From Digital Promise to Accountable Care: Faith, Technology and Equity in Nigerian Health Systems

Abiola T.,[1] Adeleke AIT.[2]

[1]Department of Behavioural Sciences, University of Ilorin Teaching Hospital, Ilorin, Nigeria; Department of Bioinfomatics, Federal Medical Center, Bida, Nigeria.

Corresponding author: Tajudeen Abiola, Department of Behavioural Sciences, University of Ilorin Teaching Hospital, Ilorin, Nigeria.
Email: abiolatob@yahoo.com

Abstract
Background: Healthcare innovation in Nigeria must be culturally relevant while remaining scientifically credible, clinically safe, equitable and accountable.
Methods: This editorial synthesises papers on artificial intelligence, faith-sensitive care, cooperative health financing, preventive health behaviour, breast-cancer risk profiling, viral hepatitis and paediatric enuresis.
Results: Artificial intelligence may improve triage, education and health financing, but requires local validation, data protection, human oversight and accessible appeal mechanisms. Faith-sensitive care should accommodate voluntary religious practice without replacing evidence-based treatment or excluding people of other beliefs. Islamic cooperative financing may support informal-sector participation, but effective protection requires transparent governance, adequate risk pooling and integration with formal health-financing structures. The original studies highlight persistent barriers related to cost, waiting time, gender, stigma and service access, while also demonstrating the need for cautious interpretation of exploratory and cross-sectional findings.
Conclusion: Innovation should be judged by whether patients can trust it, professionals can govern it, health systems can sustain it and evidence demonstrates benefit. Nigerian research should increasingly prioritise prospective, co-designed and implementation-focused studies that measure effectiveness, equity, costs, harms and sustainability.
Keywords: artificial intelligence, faith-sensitive care, health equity, health financing, Nigeria.

Introduction

This issue of the *IMAN Medical Journal* asks a more demanding question than whether an intervention is technologically advanced or culturally appealing: can it improve health while remaining safe, equitable and accountable?

The papers address artificial intelligence, Ibaadah-friendly care, the Digital Ummah, Islamic cooperative financing, routine medical check-ups, breast-cancer risk profiling, viral hepatitis and paediatric enuresis. Although their subjects differ, they converge on a common principle: context matters, but evidence and governance determine whether an innovation deserves adoption.

This distinction is particularly important in Nigeria, where health services operate within religious pluralism, workforce shortages, uneven infrastructure, high out-of-pocket expenditure and a large informal economy. New technologies and culturally grounded interventions may reduce barriers, but they may also reproduce exclusion, weaken privacy or obscure professional responsibility. Innovation should therefore be assessed not by novelty alone, but by its effects on patients, services and public trust.

Artificial intelligence and accountable clinical care

The two artificial-intelligence reviews in this issue move beyond technological optimism. Algorithms may assist triage, clinical documentation, patient education, remote monitoring, claims review and population-health planning. These functions are potentially valuable in settings where specialist services are limited and health information systems remain fragmented.

However, systems developed using foreign datasets may perform poorly when applied to Nigerian disease patterns, languages, laboratory processes and clinical workflows. Algorithms that use previous expenditure or healthcare utilisation as indicators of need may also disadvantage poor or rural populations who historically accessed fewer services because of cost or distance.

Responsible adoption therefore requires local validation across relevant demographic and clinical groups. Average performance is insufficient if a

system repeatedly misclassifies women, people with disabilities, rural populations or patients with incomplete records. Data collection should also be limited to what is necessary, particularly where health, financial, biometric or religious information is involved. Secure storage, role-based access and clear procedures for responding to breaches are essential under the Nigeria Data Protection Act [1,2].

Human oversight must remain substantive. Clinicians should be able to understand, question and override algorithmic recommendations. Patients affected by automated triage, enrolment, claims approval or subsidy decisions should receive understandable explanations and have access to human review. Post-deployment monitoring should assess errors, inequitable outcomes, privacy breaches and unintended effects on clinical practice. Technology that cannot meet these requirements represents unmanaged risk rather than responsible innovation.

Faith-sensitive care within plural health systems

The faith-informed contributions demonstrate that religion may shape coping, treatment decisions, family relationships, diet, modesty, fasting and expectations of care. Recognising these influences may improve communication, trust and adherence.

Ibaadah-friendly care and the Digital Ummah also show how Islamic ethical concepts can be translated into practical standards. *Amanah* supports trustworthy stewardship, *adl* reinforces fairness, *la darar* prioritises harm prevention and *shura* encourages consultation and shared responsibility.

Faith-sensitive care must, however, be distinguished from faith-directed care. Supporting prayer, safe ablution, modesty-sensitive care, halal nutrition or fasting-related medication planning may be appropriate when requested and clinically safe. Such accommodation should never delay emergency treatment, replace established therapy or impose religious practice.

Pluralism is equally important. Muslim patients should be able to receive respectful faith-sensitive care without non-Muslim patients or staff experiencing exclusion or pressure. The ethical value of these models lies not in creating parallel religious systems, but in strengthening dignity, choice, compassion and clinical accountability for all.

Cooperative financing and financial protection

The review of Islamic cooperative societies extends this discussion into health financing. Cooperative savings, *qard hasan*, *zakat*, *waqf* and risk-sharing arrangements may improve trust and participation among informal-sector workers who remain difficult to enrol in conventional insurance.

Nevertheless, moral appeal alone does not create financial protection. Sustainable schemes require defined benefit packages, sufficiently broad risk pools, transparent contribution rules, reserve policies, professional management and strategic purchasing. Small or poorly governed pools may fail when members develop high-cost illnesses.

Islamic cooperatives should therefore complement formal health-financing structures rather than operate as isolated welfare funds. Their most promising role may be to mobilise contributions, identify vulnerable households and connect members with the National Health Insurance Authority, state insurance agencies and the Basic Health Care Provision Fund [3].

A hybrid arrangement could combine cooperative savings, risk pooling and compassionate finance with public purchasing. Zakat and waqf may subsidise people unable to contribute regularly, while formal insurance mechanisms provide broader pooling and regulated benefits. Transparent audit, accessible grievance procedures and actuarial expertise remain indispensable.

Lessons from the original studies

The study of routine medical check-up utilisation in Yola South shows that preventive behaviour is influenced by more than knowledge. Cost, waiting time, gendered decision-making, traditional care and limited service availability shape whether people seek early assessment. Health education alone will have little effect where services remain unaffordable or difficult to access.

The breast-cancer cluster analysis suggests that age, reproductive life stage and parity may distinguish potentially relevant subgroups. However, the findings remain exploratory. Hospital-based sampling, modest sample size and limited information on tumour biology restrict immediate clinical application. Such clusters should generate research questions rather than become fixed risk categories.

The low observed hepatitis B and C seroprevalence among allied health students is reassuring, but should not encourage complacency. Vaccination documentation, confidential screening, confirmatory testing and occupational-safety training remain essential before clinical exposure intensifies.

The enuresis study highlights a different but equally important form of preventable harm. Children and adolescents living with HIV or sickle cell disease may experience shame, punishment and social withdrawal because of a treatable condition. Routine enquiry, biomedical assessment, psychosocial screening and non-punitive family education should therefore be incorporated into paediatric chronic-illness care.

Together, these studies demonstrate that practical relevance must be matched by methodological restraint. Cross-sectional associations do not establish causation, exploratory analyses do not create validated clinical categories, and low prevalence does not remove institutional responsibility.

Priorities for research and publishing

The papers in this issue point towards a clear agenda. Conceptual frameworks should progress to co-design, feasibility testing and prospective evaluation. Cross-sectional findings should inform longitudinal and implementation studies. Digital and faith-informed interventions should be evaluated under realistic service conditions rather than judged only by acceptability or theoretical appeal.

Future research should measure not only effectiveness, but also equity, costs, harms and sustainability. Investigators should examine who benefits, who is excluded and whether outcomes differ by sex, age, disability, income, residence or religious background. Unintended consequences should be reported alongside positive findings.

Journals also have a responsibility to require transparent methods, complete reporting and conclusions proportionate to the available evidence. Faith-sensitive scholarship should meet the same methodological standards as other health research, while artificial-intelligence studies should not receive reduced scrutiny because the technology is novel.

Conclusion

The contributions in this issue converge on a simple but demanding principle: innovation becomes valuable only when it produces trustworthy care.

Artificial intelligence should extend human capability without displacing human responsibility. Faith-sensitive care should accommodate meaning and worship without replacing evidence-based treatment. Islamic cooperative financing should translate solidarity into credible financial protection. Preventive services should be accessible enough for people to use, and exploratory research should generate questions without claiming unwarranted certainty.

The decisive test is not whether an intervention is new, digital, faith-informed or locally attractive. It is whether patients can trust it, professionals can govern it, institutions can sustain it and evidence shows that it improves care.

Declaration of interest

None

References

1. World Health Organization. Ethics and governance of artificial intelligence for health: WHO guidance. Geneva: World Health Organization; 2021.
2. Federal Republic of Nigeria. Nigeria Data Protection Act, 2023. Abuja: Federal Government of Nigeria; 2023.
3. Federal Republic of Nigeria. National Health Insurance Authority Act, 2022. Abuja: Federal Government of Nigeria; 2022.