

Pre-Test Fear and Confidentiality in Premarital HIV Screening in Somalia

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Abstract: Somalia has a low-level HIV epidemic, but low prevalence does not necessarily mean that HIV testing is socially or psychologically low risk. This commentary examines “pre-test fear”, defined here as anticipatory concern before HIV testing about possible health, relational, social, or confidentiality consequences of being tested or receiving a reactive result. Somalia-specific evidence documents HIV-related stigma, non-consented disclosure, misinformation, and confidentiality concerns, but direct evidence on pre-test fear and the prevalence or regulation of premarital HIV testing remains limited. Accordingly, the article distinguishes local evidence from contextual evidence drawn from other settings and does not present new patient-level data. It proposes a conceptual privacy-first framework for routine and premarital HIV screening built around voluntary informed consent, brief culturally appropriate pre-test information, confidential laboratory workflows, confirmatory testing, linkage to care, and community health literacy. The framework is intended to generate testable implementation questions rather than to represent an empirically validated intervention. For Somalia, the principal implication is that diagnostic quality should include not only analytical accuracy but also the conditions that make people willing to test, receive results, and continue into confirmatory testing and care. Prospective mixed-methods and implementation studies are needed to measure pre-test fear, characterize premarital testing practices, assess confidentiality, and evaluate whether privacy-centered counseling improves acceptability and linkage.

Plain Language Summary: This commentary asks why some people in Somalia may feel afraid before an HIV test, especially when testing is connected with marriage. Somali studies show that stigma, misinformation, and loss of privacy affect people living with HIV and may discourage use of HIV services. However, Somalia has little published evidence that directly measures fear before testing or describes how often premarital HIV testing occurs. We therefore do not report new patient results. Instead, we bring together available Somali evidence, WHO guidance, and clearly identified evidence from other settings. We propose a privacy-first approach that gives each person clear information, private consent, confidential testing and result delivery, correct confirmatory testing, and rapid connection to care. The proposed framework has not yet been tested in Somalia. Future research should measure patient fear and trust and test whether these practical steps improve the experience and uptake of HIV testing.

Keywords: health literacy, stigma, counseling, diagnostic quality, patient trust, public health policy

Introduction

HIV testing services are a gateway to diagnosis, prevention, antiretroviral therapy, partner services, and public health surveillance. The World Health Organization (WHO) describes HIV testing as more than a laboratory assay and emphasizes consent, confidentiality, counseling, correct results, and connection to prevention, care, and treatment—the “5 Cs” of HIV testing services.^{1,2}

Somalia provides a distinctive context for considering test acceptability. In the 2018 HIV sentinel surveillance survey, 9 of 9055 pregnant women attending 20 antenatal sentinel sites were HIV positive, corresponding to a seroprevalence of 0.10% in that sentinel population.³ WHO Somalia has nevertheless continued to identify stigma and discrimination as barriers to equitable HIV

services and has emphasized confidentiality in counseling, testing, and treatment activities.⁴ Thus, low measured prevalence in sentinel populations should not be interpreted as evidence that the social consequences of HIV testing are negligible.

Local evidence supports concern about trust and disclosure. The 2017 Somali People Living with HIV Stigma Index, conducted among 750 people receiving HIV care across South Central Somalia, Puntland, and Somaliland, reported that 24.8% of respondents said a health-care worker had disclosed their HIV status to other people without consent; the report also described fear of confidentiality loss as a reason some communities avoided nearby HIV counseling and testing services.⁵ A qualitative study of people living with HIV and HIV-program officials in Somalia similarly found widespread stigma and reluctance to seek voluntary diagnosis and treatment.⁶ A 2019 legal-environment assessment supported by the United Nations Development Programme and Somali authorities documented continuing stigma and highlighted informed consent and confidentiality as core HIV-policy principles, while also noting that the legal and policy framework was not uniform across the Federal level, Puntland, and Somaliland at that time.⁷

In this commentary, “pre-test fear” means anticipatory concern arising before HIV testing about the possible biomedical, relational, social, reputational, or confidentiality consequences of undergoing testing or receiving a reactive result. The term is used as a conceptual construct rather than as a validated Somali measurement scale. The central argument is that such anticipatory concerns deserve attention as a component of testing acceptability and diagnostic quality, particularly when testing is linked to socially consequential events such as marriage.

Evidence Selection and Interpretive Approach

This is a commentary, not an original research study or systematic review. To inform the argument and this revision, targeted searches of PubMed-indexed literature and official WHO, Somali health-sector, HIV-program, and legal-policy documents were undertaken through 13 August 2026. Search concepts combined Somalia or Somaliland with HIV testing, stigma, confidentiality, counseling, premarital testing, HIV knowledge, and antiretroviral care. Somalia-specific evidence was prioritized. Evidence from sub-Saharan Africa or other culturally conservative settings was used only when directly relevant to an identified local evidence gap and is explicitly presented as contextual rather than as proof of conditions in Somalia. No original patient-level data were collected, no statistical synthesis was performed, and the proposed framework is conceptual and requires empirical evaluation.

Why Pre-Test Fear Matters in a Low-Level Epidemic Setting

Routine service statistics usually count people who were tested, received results, or entered care; they may not capture people who decline or postpone testing because of anticipated social consequences. Somalia-specific qualitative evidence shows that stigma can affect willingness to seek voluntary diagnosis and treatment.⁶ The Stigma Index additionally documented non-consented disclosure and avoidance of nearby testing services because of confidentiality concerns.⁵ These findings do not directly quantify fear before a test, but they make pre-test fear a plausible and testable patient-centered construct in the Somali setting.

Health literacy is another relevant local factor. A 2023 analysis of the 2018–2019 Somali Health and Demographic Survey found important sociodemographic differences in HIV/AIDS knowledge among women.⁸ A 2024 nationwide analysis among currently married women likewise found substantial variation in comprehensive HIV knowledge by education, residence, region, and socioeconomic factors.⁹ In a 2025 nationwide analysis, 67.18% of reproductive-age women were classified as having HIV-transmission misconceptions, with education and other sociodemographic factors associated with the outcome.¹⁰ Among 440 adolescents in internally displaced-person camps in Mogadishu, a separate 2025 study reported poor HIV knowledge in 69%, stigmatizing attitudes in 84%, and very low reported HIV testing; these findings are specific to that adolescent IDP sample and should not be generalized to the entire Somali population.¹¹

More recent clinical evidence also supports attention to confidentiality. A 2025 qualitative study involving adults receiving antiretroviral therapy and health-care providers in Mogadishu identified stigma, discrimination, and confidentiality concerns among barriers affecting HIV care.¹² A 2026 analysis of women in underserved areas of Somaliland found substantial gaps in HIV/AIDS awareness associated with education, media exposure, and residence.¹³ Together, these studies support a local rationale for measuring trust and anticipatory concerns, while still falling short of establishing the prevalence, causes, or consequences of pre-test fear itself.

Evidence from elsewhere in sub-Saharan Africa provides contextual support rather than direct Somali evidence. A systematic review of qualitative studies identified stigma, concerns about confidentiality, gender relations, perceived risk, and fear of the consequences of a positive result as factors that can influence HIV-testing uptake.¹⁴ These themes are consistent with the Somali evidence above, but their magnitude and causal importance in Somalia require direct study.

Premarital HIV Screening: A Potential Opportunity with Important Safeguards

Premarital HIV testing is especially sensitive because a test can become entangled with relationship decisions, family expectations, and perceptions of moral or marital suitability. However, the targeted evidence search for this commentary did not identify a national estimate of premarital HIV-testing uptake in Somalia or a current, nationally uniform regulation specifically mandating premarital HIV testing. The 2019 Somali HIV Legal Environmental Assessment reported that the endorsed Somaliland HIV policy emphasized voluntary testing, informed consent, counseling, and strict confidentiality, while Federal and Puntland HIV policies were still described as drafts at that time.⁷ This historical policy evidence should not be interpreted as establishing the current legal status of premarital testing across all Somali jurisdictions.

Because direct Somalia-specific premarital evidence is sparse, international experience should be used cautiously. A qualitative study of mandatory premarital HIV testing in Malaysia identified support for prevention goals alongside concerns about confidentiality, counseling, discrimination, and reluctance to test.¹⁵ Bioethical analysis of mandatory premarital HIV testing in African settings has likewise emphasized the tension between public health goals, voluntariness, and individual rights.¹⁶ These studies are contextual analogies, not evidence that the same attitudes, practices, or policy effects occur in Somalia.

The appropriate policy question for Somalia is therefore not whether premarital testing should be assumed to be beneficial or harmful, but how any premarital testing service can be designed to protect both partners while preserving individual consent, confidentiality, accurate diagnosis, and linkage to care. This commentary does not advocate mandatory HIV-negative certification as a condition for marriage. Where couples seek or are offered premarital HIV testing, joint education can be combined with individually protected consent and result disclosure, with clear explanation that a reactive screening result requires confirmation before any clinical or social conclusion is drawn.^{1,2}

The Laboratory as a Trust Environment

The laboratory is a technical environment, but HIV testing also makes it a trust environment. The 2018 sentinel survey demonstrated that confidential, consent-based testing with coded documentation and trained counselors is operationally feasible in Somali services.³ At the same time, the Somali Stigma Index and legal-environment assessment documented reported confidentiality breaches and concerns about disclosure in health-care settings.^{5,7} A 2025 Mogadishu qualitative study also identified confidentiality concerns within HIV care.¹² The contrast is important: Somalia already has examples of confidentiality-protective practice, but consistent implementation and patient confidence cannot be assumed.

For this reason, quality assurance for HIV testing should consider more than analytical performance. Patient-facing processes—registration, visibility of test requests, waiting areas, specimen labeling, access to registers, result delivery, and referral—can either protect or expose the individual. These are measurable service-design features. Their relationship with willingness to test should be evaluated rather than presumed.

A Conceptual Privacy-First HIV Screening Framework

The proposed privacy-first framework is summarized in [Table 1](#). It translates WHO testing principles and the concerns identified in Somali evidence into practical steps for routine, clinical, and premarital testing contexts.^{1,2,5,7} The framework is conceptual: it has not been prospectively evaluated in Somalia and should not be presented as proven to increase uptake, reduce stigma, or improve linkage. Its purpose is to provide a structured set of components that can be piloted and tested.

Table 1 Proposed Conceptual Privacy-First Framework for HIV Screening in Routine and Premarital Contexts in Somalia

Framework Component	Practical Action	Rationale and Proposed Contribution
Normalize testing	Present HIV testing as health protection rather than as evidence of suspected misconduct; use neutral, nonjudgmental language.	May reduce social signaling around the test and improve acceptability; effect requires local evaluation.
Private informed consent	Give each person a private opportunity to receive information, ask questions, and consent, including when couples attend together.	Protects autonomy and provides a safeguard against coercion in socially consequential testing contexts.
Brief pre-test information	Explain the purpose of testing, confidentiality, window-period limitations where relevant, screening versus diagnosis, confirmatory testing, and treatment availability in clear Somali language.	Addresses misinformation and gives patients information needed for an informed testing decision.
Confidential laboratory workflow	Protect privacy during registration, specimen labeling, record access, result delivery, and referral; restrict information to staff who need it for care.	Targets confidentiality concerns documented in Somali HIV evidence and makes privacy auditable as a quality domain.
Confirmatory pathway	Manage every reactive screening result according to the applicable confirmatory algorithm before communicating a definitive diagnosis.	Reduces the risk of diagnostic error and premature clinical or social consequences.
Linkage to care	Provide a defined route to confirmatory testing, antiretroviral therapy, prevention counseling, partner services where appropriate and safe, and psychosocial support.	Connects testing to care rather than leaving patients with an isolated laboratory result.
Community health literacy	Use culturally appropriate facility and community education, including engagement with trusted community stakeholders, to explain transmission, treatment, confidentiality, and the purpose of testing.	May reduce misconceptions and normalize HIV care; content and delivery should be evaluated locally.

Notes: This framework is conceptual and has not been empirically validated in Somalia. It translates WHO HIV-testing principles and concerns identified in Somali evidence into testable service-design components. It should be piloted and evaluated before broad implementation claims are made.

Abbreviations: HIV, human immunodeficiency virus; WHO, World Health Organization.

The model has seven components: normalization of testing as health protection; private informed consent; brief pre-test information; confidential laboratory workflow; a clear confirmatory pathway for reactive screening tests; active linkage to care and psychosocial support; and community health literacy. For premarital testing, the framework adds an explicit separation between couple education and individual consent and disclosure. This distinction aims to preserve the potential preventive value of couple engagement without converting screening into a punitive social gatekeeping process.

Clinical and Public Health Implications

First, clinicians and laboratory teams can normalize HIV testing by explaining its preventive purpose in the same nonjudgmental manner used for other clinically indicated tests. This approach may reduce the perception that the request itself is an accusation, but its effect in Somalia should be measured rather than assumed.

Second, pre-test communication can be brief and standardized. Essential information includes why the test is being offered, how privacy will be protected, what a reactive screening result means, why confirmation is required, and where care is available. A short Somali-language script and private opportunity for questions may be feasible even in high-volume facilities.

Third, facilities can audit confidentiality as a quality-improvement domain. Practical indicators could include private result delivery, restricted access to HIV records, use of coded identifiers where appropriate, staff training, and documented referral pathways. These indicators would complement—not replace—laboratory quality assurance.

Fourth, premarital services should be couple-sensitive but not assume that joint testing removes the need for individual autonomy. Private consent and individualized counseling remain important, particularly where disclosure

could have adverse social consequences. The 2017 Somali Stigma Index documented spouse abandonment and other forms of enacted stigma after HIV diagnosis or disclosure among people already living with HIV, underscoring the need for careful, patient-centered disclosure processes.⁵

Research Agenda for Somalia

The first research priority is measurement. A locally developed and psychometrically evaluated instrument could define and quantify pre-test fear across routine clinical, antenatal, surgical, blood-donor, voluntary counseling, and premarital contexts. Candidate domains include fear of a positive result, perceived confidentiality, anticipated stigma, relationship consequences, family disclosure, misinformation, and trust in health workers.

Second, mixed-methods studies should describe premarital HIV-testing practice rather than assume its prevalence or regulatory basis. Facility surveys and policy mapping could establish where testing is offered or requested, whether it is voluntary or required by particular institutions, how consent is obtained, who receives results, and what happens after a reactive screen. Qualitative interviews with couples, laboratory staff, clinicians, counselors, religious leaders, and policymakers could explore acceptability and ethical concerns.

Third, implementation studies should test the conceptual framework. A pragmatic before-and-after or cluster design could evaluate whether a standardized privacy-first package changes testing acceptance, completion of confirmatory testing, return for results, linkage to care, patient-reported trust, and perceived dignity. Adverse outcomes—such as unintended disclosure, relationship conflict, or coercion—should be monitored explicitly.

Policy Recommendations

At facility level, HIV programs should consider standard pre-test information, private consent opportunities, secure result pathways, and clear confirmatory and referral algorithms. Staff training should include confidentiality, stigma-free communication, and safe disclosure. At program level, the distinction between voluntary couple counseling and mandatory premarital certification should be explicit. Where premarital testing is offered, a reactive screening result should trigger confirmation and counseling rather than immediate social or administrative consequences.

Community education should address misconceptions and the meaning of modern HIV treatment while avoiding messages that unintentionally reinforce moral labeling. Evidence from low- and middle-income settings suggests that stigma-reduction strategies can support HIV-testing uptake, but interventions should be culturally adapted and evaluated locally.¹⁷ Somali health authorities and research institutions could use the proposed framework as a starting point for implementation research rather than as a prescriptive national standard.

Limitations and Interpretation

This commentary has several limitations. First, it presents no original data and does not estimate the prevalence of pre-test fear. Second, the evidence search was targeted rather than systematic, so relevant sources may have been missed. Third, Somalia-specific evidence directly examining premarital HIV testing, testing refusal, and pre-test fear is sparse; several arguments therefore represent hypotheses generated from related local evidence on stigma, disclosure, knowledge, and HIV-care experiences. Fourth, evidence from other African or culturally conservative settings may not be transferable to Somalia and has been labeled as contextual. Fifth, the legal and policy environment varies across Somali jurisdictions and evolves over time; the 2019 legal-environment assessment is useful historical evidence but cannot by itself establish the current status of all HIV-testing regulations. Finally, the privacy-first framework is conceptual and has not been empirically evaluated. These limitations are precisely why prospective local research is needed before broad implementation claims are made.

Conclusion

Available Somali evidence shows that HIV-related stigma, misinformation, and confidentiality concerns remain relevant to HIV services, but it does not yet quantify fear before testing or define the national pattern of premarital HIV screening. Pre-test fear should therefore be treated as an important research and service-design hypothesis rather than an established population-level fact. A privacy-first, counseling-centered approach is consistent with WHO testing principles and with

concerns documented in Somali studies, but its effects on testing acceptability and linkage require empirical evaluation. By measuring both diagnostic accuracy and patient trust, Somalia can generate evidence for HIV-testing services that are technically reliable, ethically defensible, and responsive to the social context in which testing occurs.

Data Sharing Statement

No datasets were generated or analyzed for this commentary.

Ethics Approval and Consent to Participate

Not applicable. This commentary does not involve human participants, patient records, or individual-level data.

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Disclosure

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