Insight of PrEP and Testing STI Puzzle
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Abstract
Introduction: Pre Exposure Prophylaxis (PrEP) is the use of Anti Retroviral (ARV) drugs by HIV-uninfected people to block the acquisition of HIV before exposure to HIV.

Discussion: There are concerns that PrEP introduction and scale up may pose risks, such as sexual behavior change in specific populations, and have an impact on the budget in already constrained health systems. Therefore, public health measures for the prevention of HIV and other STIs need to be enhanced, such as the prioritization of PrEP, coupled with more effective STI screening and treatment. Integration of STI and PrEP programmes can be viewed bi-directionally (not only integrating STI services into PrEP services but also considering STI clients as people also at risk for HIV and therefore potentially eligible for PrEP). This approach fosters synergies and efficiencies from a public health perspective. However, there are many challenges to programmatic integration, including siloed funding streams and programmes, the availability and costs of expanded etiological STI testing, and gaps in capacity and training for STI management.

Conclusion: The PrEP and STI testing approach fosters synergies and efficiencies from a public health perspective.

Keywords: PrEP, STI, services

1. Introduction
Pre Exposure Prophylaxis (PrEP) involves HIV negative people taking antiretroviral drugs to protect them and prevent HIV infection1. PrEP is taken on an ongoing basis before potentially being exposed to HIV or before/throughout a period where you know you are going to be having sex. Some would say it’s similar to ‘the pill’ that women take to prevent unplanned pregnancy1.

WHO recommended PrEP for use among serodiscordant couples, men who have sex with men and transgender people on the basis that demonstration projects were needed to ascertain optimal delivery approaches since 2012. In 2014, WHO developed consolidated HIV guidelines for key populations, including men who have sex with men, people who inject drugs, sex workers, transgender people and people in prisons and other closed settings. In those guidelines, PrEP was strongly recommended for men who have sex with men. This recommendation enables the offer of PrEP to be considered for people at substantial risk of acquiring HIV rather than limiting the recommendation to specific populations. In 2015, one year later, WHO recommended PrEP for anyone at substantial risk for HIV infection2. This article aimed to overview the PrEP and testing to
prevent HIV and STIs, especially patient with substantial risks.

2. Reviews

PrEP Definition
Pre Exposure Prophylaxis (PrEP) is the use of Anti Retroviral (ARV) drugs by HIV-uninfected people to block the acquisition of HIV before the potential exposure to HIV\(^1\).\(^2\).

PrEP Recommendation
PrEP is recommended for people who are considered at risk of getting HIV\(^3\). WHO currently recommends that any person at substantial risk of HIV should be offered PrEP as an additional prevention choice, as part of combination HIV prevention approaches. Substantial risk of HIV infection is defined by an incidence of HIV infection in the absence of PrEP that is sufficiently high (>3% incidence) to make offering PrEP potentially cost-saving (or cost-effective). Anyone is at risk if you:

a. Are a man who has anal sex with the men and does not always use a condom
b. Have a heterosexual partner who has HIV and you want to have a baby
c. Have a partner who is HIV positive but has not achieved a undetectable viral load and you don't always use a condom

Although most PrEP users are in the United States, where regulatory approval for PrEP was first granted, other countries are beginning to consider how PrEP can be effectively introduced into their settings. Since the release of WHO’s 2015 recommendation on PrEP, national medicines regulatory authorities (NMRAs) in France, South Africa, Kenya, Australia, Peru, Thailand, and Tanzania, as well as the European Medicines Agency have officially approved the use of TDF/FTC for PrEP\(^4\).

PrEP should not replace or compete with effective and well-established HIV prevention interventions, such as comprehensive condom programming for sex workers and men who have sex with men and harm reduction for people who inject drugs. Many people who could benefit most from PrEP belong to key population groups that may face legal and social barriers to access health services. This needs to be considered when developing PrEP services. Although the public health approach underpins the WHO guidance on PrEP, the decision to use PrEP should always be made by the individual concerned\(^5\).

Integration PrEP and STI services
The integration PrEP and STI services have the primary purposes to make services more convenient for people who attend health facilities for other reasons and to increase the uptake of HIV-specific services. The integration of HIV services is appropriate in all epidemic settings and is particularly important where HIV prevalence is high\(^5\).

The integration of PrEP in existing health services could be considered, for example PrEP could be integrated into services that are already being provided to key populations, such as HIV testing services and antiretroviral therapy (ART). The other settings for integration services such as sexual health clinics, family planning services, services for MSM and transgender, services for sex workers, harm reduction services and private healthcare providers\(^6\).\(^7\).

After years of neglect, greater global attention is being paid to the increasing incidence of sexually transmitted infections (STIs)\(^6\). Everyday, more than 1 million new cases of four common curable STIs (chlamydia, gonorrhoea, syphilis and trichomoniasis) occur among people aged 15 – 49 years. The need for greater focus on STIs has also been highlighted in the context of expanded use of PrEP for HIV prevention, where high STI prevalence at baseline and incidence during PrEP use has been observed. The epidemiological situation demands a call to action to ensure that these STIs are addressed, and that populations at risk have access to comprehensive STI prevention and care\(^6\).\(^7\). Integration of STI services and PrEP has challenges, but it also
provides and opportunity not only to induce much-needed progress in STI control, but also to optimize broader sexual and reproductive health services for key, underserved and overlooked populations.

The actions to optimize STI services in the context of Oral PrEP
To promote better sexual and reproductive health services, the unmet need for appropriate STI screening and treatment for people at risk for HIV and other STIs should be filled, particularly in low-middle income countries. The current state of STI interventions, both within PrEP and other HIV services and beyond, is inadequate to achieve the targets set in the Global health sector strategy on STIs, 2016 – 2021. As such, the following actions can accelerate progress towards those targets:

a. Advocacy drive: prioritization of STIs services by ministries of health, donors and other stakeholders
b. Push for greater investment in: building capacity for screening and treatment of STIs; additional research from early product development to implementation research; developing more affordable, accurate and easy-to-use POC STI testing to support countries in their STI responses; vaccine development
c. Establish and maintain multi-partner platforms to consider how to optimize testing, treatment and prevention strategies for STIs, which include vaccinations and other multipurpose technologies.
d. Aim for greater innovation in next-generation interventions and service delivery for STI control. (including digital health)

PrEP presents an opportunity to think strategically about how more comprehensive services can be supported by governments and other stakeholders. Challenges persist in STI diagnosis and treatment: missed opportunities for treatment, concerns regarding mistreatment and potential for overtreatment, including in PrEP users who do not have access to appropriate diagnostic testing.

3. Conclusion
PrEP and testing STI is needed for the prevention of HIV and other STIs. This approach need to be enhanced, such as the prioritization of PrEP, coupled with more effective STI screening and treatment. This approach fosters synergies and efficiencies from a public health perspective.

References
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