

HIV Research Priorities in Iran: Reflections from the Early Years to a New Framework for Action

Reliable and comprehensive data have always been the cornerstone of effective public health planning, and HIV/AIDS is no exception. In this issue of the *Iranian Journal of Medical Sciences*, Aleebrahim and colleagues present a thoughtful and much-needed contribution by systematically identifying the research priorities for HIV/AIDS in Iran through a combined systematic review and Delphi consensus approach.¹ Their work meticulously classifies the research landscape into defined areas and sub-areas, creating a structured framework that future investigations and policy decisions can build upon.

The authors' classification of research areas and sub-areas—covering prevention, diagnosis, laboratory sciences, co-infections, stigma, ethics, and more—offers a structured roadmap for future inquiry. Their ranking of priorities, based on importance, feasibility, cost-effectiveness, and alignment with national strategic plans, is particularly valuable at a time when financial and human resources remain limited. Interestingly, their findings reveal a striking misalignment between research activity and national needs: while co-infections dominate the current literature, the areas most urgently requiring investment—namely, strengthening reference laboratories and advancing molecular epidemiology—remain significantly underexplored. Equally notable is the low representation of ethical and stigma-related research, despite the continued importance of these issues in our national HIV response.

While the study provides a comprehensive list of 11 main areas and 60 sub-areas, this breadth raises an important methodological question. A list of 60 “priorities” may be too extensive to guide practical decision-making, as effective priority-setting typically requires a concentrated set of fewer, high-impact goals that policymakers can realistically fund and implement. Narrowing these into a more focused and actionable agenda would likely strengthen the practical utility of the findings.

Reading this paper brought me back to the early years of our work in Fars province, southern Iran. In the 1980s, when HIV/AIDS was still poorly understood globally, few believed that the disease would ever reach Iran. The diagnosis of the first known Iranian case—a young child with hemophilia infected through contaminated factor VIII—was a sobering wake-up call. Even then, many assumed that HIV would remain rare or confined to specific risk groups. When our provincial committee began its work in 1990, prompted by the death of a patient with severe pulmonary infection and the subsequent diagnosis of his wife with HIV, we were confronted with both medical uncertainty and widespread misconceptions.

The epidemiology of HIV in Fars province differed from national patterns. For several years, sexual transmission was the predominant route of infection, until cases among people who inject drugs began to emerge, particularly among incarcerated individuals. Many early patients came from southern areas of the province, where frequent and prolonged travel for work to neighboring countries increased their vulnerability. Despite the deep stigma associated with HIV at the time, many families showed remarkable resilience and support once the principles of transmission were explained. Ironically, it was often the medical community—not the public—that struggled the most. Even trained specialists hesitated to treat patients because of fears of needle-stick injuries in an era when treatment options were extremely limited.

Recognizing the urgency of education, we began a series of public awareness initiatives, particularly targeting young adults at risk of unprotected sexual activity. With the support of local authorities, we delivered weekly educational programs through provincial radio and, when necessary, television. Our medical school helped establish student-led organizations that delivered peer education in universities, parks, and community centers. We also trained science teachers to incorporate factual discussions about HIV prevention into secondary school curricula—an essential step in reducing misinformation.

One of our most significant achievements was initiating annual surveillance in prisons beginning in 1994. The first HIV-positive cases were identified in 1996 among individuals transferred from other facilities. Surveillance continued until 2007, when routine screening of all new prisoners was implemented. Throughout this process, we emphasized harm reduction by discouraging needle sharing, promoting

methadone therapy, and encouraging prisoners to seek counseling and retesting. After comprehensive education efforts, no new infections attributable to needle sharing were documented in subsequent years.

The present study highlights many issues that remain central to Iran's HIV response. The limited capacity of laboratory systems continues to hinder accurate diagnosis, monitoring, and molecular characterization. Strengthening reference laboratories would not only improve diagnostic accuracy but also support surveillance systems and inform treatment strategies. Similarly, stigma remains a persistent obstacle to testing, treatment adherence, and long-term care, despite strong global evidence demonstrating that stigma reduction leads to improved health outcomes.^{2, 3} Yet, as the authors note, stigma and ethics remain among the least-studied domains in Iran.

Ethical challenges—including confidentiality, informed consent, and equitable access—deserve far more attention within HIV research. In a context where the disease carries profound social implications, ethics cannot be viewed as secondary. Rather, ethical principles are central to ensuring that scientific advancements translate into compassionate, equitable care.

Ultimately, the strength of this study lies in its attempt to articulate a national research agenda grounded in both evidence and expert consensus. To maximize its impact, future efforts may benefit from refining the long list of priorities into a concise set of actionable, high-impact goals. Doing so would help policymakers allocate scarce resources more efficiently and ensure that research activities are aligned with the most urgent public health needs.

For those of us who have witnessed the evolution of HIV/AIDS in Iran—from uncertainty and fear to evidence-based action—the reflections presented here reinforce the continuing need for rigorous research, robust laboratory systems, and sustained educational and stigma-reduction efforts. A balanced approach that values both scientific progress and human dignity remains essential as we continue strengthening Iran's HIV response in the decades ahead.

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