights and freedoms may be curtailed. National laws and constitutional provisions shall apply, together with universal ethical normative instruments.

The rule of law and the Constitution remain in force during public health emergencies, as the State seeks to safeguard the threat to wellbeing.

#### 7.1 Regulatory framework

The Constitution of Kenya (2010) and the Public Health Act (2012) have been invoked in this section.

The guidelines from the World Health Organization and Ministry of Health demonstrate that the limitations imposed are for purposes of safeguarding the public and protecting human life. The regulations indicate the timelines applicable, but, given the complexity of the pandemic, the *precautionary* principle requires the government to take preventative measures despite the uncertainty of the disease's trajectory and timelines.

#### 7.2 The Legality of Limiting Rights or Fundamental Freedoms

All individuals are entitled to certain rights and freedoms as provided for in the Bill of Rights of the Constitution of Kenya, among other legal documents.

Article 24 of the Constitution at the same time outlines the rights and fundamental freedoms that may be limited by law, as long as such limitation is *reasonable* and *justifiable*. The conditions for limitation are that it must be imposed by law; the right to be limited must be identified; the importance of limiting the right as well as accompanying timelines must be made manifest; the limitation must not prejudice enjoyment of the right by others, and lastly, the least restrictive measure ought to be employed to achieve the desired result.

The restriction of personal liberties is an expected outcome during public health crises, although their duration should be short-lived. The COVID-19 pandemic, with the available evidence of related morbidity and mortality is deemed serious enough to warrant such limitation of rights and freedoms.

Freedom of movement is limited to hours outside of the curfew and in certain cases, restricted to defined areas. Quarantine requirements may impose additional restrictions to the freedom of movement. Regulations on social distancing limit the right to assembly

and to the religious expression through public worship, and the enjoyment and participation in cultural festivities and ceremonies.

The right to work is also impacted by the inevitable scale down of non-essential service sectors. Regulations requiring notification of persons suspected to be infected as well as the powers granted to authorize health workers to enter, search and decontaminate infected surfaces limit the right of privacy.

To be fair and ethical, these restrictions must meet the stated conditions under Article 24 of the Constitution. Some aspects of the current restrictions shall be addressed on a case-by-case basis.

If it were deemed necessary and subject to given conditions, the President could eventually declare a State of Emergency subject to Article 58 of the Constitution, which would permit such a declaration to meet the circumstances for which the emergency is declared. This would mean that the pandemic is qualified as a public emergency that threatens the life of the nation. A State of Emergency should not extend beyond 14 days without the authorization of Parliament and the Supreme Court is empowered to decide on the validity of its declaration, its extension and the legislation enacted or other action taken in consequence. Any legislation enacted subsequently may limit a right or fundamental freedom in the Bill of Rights only to the extent that the limitation is strictly required by the emergency and shall not take effect until it is published in the Gazette.

#### 7.3 Ethical Issues Related to the Implementation of Containment Measures

The legal provisions essential to the management of COVID-19 and other pandemics shall be implemented with considerations to individual and public needs, while upholding ethical principles.

Policies, laws and regulations must delicately balance protecting individual rights with meeting collective needs, promoting cooperation and coordination across jurisdictions, and ensuring fairness in meeting the needs of particularly vulnerable populations. The State shall ensure the health and wellbeing of all, and public health functions performed to ensure that health and social measures are enforced within the confines of human rights and respect for human dignity, while protecting the public from exposure to the disease.

#### 7.3.1 Respect for Persons & Human Dignity and Human Rights

The public health regulations should uphold national values and principles of governance, specifically upholding human dignity, non-discrimination and

accountability to protect lives, a constitutional responsibility of the government as earlier stated.

#### 7.3.2 Distributive Justice and Vulnerability

Corresponding policies shall safeguard the economic, social and cultural rights such as right of access to food and water, free quarantine services, access to masks, ensuring that frontline healthcare workers have personal protective equipment, protecting workers from mass layoffs and tenants from pandemic-related eviction and ensuring that hospitals are equipped to handle other cases.

#### 7.4 Exercise of public oversight role

Although the regulations developed to fight disease pandemics such as the COVID-19 pandemic inevitably limit some rights and fundamental freedoms, nonetheless they satisfy basic conditions set out in Article 24 of the Constitution. Public oversight should ensure that the least restrictive approaches are respectfully implemented to achieve a practical and reasonable balance between public health protection and enjoyment of fundamental rights and freedoms.

# 8.0 ETHICAL GUIDELINES IN INFORMATION HANDLING AND COMMUNICATION DURING COVID-19 PANDEMIC, DISASTERS AND EMERGENCIES

During public health emergencies individuals and organizations will desire to understand the implication of the pandemic on the daily lives and activities. Accurate and reliable information is fundamental. Guidelines should be developed for management and transmission of real time information. Efficient, and effective communication is essential for the prevention of further spread of the pandemic.

## 8.1 Information Handling and Communication during Pandemics, Disasters and Emergencies

Factual information shall be offered by designated organs such as Ministry of Health to avoid misinformation. Guidelines will be developed to help in management and sharing of information.

#### 8.2 Ethical Issues Arising from Information Handling and Communication Process

Salient ethical concerns arise from the way information is handled and communicated by states. These include:

- a. Right to information. This is a basic human right
- b. Access to information, equity, equality and justice. This will enhance compliance with the directives and protocols for appropriate management and control of spread of the pandemic
- c. Accuracy reliability and timeliness of information
- d. Privacy and confidentiality (of persons tested and results)

These ethical issues need to be addressed as follows:

#### 8.2.1 Right to Information

All people in the country are entitled to information to enable them make appropriate decisions and choices. All efforts should be made to ensure this right is observed during pandemics and other public health emergencies.

#### 8.2.2 Access to information, Equity, Equality and Justice

To promote access, equity, equality and justice in provision of information to all the people of Kenya as well as ensure accuracy and reliability of the information, a communication framework should be established. In this effort, a Multi-Agency National Emergency Response Committee (NERC) consisting of key agencies should be constituted or revamped if it already exists. The committee should ensure appropriate use of a wide array of communication channels including various media such as electronic, print, and social for effective reporting to educate the public on medical, psycho-social, cultural, religious and ethical issues. Other channels should include sensitized opinion leaders to convey some of the messages to their local communities in the local language, billboards, brochures, fliers and newspapers.

To enhance access and equity, the messages should reflect the literacy levels and cultural contexts, be translated to different local languages/dialects and contain explanations to

help in understanding and acceptance of directives. Where possible, a toll-free call centre shall be made available to enhance access to information and for seeking clarification for information enquiry.

Additionally, the Ministry of Health should establish partnerships and collaborations with media stations; and also establish a dedicated website to provide a repository of information to various stakeholders and the public. Government briefs should be posted on the website that is frequently updated, with links to websites of partners or collaborating institutions. The website should be tailored for different audiences with each section having relevant information on current events, guidance, and recommendations. Partnerships between the state and mobile service providers and organizations should be sought/strengthened to relay appropriate messages.

Electronic devices and related applications such as Global Positioning Systems (GPS), smartphones, and others should be used appropriately for monitoring of behavior patterns and hence provide valuable information in transmission mapping.

#### 8.2.3 Accuracy, Reliability and Timeliness of Information

To ensure transmission of accurate and reliable information, the Multi-Agency National Emergency Response Committee should establish an Emergency Communication Center (ECC) to synthesize and coordinate the received data and updates. In addition, they should have designated spokespersons to ensure the information provided is not only accurate and reliable but also consistent in order to garner public trust. To further secure and sustain public confidence, trust and compliance with directives, people in authority at all levels should lead by example in complying with directives provided.

Timely delivery of information is of essence in pandemics for saving those infected and the public. Thus, messages should be crafted reflecting the literacy levels and cultural contexts, be translated to different local languages, and relayed in a timely manner.

The Committee shall thus, to the extent possible, apply the Principles of Effective Crisis and Risk Communication, which includes: **Be first:** Communicating information quickly is almost always important. For members of the public, the first source of information often becomes the preferred source; **Be right:** Provide accurate information by communicating what is known, what is not known and what is being done in response to the pandemic; **Be credible** through honesty and truthfulness; Express empathy by acknowledging in words and deeds; **Promote action** by giving meaningful things to do

calms anxiety, helps restore order, and promotes a restored sense of control; **Show respect** through respectful communication to promote cooperation and rapport.

#### 8.2.4 Privacy and confidentiality

Privacy and confidentiality shall be upheld to the extent possible with regard to information on screening, results, treatment, recoveries and discharge of patients. Personal medical information and data should be protected from unauthorized access through secure storage. Information shared should be general and non-identifiable unless competent individuals have consented, without coercion, to identification. This will forestall stigma and discrimination usually associated with pandemics like COVID-19.

Risks of misuse of social media for transmitting identifying and sometimes untruthful information, and digital approaches in collection and sharing of data, should be curbed by enforcing mitigation measures including obtaining prior, free and informed consent of the person concerned and ensuring anonymity of contact dendrograms shared to media.

#### REFERENCES

American Medical Association. (2020). Access and health equity during a pandemic. Accessed April 26, 2020 on <a href="https://www.ama-assn.org/delivering-care/ethics/access-and-health-equity-during-pandemic">https://www.ama-assn.org/delivering-care/ethics/access-and-health-equity-during-pandemic</a>

Anahuac University. (2020). *Ethical Criteria Guideline for Health Emergencies in Mexico in the Context of COVID-19 Pandemic*. School of Bioethics. Mexico (Unpublished).

Arango C., (2020) Lessons learned from the coronavirus health crisis in Madrid, Spain: How COVID-19 has changed our lives in the last two weeks, Biological Psychiatry, https://doi.org/10.1016/j.biopsych.2020.04.003.

Bloom DE, Cadarette D, Ferranna M, Seligman B. (2020). *A Matter of Life and Death. We should do everything possible to minimize the damage of the COVID-19 pandemic, but it's also time to decide how to best allocate scarce medical resources*. Finance and Development. Accessed April 26, 2020 on <a href="https://www.imf.org/external/pubs/ft/fandd/2020/04/allocating-scarce-medical-resources-during-the-COVID19-pandemic-bloom.htm">https://www.imf.org/external/pubs/ft/fandd/2020/04/allocating-scarce-medical-resources-during-the-COVID19-pandemic-bloom.htm</a>

Calland, R. (2020). Coronavirus casts dark shadow over South Africa's freedom celebrations. (Available at: https://theconversation.com/coronavirus-casts-dark-shadow-over-south-africas-freedom-celebrations-137188)

- Chinese Cochrane Center. (2015). West China Hospital of Sichuan University and Wiley Publishing Asia Pty Ltd. JEBM 831–35 C 2015
- Emanuel J.E, Persad G, Upshur R, Thome B, Parker M, Glickman A, et al. (2020). *Fair Allocation of Scarce Medical Resources in the Time of Covid-19*. New England Journal of Medicine, March 23. DOI: 10.1056/NEJMsb2005114.
- Gostin, L. O. (Ed.). (2010). Public health law and ethics: a reader (Vol. 4). Univ of California Press.
- JEBM 8 (2015) 31–35 C 2015 Chinese Cochrane Center, West China Hospital of Sichuan University and Wiley Publishing Asia Pty Ltd
- Kenya Medical Association (2020).Interim Guidelines on Management of COVID-19 in Kenya. https://kma.co.ke/Documents/Case%20management%20protocol.pdf
- Kulkarni A, Kotwal A, Hiremath R, Verma A, Bhalla S, Singh H, 'Role of government in public health issues' 3(2) Journal of Scientific and Innovative Research, 2014.
- Lemon, S.M., Hamburg, M.A., Sparling, P.F., Choffnes, E.R and Mack, A. (2007). Ethical and Legal Considerations in Mitigating Pandemic Disease: Workshop Summary. National Academies Press. http://www.nap.edu/catalog/11917.html. Accessed on 18th May 2020.
- Mathuna D.O', (2015). Research Ethics in the Context of Humanitarian emergencies. Journal of Evidence Based Medicine, 31-35
- Ministry of Health (2020). Interim Guidance on Continuity of Mental Health Services

  During the Pandemic.https://www.health.go.ke/wpcontent/uploads/2020/05/INTERIM-GUIDANCE-ON-CONTINUITY-OFMENTAL-HEALTH-SERVICES-DURING-THE-COVID-19PANDEMIC\_compressed-2.pdf
- National Emergency Response Committee (2020). Public Mental Health Education During

  COVID-19
  Pandemic.https://drive.google.com/file/d/1IpKLglbtAKXItyxTlmvlsoau\_iXgJbp6/view
- National Council for Law Reporting (2010). The Constitution of Kenya, 2010. www.kenyalaw.org.

- Norheim, O. F., R. Baltussen, M. Johri, D. Chisholm, E. Nord, D. Brock, P. Carlsson, et al. (2014). Guidance on priority setting in health care (GPS-Health): the inclusion of equity criteria not captured by cost-effectiveness analysis: Cost Effectiveness and Resource Allocation: C/E 12 (1): 18. doi:10.1186/1478-7547-12-18.
- Owino, S. (2020). *Laws to fight Covid-19 are necessary but not all are constitutional* (Available at: <a href="https://www.nation.co.ke/oped/opinion/Laws-to-fight-Covid-19-are-necessary/440808-5507804-hc93ap/index.html">https://www.nation.co.ke/oped/opinion/Laws-to-fight-Covid-19-are-necessary/440808-5507804-hc93ap/index.html</a>)
- Persad G, Wertheimer A, Emanuel EJ. (2009). *Principles for allocation of scarce medical interventions*. Lancet; 373: 423–31
- Persad, Govind, Alan Wertheimer, and Ezekiel J. Emanuel. (2009). *Principles for allocation of scarce medical interventions*. Lancet 373 (9661): 423-431.
- Principles of Epidemiology in Public Health Practice (3rd). An Introduction to Applied Epidemiology and Biostatistics.https://www.cdc.gov/csels/dsepd/ss1978/Glossary.html#phylogeneticTree
- Rosenbaum L. (2020). *The Untold Toll The Pandemic's Effects on Patients without Covid-*19 New England Journal of Medicine. DOI: 10.1056/NEJMms2009984
- Sperry Willard L. (1950). Journal of the Association of American Medical Colleges: <u>July</u> 1950 Volume 25 Issue 4 p 30
- UNESCO (2005) The Universal Declaration on Bioethics and Human Rights
- UNESCO International Bioethics Committee (IBC) and the UNESCO World Commission on the Ethics of Scientific Knowledge and Technology (COMEST). (2020). *Statement on COVID-19: Ethical considerations from a global perspective;* SHS/IBC-COMEST/COVID-19. Paris.
- UNESCO, 2005. Universal Declaration on Bioethics and Human Rights. UNESCO, Paris
- Vergano, M., Bertolini, G., Giannini, A. et al. (2020). Clinical ethics recommendations for the allocation of intensive care treatments in exceptional, resource-limited circumstances: the Italian perspective during the COVID-19 epidemic. Crit Care 24, 165. <a href="https://doi.org/10.1186/s13054-020-02891-w">https://doi.org/10.1186/s13054-020-02891-w</a>
- WHO 2016. International Health Regulations (IHR) 2005, 3rd Edition. World Health Organisation, Geneva, Switzerland
- WHO. (2020) Ethics and COVID-19: resource allocation and priority-setting. WHO reference number: WHO/RFH/20.2. The WHO Working Group on Ethics and COVID-19. Accessed

- April 26, 2020 <a href="https://www.who.int/who-documents-detail/ethics-and-covid-19-resource-allocation-and-priority-setting">https://www.who.int/who-documents-detail/ethics-and-covid-19-resource-allocation-and-priority-setting</a>
- World Health Organization, (2015). *Ethics in epidemics, emergencies and disasters: Research, surveillance and patient care Training Manual.*
- World Health Organization; (2018). *Integrating palliative care and symptom relief into the response to humanitarian emergencies and crises: a WHO guide.* Geneva: Licence: CC BY-NC-SA 3.0 IGO.P.59.

SOURCES OF ABBREVIATIONS, ACRONYMS AND DEFINITIONS ((to be inserted above?))

WHO. 2016. International Health Regulations (IHR) 2005, 3<sup>rd</sup> Edition. World Health Organization, Geneva, Switzerland

UNESCO. 2005. Universal Declaration on Bioethics and Human Rights. UNESCO, Paris.

https://www.cdc.gov/flu/pandemic-resources/2009-h1n1-pandemic.html

https://www.who.int/hac/about/definitions/en/

https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/

http://www.pandemsim.com/data/index.php/glossary/> Accessed 13062020

WHO. 2006. Health workers: a global profile. The World Health Report. Geneva, Switzerland.

https://www.who.int/hac/about/definitions/en/

#### Pandemic

https://www.who.int/csr/disease/swineflu/frequently\_asked\_questions/pandemic/en/

Outbreak: <a href="https://www.cdc.gov/csels/dsepd/ss1978/lesson1/section11.html">https://www.cdc.gov/csels/dsepd/ss1978/lesson1/section11.html</a>

H1N1: <a href="https://www.merriam-webster.com/medical/H1N1">https://www.merriam-webster.com/medical/H1N1</a>

Expedited: <a href="https://www.merriam-webster.com/dictionary/expedited">https://www.merriam-webster.com/dictionary/expedited</a>

Exp Rev Process:

https://www.hopkinsmedicine.org/institutional\_review\_board/guidelines\_policies/guidelines/expedited\_review.html

Baghramian, Maria and Carter, J. Adam, 2019. "Relativism", *The Stanford Encyclopedia of Philosophy*, Edward N. Zalta (ed.).

https://plato.stanford.edu/archives/win2019/entries/relativism.