

# Ethical Integration of Research in Public Health Emergencies: The Case in developing countries **Challenges, Principles and Recommendations**

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# Multidisciplinary Research in COVID-19

- Research during pandemics is inherently multidisciplinary: *Public health, infectious disease, clinical care, epidemiology, veterinary science.*
- Collaborative approach between diverse expertise helps address complex factors influencing disease emergence and control.
- Research in emergencies situations is critical but raises unique ethical issues, especially in low resource settings.
- It is essential to balance urgency with embedding ethics throughout the research process.

# Why Focus on Developing Countries

- Higher burden of infectious diseases and emergencies. E.g. (H5N1) Avian Flu, H1N1 Swine influenza, SARS, Ebola, Zika, Mers-Cov, COVID-19 and Mpox.
  - Liljander A et al., 2016 show evidence of autochthonous MERS-CoV infection in humans several countries in Africa (Nigeria, Egypt, Kenya) 30 years ago.
  - Rachel Ochola 2025 , Sub-Saharan Africa experienced over 100 public health emergencies annually mostly zoonotic spillovers.
- Limited resources for research and healthcare.
- Lack of vigorous research ethics and regulations.
- Increased vulnerability due to economic instability, cultural sensitivities, and political demands.

# Publication Inequities In Africa

- Juliet Nabyonga-Orem et al., 2024 asks: “*Why Are African Researchers Left Behind in Global Scientific Publications?*”
- African researchers are underrepresented in scientific literature.
- Publication output in 2005 was 1.5%, with a marginal increase in 2016 to 3.2%.
- COVID-19 (2020) publications: only 3.9% African leads.
- Causes: underfunding, lack of sustainable research governance and resources, accessibility issues (unaffordable article processing charges).

# Key Ethical Principles

- Ethical research requires (Emanuel 2000):
  1. Scientific validity and social value.
  2. Respect for persons autonomy.
  3. Informed consent.
  4. Fair distribution of risks and benefits.
  5. Collaboration with affected communities.

# Major Ethical Challenges

- Weak or under-resourced Research Ethics Committees for research publication (Fallah et al., 2025) (Chou et al., 2023).
- Inadequate informed consent processes (Omutoko et al., 2024).
- Lack of community engagement.
- Poor data sharing and lack of transparency with information.
- Absence of guidelines and policies related to research ethics.

## Case Study: Mpox (Monkeypox) Response in Central Africa

- Recent monkeypox outbreaks in Central African Republic and DRC highlighted research tensions in emergency response.
- Underfunding and lack of healthcare infrastructure meant limited capacity for diagnosing (Moyo et al., 2022).
- The prevalence of misinformation resulted in stigma and discouraged health seeking behaviour limiting research (El Dine et al., 2024).
- Delayed outbreak detection due to poor communication on sample use and data sharing.

## Case Study: Research Ethics in Asia (Taiwan, Korea and Japan)

- These countries have seen a rise in the adaptation of policies and regulations governing research ethics post misconduct/scandal.
- Still facing systemic, cultural, and practical challenges (Chou et al., 2023):
  1. “Top-down governance”: Government led inferences leads to an array of issues including passive compliance and low initiative for institutions to promote research ethics.
  2. Lack of resources and qualified research integrity officers.
  3. Unwillingness to undertake research ethics training.
  4. Push to produce journal articles in English (resulting in false authorship).



# Recommendations

- Strengthen Research Ethics Committees.
- Ensure informed, culturally sensitive consent.
- Protect vulnerable populations: addressing the ethical challenges caused by stigma during outbreaks.
- Training researchers from Africa and Asia in ethical and professional integrity of research.
- Invest in research in continents central to pandemics.
- Allow for accessibility to publications (inclusive research environment, low article processing charges).
- Contextualise global guidelines to local realities.

# Thank you

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