

Assessing Healthcare Providers' Knowledge and Attitudes Towards HIV/AIDS in Nigerian Hospitals: A Narrative Review

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ABSTRACT

Healthcare providers (HCPs) are central to Nigeria's HIV response, yet gaps in HIV knowledge, fear of occupational exposure, and stigmatizing attitudes can undermine testing, treatment uptake, retention, and patient dignity. This narrative review synthesizes evidence on Nigerian hospital-based HCPs' (and closely related facility-based cadres') knowledge and attitudes towards HIV/AIDS, highlighting key drivers of stigma and practical, system-level interventions. Evidence consistently links negative attitudes to perceived personal risk, incomplete understanding of HIV transmission, limited access to infection-prevention resources, and weak institutional enforcement of anti-discrimination norms. Studies in Nigeria document discriminatory practices and resistance to providing care among a subset of health workers, alongside settings where measured stigma is comparatively low, suggesting that context, training, and facility readiness matter. Targeted continuing professional development, reliable infection-prevention supplies, and "rights + safety" institutional policies (anti-stigma + occupational safety/PEP systems) are the most actionable levers for improving provider behavior and patient outcomes.

Keywords: HIV/AIDS, healthcare workers, knowledge, attitudes, stigma, discrimination, Nigeria, hospitals, PEP, PMTCT

INTRODUCTION

Nigeria continues to bear one of the world's largest HIV burdens, with contemporary reports frequently citing approximately 1.9 million people living with HIV (PLHIV). In a setting where HIV remains a major public health challenge, health facilities and hospitals are central to prevention, diagnosis, treatment initiation, and long-term care. From first contact with a patient to sustained viral suppression, facility-based providers like doctors, nurses, midwives, laboratory personnel, pharmacists, counselors, and other frontline staff shape HIV outcomes at multiple points [1]. These include risk assessment and HIV testing services, timely linkage to antiretroviral therapy (ART), prevention of mother-to-child transmission (PMTCT) delivery, identification and management of opportunistic infections, adherence counseling, and retention in care. However, the effectiveness of these services is not determined only by availability of ART and clinical guidelines. The "human factor" within the health system, especially providers' HIV-related knowledge and attitudes, often determines whether PLHIV experience dignified, safe, and effective care [2]. Knowledge here includes understanding HIV transmission routes, infection prevention and control (IPC) standards, universal precautions, occupational exposure response, PEP timing and adherence, and clinical management principles. Attitudes include beliefs and emotions about PLHIV, empathy versus blame, comfort versus fear, professionalism versus avoidance, and commitment to non-discriminatory care versus stigmatizing behavior [3].

Knowledge and attitudes matter because they translate directly into clinical and interpersonal behaviors. In HIV service delivery, these behaviors may include protection of patient confidentiality, use of informed consent during testing, respectful communication, willingness to perform procedures (e.g., wound dressing, delivery, surgery, dental procedures), compliance with standard precautions, and correct use of PEP after occupational exposure [4]. Where providers have inadequate knowledge or fear HIV infection, they may adopt practices that undermine care quality:

refusing care or delaying treatment, using “excessive precautions” that single out PLHIV (double gloving beyond indication, unnecessary segregation, labeling files, separate wards), breaching confidentiality, or speaking to patients in a manner that conveys judgment. Such fear-driven practices reduce service uptake and continuity, erode trust in the health system, and reinforce community stigma [5].

Nigeria has previously recorded discriminatory attitudes and practices among health workers, underscoring that stigma is not limited to the general population; it can occur within facilities where people seek help. Discrimination by providers is especially harmful because it is backed by institutional authority and can block access to essential services [6]. In HIV care, the consequences are tangible: delayed testing, reduced disclosure, missed PMTCT opportunities, poor adherence support, reduced retention in care, and ultimately worse clinical outcomes, including unsuppressed viral load and onward transmission. Therefore, strengthening provider knowledge and transforming stigmatizing attitudes are not optional “soft” interventions; they are core quality-of-care issues and essential for HIV epidemic control [7].

Nigeria’s HIV response has expanded substantially over time, with increasing ART coverage, improved PMTCT platforms, and wider HIV testing access. Yet progress is uneven, and barriers persist at the facility level. Many of these barriers are behavioral and system-linked: persistent stigma in healthcare settings, insufficient training updates, misconceptions about transmission risk during routine care, and inconsistent IPC supplies that heighten fear among staff. Hospital and facility-based providers occupy a unique position in the HIV care continuum [8]. They serve as gatekeepers to testing and treatment (who gets offered a test, who receives counseling, who is linked immediately to ART). They also control the patient experience, whether it is respectful and supportive or humiliating and deterring. Importantly, providers also face occupational risks (needle-stick injuries, blood/body fluid exposure), which can generate anxiety. Where occupational safety systems are weak (limited PEP availability, unclear reporting pathways, inadequate sharps disposal, understaffed wards), fear can amplify stigmatizing attitudes toward PLHIV [9]. Conversely, when providers are well trained, supported with adequate resources, and protected by clear anti-discrimination policies, they are more likely to deliver high-quality, nonjudgmental care.

Studies across sub-Saharan Africa have repeatedly linked health worker stigma to reduced uptake of HIV testing, reduced engagement in care, and poor treatment adherence. In Nigeria, foundational evidence has also documented discriminatory attitudes and practices among health workers and highlighted the need for provider education, adequate resources, and enforceable anti-discrimination policies. Despite this, gaps may remain in current facility contexts, especially given changing guidelines (e.g., test-and-treat policies), evolving service delivery models, and continuing workload pressures. This study is therefore grounded in the need to better understand facility-based providers’ current knowledge and attitudes, and how these may shape HIV service delivery and patient outcomes [10].

Although Nigeria has expanded HIV services, the continued HIV burden suggests persistent gaps in prevention, early diagnosis, ART initiation, and long-term retention, with the quality and acceptability of facility-based care for people living with HIV (PLHIV) remaining a key concern. Stigma and discrimination in healthcare settings, refusal of care, breaches of confidentiality, judgmental communication, and unnecessary segregation can discourage PLHIV from seeking services consistently and undermine trust in the health system [11]. These practices may be reinforced by misconceptions about HIV transmission and exaggerated perceptions of occupational risk among some healthcare workers, leading to fear-based behaviors and reduced willingness to provide care. When providers lack accurate knowledge of transmission pathways, universal precautions, and post-exposure prophylaxis (PEP), they may either under-protect themselves or adopt excessive precautions that stigmatize patients, both of which compromise safe, equitable service delivery. Because facility realities evolve with staff turnover, guideline changes, funding shifts, and intermittent training, updated evidence is needed [12]. This study addresses the lack of current, context-specific clarity on providers’ HIV knowledge and attitudes and their influence on HIV service quality in Nigerian facilities. This study aims to assess healthcare providers’ knowledge and attitudes toward HIV and people living with HIV (PLHIV) in selected Nigerian health facilities, with particular attention to how these factors shape day-to-day clinical practice. It will examine whether providers’ understanding of HIV transmission, prevention, treatment, post-exposure prophylaxis (PEP), and infection prevention and control (IPC) aligns with recommended standards, and how gaps or misconceptions may translate into unsafe or stigmatizing behaviors. Equally, the study will explore attitudinal dimensions—fear of infection, blame, moral judgment, and discomfort with key populations—and how these may influence confidentiality, communication, and willingness to provide care. The significance is multi-level: for HIV program improvement, findings will help managers pinpoint specific, actionable training and mentorship needs instead of relying on generic sensitization; for patient outcomes and equity, evidence on facility-based stigma can guide interventions that strengthen respectful care, confidentiality, and trust—critical for early testing, ART uptake, adherence, and retention; for occupational safety, results can inform stronger exposure-response systems (PEP access, reporting pathways, IPC supplies) while reducing “excessive precautions” driven by fear; and for policy and accountability, the data can support enforceable anti-discrimination standards and quality-of-care monitoring.

What “knowledge” means in practice: core domains

In practice, “knowledge” among health workers is not just factual awareness of HIV, but an applied competence that shapes everyday clinical decisions, perceived safety, and patient experience. A common driver of negative attitudes toward people living with HIV is the overestimation of transmission risk during routine care and uncertainty about what clinical contact is actually safe. Evidence from a large Nigerian health-sector study across four states involving over 1,000 health professionals linked discriminatory behaviours to fear and system-level gaps, showing that knowledge is necessary, but not sufficient when protective infrastructure and clear procedures are weak [13]. For hospitals, this means knowledge must be continuously reinforced through procedural clarity: consistent standard precautions, safe sharps handling, clear triage workflows, and straightforward exposure reporting pathways. Knowledge also includes practical competence in occupational post-exposure prophylaxis (PEP), where global guidance stresses rapid initiation as soon as possible and within 72 hours after potential exposure. However, Nigeria-based studies repeatedly report gaps not only in awareness but in correct regimen knowledge, timely access, reporting behaviour, and completion often shaped by stock availability, stigma, and fear of workplace disclosure. Finally, knowledge of PMTCT guidance and HIV service protocols is critical because PMTCT platforms are high-volume and high-impact; studies (e.g., Lagos) show guideline awareness and consistent use can be uneven due to health-system constraints [14].

Attitudes towards PLHIV in Nigerian hospitals: what the evidence shows

Evidence from Nigerian hospitals shows that stigma and discrimination toward people living with HIV (PLHIV) remains a persistent, though uneven, barrier to equitable care. The most frequently cited baseline evidence is a multi-site national study that documented discriminatory attitudes and practices across the health sector and argued for a three-part response: targeted provider education, adequate facility resources, and enforceable anti-discrimination policies. More recent Nigeria-focused studies continue to report stigma-related outcomes, but with important variation by setting, professional cadre, and the tools used to measure stigma. Notably, some PMTCT providers in Lagos primary health-care centres reported generally low AIDS-related stigmatization, with authors linking improved attitudes to stronger infection-prevention resources that reduce fear of contagion [15]. This matters because it demonstrates stigma is modifiable rather than fixed, and can decline when training is paired with supportive supervision and practical safety systems. Across the literature, fear of occupational infection repeatedly emerges as a central mechanism driving avoidance of PLHIV, refusal of procedures, or excessive precautions. When providers trust protective measures—PPE availability, sharps safety, PEP access, and non-punitive incident reporting—attitudes improve. Finally, broader societal stigma around sexuality, drug use, and gender norms can “spill over” into clinical practice, shaping moralizing care toward key populations and reinforcing layered discrimination [16].

Determinants of provider knowledge and attitudes

Determinants of provider knowledge and attitudes—drawing from Nigerian studies and broader implementation evidence—tend to cluster across four interacting levels. At the individual level, providers’ competence and perceptions are shaped by training exposure (pre-service foundations versus in-service updates), professional cadre and day-to-day role (e.g., nurses, doctors, laboratory staff), and prior experience delivering HIV services [17]. While experience often improves confidence and clinical skills, it can also heighten fear of infection in settings where protection and support are inadequate. At the facility level, attitudes and practice are strongly influenced by the availability of PPE, safe sharps disposal systems, and reliable access to post-exposure prophylaxis (PEP). Clear standard operating procedures, visible job aids, and supportive supervision further reinforce correct, non-stigmatizing care, while weak confidentiality in occupational health pathways can discourage reporting and PEP uptake [18]. At the health-system level, staffing shortages and heavy workloads reduce time for counseling and respectful engagement, and unstable supply chains for HIV commodities and infection-prevention materials undermine confidence and quality. Finally, sociocultural and policy factors including community norms that moralize HIV, weak enforcement of anti-discrimination rules, confidentiality breaches, and informal workplace stigma can sustain blame-based attitudes even when clinical knowledge is adequate [19].

Consequences for HIV outcomes in Nigerian hospitals

In Nigerian hospitals, incomplete provider knowledge about HIV and stigmatizing attitudes can directly undermine key HIV outcomes along the entire care cascade. When health workers are uncertain about current guidelines or hold judgmental beliefs, patients may delay or avoid HIV testing, decline disclosure, or disengage from follow-up due to fear of discrimination. This weakens early diagnosis and timely linkage to antiretroviral therapy (ART), which are central to Nigeria’s “test and treat” approach and broader service delivery reforms [20]. Stigma also erodes patient trust in hospital services, contributing to poor retention in ART clinics, missed appointments, and interrupted treatment, factors strongly associated with unsuppressed viral load and increased morbidity. In maternity and reproductive health units, negative provider attitudes can reduce women’s willingness to use prevention of mother-to-child transmission (PMTCT) services, accept adherence counseling, or return for postnatal follow-up, thereby increasing the risk of vertical transmission [21]. Additionally, strained clinical interactions marked by disrespect, poor communication, or breaches of confidentiality can discourage patients from seeking care

within formal facilities and shift them to informal or delayed care pathways, ultimately compromising both individual health outcomes and public health targets for HIV control.

What works: practical interventions hospitals can implement

Hospitals can reduce HIV-related stigma while improving staff confidence by implementing practical, system-level interventions that combine “rights + safety.” A feasible high-impact package pairs anti-stigma training rooted in ethics, patient rights, confidentiality, and respectful communication with strong occupational safety measures that directly reduce fear of infection. When staff trust that PPE is consistently available, standard precautions are enforced, and exposures are handled professionally, resistance to providing care declines [22]; Nigerian evidence suggests that stronger infection-control resources can lower fear-driven avoidance and improve willingness to treat. Beyond awareness, hospitals should operationalize post-exposure prophylaxis (PEP) as a reliable 24/7 pathway: an immediate reporting channel (hotline or occupational-health focal person), a clear exposure algorithm and documentation process, accessible after-hours starter packs, and structured follow-up testing plus adherence support [23]. This approach aligns with global guidance emphasizing initiation of PEP within 72 hours of exposure. For PMTCT and ART protocols, hospitals should strengthen “know-do” translation through brief job aids in clinical areas, mentorship and clinical audit, and case-based learning or simulation since evidence from Lagos indicates that gaps in provider knowledge of national PMTCT recommendations persist without implementation support. Finally, accountability matters: integrate stigma and discrimination indicators into routine quality improvement using anonymous patient experience surveys, periodic staff stigma scales with feedback loops, clear sanctions for confidentiality breaches or refusal of care, and recognition for teams demonstrating consistently respectful, rights-based service delivery.

CONCLUSION

Hospitals can meaningfully reduce HIV-related stigma by pairing a rights-based culture with visible safety systems that address staff fears and normalize high-quality, non-discriminatory care. This review shows that anti-stigma efforts work best when they move beyond general sensitization to practical, enforceable routines: ethics and confidentiality training, respectful communication, and explicit patient-rights protections must be reinforced by reliable infection prevention and control. When staff consistently access PPE, apply standard precautions, and receive professional support after occupational exposures, fear-driven avoidance declines and confidence in providing care improves. A core operational priority is a dependable 24/7 post-exposure prophylaxis (PEP) pathway with clear reporting channels, exposure algorithms, immediate starter packs, and structured follow-up to ensure timely initiation within 72 hours. Hospitals should also strengthen PMTCT and ART guideline implementation using job aids, mentorship, audit, and simulation-based learning to close “know-do” gaps. Sustained progress requires accountability: embed stigma indicators in quality improvement, use anonymous patient feedback, monitor staff stigma metrics, enforce consequences for breaches, and reward exemplary teams.

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