Contextualising ELSI in African Genomics

Mutiat Afolabi

Postgraduate Researcher, Leicester Law School, University of Leicester, UK

Abstract

Globally, genomics is reshaping clinical practice and healthcare research. In Africa, while the field is advancing, it remains relatively unfamiliar outside specialist or interdisciplinary circles. This lack of familiarity extends to the ethical, legal, and social implications (ELSI) of genomic science, which are often overlooked due to limited awareness, restricted use in mainstream healthcare, and constrained resources. As a result, the translation of genomics into public benefit remains hindered. Yet, understanding ELSI is critical for ensuring equitable and sustainable implementation.

Focused attention to ELSI in African genomics can promote equitable benefit-sharing, build public awareness and trust, and strengthen governance frameworks to protect the rights of genomic data subjects and the wider community. While Global North genomic frameworks have been instructive in Africa, direct transplantation of these models into African contexts is problematic. Instead, bespoke approaches are needed to reflect Africa's realities, including cultural pluralism, evolving legal systems, and infrastructural constraints.

Adopting a socio-legal perspective, this research highlights how law, ethics, and social context intersect to shape the trajectory of genomic science. This perspective illuminates the legal uncertainties, normative debates, and capacity priorities that biomedical perspectives alone cannot capture. Africa's readiness for genomics requires regulatory reform alongside embedding ELSI awareness and training across stakeholder groups. Practically, this calls for targeted capacity building, inclusion of ELSI in professional curricula, and the development of African-led governance frameworks that balance universal principles with local realities.

Keywords

Genomics, Africa, ELSI, Socio-Legal Studies, Equity, Capacity Building.

Funding: Wellcome Trust, UK.