ROLE OF HIV SELF-TESTING IN STRENGTHENING HIV PREVENTION SERVICES

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Background:
HIV self-testing (HIVST) has been increasingly available since 2016, and is proven to significantly increase testing, particularly among key populations. However, its use within HIV prevention programs has previously been overlooked. We reviewed clinical trial evidence to investigate how HIVST is used across HIV prevention, including post-exposure prophylaxis (PEP), pre-exposure prophylaxis (PrEP), voluntary medical male circumcision (VMMC) and needle syringe programs (NSP).

Methods:
In January 2024, we conducted a search on PubMed for clinical trials on the use of HIVST in facilitating access to HIV preventive methods (i.e., PrEP, PEP, NSP and VMMC), published between 2010 and 2024. We also examined trial evidence on linkage to PrEP post-HIVST. A random-effects meta-analysis was performed to summarise the pooled relative risk ratio, where data was available.

Results:
Overall, 19 studies were included. Of which, three studies showed that HIVST can facilitate PrEP initiation and opens avenues for tele-PrEP and other de-medicalised service delivery models. The integration of HIVST could enhance the effective use of PrEP and support PrEP continuation. Comparing HIVST-supported PrEP programs with no HIVST, the pooled relative risk of three RCTs for PrEP use and adherence are 1.00 (95%CI: 0.92–1.07) and 1.09 (95%CI: 0.82–1.45), respectively. However, six included RCTs showed mixed evidence for the effectiveness of linkage to PrEP post-HIVST, underscoring the need to further understand contextual factors and optimal implementation strategies. Limited evidence for linkage to VMMC post-HIVST found no difference compared with standard demand creation strategies. No trials examined how HIVST can be used for PrEP re-initiation, PEP initiation or follow-up, or linkage to needle syringe programs.

Conclusion:
HIVST-supported PrEP and PEP appeared acceptable, feasible, and potentially effective, particularly in supporting adherence and continuation. Evidence for the use of HIVST-supported models of HIV prevention is accumulating and, if able to be scaled up, could contribute to reducing HIV infections globally.

Disclosure of Interest Statement:

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