Evaluating the acceptability of home-based testing as an approach towards achieving universal knowledge of HIV status – findings from a case-control study nested within the HPTN 071 (PopART) trial

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BACKGROUND

HPTN 071 (PopART) TRIAL

The HPTN 071 (PopART) trial is being conducted in 21 communities in Zambia and South Africa (Figure 1). It examines the impact of a combination prevention package including universal testing and treatment on community-level HIV incidence. Among community members consenting to the PopART intervention (and not self-reporting known diagnosis of HIV-infection) in Arms A & B in Zambia, during the first annual round – 67% (142,922/212,819) accepted home-based HIV-testing and counselling (HB-HTC) provided by PopART Community HIV-Care Providers (CHPs).

METHODS

Among individuals who were encouraged by CHPs and offered HB-HTS, random samples of individuals who declined HB-HTC (cases) and those who accepted HB-HTC (controls) were recruited.

RESULTS

Four hundred and ninety-five participants were recruited in Zambia, (90% of those who were asked for written informed consent).

The acceptors and non-acceptors were well balanced by gender (reflecting the sampling strategy of attempting to recruit equal numbers of men and women) (Table 1).

Non-associated was seen between HB-HTC acceptance status and any of: age, marital status, socio-economic status, education, household composition, CHKP or peer related potential influences on acceptance, sexual behaviour, health-seeking behaviour (including number of HIV tests in lifetime), illness (last 12m) or in women - gender-based violence (last 12m) or ANC attendance, in men: circumcision status.

Non-acceptors of HB-HTC (cases) were less likely to cite as reasons in favour of HB-HTC, irrespective of whether they had accepted it.

Logistic regression was used to estimate odds ratios comparing cases and controls (adjusted for) and offered HB_HTS, random samples of individuals

Table 1. Key participant characteristics

<table>
<thead>
<tr>
<th>Gender</th>
<th>Non-acceptors %</th>
<th>Acceptors %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>125 (52)</td>
<td>144 (56)</td>
</tr>
<tr>
<td>Female</td>
<td>115 (47)</td>
<td>105 (44)</td>
</tr>
</tbody>
</table>

Table 2. Factors that encouraged/discounted HB-HTC

<table>
<thead>
<tr>
<th>Factors encouraged/discounted HB-HTC</th>
<th>Non-acceptors %</th>
<th>Acceptors %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having HIV positive result</td>
<td>1 (0.01)</td>
<td>Yes</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>124 (52)</td>
<td>141 (56)</td>
</tr>
<tr>
<td>Agree</td>
<td>193 (81)</td>
<td>216 (82)</td>
</tr>
<tr>
<td>Disagree or strongly disagree</td>
<td>54 (23)</td>
<td>38 (15)</td>
</tr>
</tbody>
</table>

*Adjusted for gender & community, age category & absence from home

Acceptors see to be those who: - Believe they are negative & want to confirm it - Accepted CHHP advice to test

Like the convenience of testing at home

Non-acceptors see to be those who: - Fear a positive result - Recently tested and are avoiding testing again - Have a more negative view about treatment

These novel data on reasons for and against uptake of HB-HTC, from a study nested within the largest ongoing trial of treatment as prevention, suggest broad acceptability across socio-demographic sub-groups of the population.

They also highlight perceptions which should be addressed when tailoring messaging to promote HB-HTC, in efforts towards attaining the first of the UNAIDS 90-90-90 targets and achieving universal knowledge of HIV status.

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