ART initiations following community-based distribution of HIV self-tests: Meta-analysis and meta-regression of STAR Initiative data

Supplemental information

Supplemental Figure 1. Diagram illustrating links between and measures of intervention, implementation, mechanisms of impact, and outcomes

Context
- Availability of HTS among the general population, measured using proportion of PLHIV knowing their status (Spectrum data)
- Availability of treatment for PLHIV, measured using proportion of PLHIV on ART (Spectrum data)

Intervention
- Community-based HIVST distribution

Implementation
- Intensity of HIVST distribution, measured using number of HIVST kits distributed per 10,000 population (programme data)
- Reach of intervention, measured using the proportion of population that had used HIVST in the past 12 months (survey data)

Mechanism
- Knowledge of linkage, measured using proportion of population that knows where to link following a reactive HIV test result (survey data)

Outcome
- ART initiation at health facility

Graphic adapted from Moore et al. 2015
Supplemental Table 1. Assessment of bias in selection, performance, detection, attrition, and reporting

<table>
<thead>
<tr>
<th>Study author and year</th>
<th>Selection bias</th>
<th>Performance bias</th>
<th>Detection bias</th>
<th>Attrition bias</th>
<th>Reporting bias</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Random sequence generation</td>
<td>Allocation concealment</td>
<td>Blinding of participants and personnel</td>
<td>Blinding of outcome assessment</td>
<td>Incomplete outcome data</td>
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<tr>
<td>Indravudh et al. 2018</td>
<td>Low risk. Computer-generated random sample list used.</td>
<td>Low risk. Community allocations made at public ceremony.</td>
<td>High risk. Participants and intervention staff could not be masked.</td>
<td>Unclear risk. Masking data prior to outcome assessment not mentioned.</td>
<td>Low risk. Retrospective ART data collected from pre-existing clinic record systems.</td>
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<td>Low risk. Computer-generated random sample list used.</td>
<td>Low risk. Community allocations made at public ceremony.</td>
<td>High risk. Participants and intervention staff could not be masked.</td>
<td>High risk. Data were analyzed without reference to allocation where possible, but not formally masked.</td>
<td>Unclear risk. ART data collected prospectively by unmasked research assistants at facilities.</td>
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<tr>
<td>Neuman et al. 2021</td>
<td>Low risk. Computer-generated random sample list used.</td>
<td>Unclear risk. No detail on how allocations communicated to communities.</td>
<td>High risk. Participants and intervention staff could not be masked.</td>
<td>Low risk. Data were masked for assessment of primary outcome</td>
<td>Low risk. Retrospective ART data collected from pre-existing clinic record systems.</td>
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<td>Sibanda et al. 2018</td>
<td>High risk. Non-randomized comparison used.</td>
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Higgins et al. 2011 was used to structure bias assessment
Works cited


