An Examination of Perceived Autonomy Support, Care Coordination Quality, and PrEP Discontinuation among Black MSM in Three US Cities: HPTN 073

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Black/African American MSM: 25% of 37,968 HIV diagnoses

PrEP use among Black men who have sex with men has not reached levels sufficient to have a population impact on HIV incidence.

HPTN 073: Pre-Exposure Prophylaxis (PrEP) Initiation and Adherence among Black Men who have Sex with Men (BMSM) in Three U.S. Cities

Purpose:
To assess the initiation, acceptability, safety, and feasibility of PrEP for Black men who have sex with men (BMSM) in three U.S. cities utilizing client-centered care coordination (C4) models.
C4: Client-centered care coordination
The purpose of this study was to examine whether perceived autonomy support and care coordination quality were associated with discontinuation of PrEP use among Black MSM who initiated PrEP in HPTN 073.

H1: We hypothesized that high perceived autonomy support would be negatively associated with PrEP discontinuation.

H2: We hypothesized that the high perception of coordination quality would be negatively associated with PrEP discontinuation.
Measure – Client Perceptions of Coordination Questionnaire

- Higher mean scores correspond with a higher perception of coordination quality.

<table>
<thead>
<tr>
<th>Client Perceptions of Coordination Questionnaire (CPCQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Service Elements: Questions 1-11 relate to the care you received for your health from any doctor or service provider in the last 3 months.</td>
</tr>
</tbody>
</table>

1. How often did you get the services you thought you needed?
   - Never
   - Rarely
   - Sometimes
   - Mostly
   - Always
   - Prefer Not to Say

2. How often did you have to wait too long to obtain a service/appointment?
   - Never
   - Rarely
   - Sometimes
   - Mostly
   - Always
   - Prefer Not to Say

3. In the past 3 months, how often did you seem to receive the medicines you thought you needed?
   - Never
   - Rarely
   - Sometimes
   - Mostly
   - Always
   - Not Applicable
   - Prefer Not to Say

4. How often were the results of tests discussed with you (e.g. blood tests)?
   - Never
   - Rarely
   - Sometimes
   - Mostly
   - Always
   - Not Applicable
   - Prefer Not to Say

5. In the past 3 months, how often did you feel the care you received was well coordinated?
   - Never
   - Rarely
   - Sometimes
   - Mostly
   - Always
   - Prefer Not to Say

6. How often were you happy with the quality of care you received?
   - Never
   - Rarely
   - Sometimes
   - Mostly
   - Always
   - Prefer Not to Say

7. In the past 3 months, how often have service providers responded appropriately to changes in your needs?
   - Never
   - Rarely
   - Sometimes
   - Mostly
   - Always
   - Not Applicable
   - Prefer Not to Say
Autonomy support was defined as the degree to which a patient perceives their providers were supportive about a health care issue.

Higher scores correspond with a higher perception of autonomy support.
Outcome – PrEP Discontinuation

• Discontinuation was defined as the first product hold that was greater than 14 days
Analysis

• Predictors:
  • Perceived autonomy support at weeks 4 and 8, and CPCQ at week 13 were assessed separately as predictors while adjusting for site.

• Outcome:
  • Cox proportional model was used to predict time (in days) to first PrEP discontinuation of 14 days or more.
## Results

<table>
<thead>
<tr>
<th></th>
<th>Participants who had C4 sessions (%( n))</th>
<th>Client Perception Coordination Quality Mean (SD)</th>
<th>Healthcare Climate Questionnaire Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PrEP Mean (SD)</td>
<td>PrEP Mean (SD)</td>
</tr>
<tr>
<td>Enrollment</td>
<td></td>
<td>PrEP Mean (SD)</td>
<td>PrEP Mean (SD)</td>
</tr>
<tr>
<td>Enrollment</td>
<td>66% (117)</td>
<td>65% (31)</td>
<td>-</td>
</tr>
<tr>
<td>Week 4</td>
<td>63% (109)</td>
<td>60% (25)</td>
<td>-</td>
</tr>
<tr>
<td>Week 8</td>
<td>63% (105)</td>
<td>53% (19)</td>
<td>-</td>
</tr>
<tr>
<td>Week 13</td>
<td>64% (110)</td>
<td>59% (22)</td>
<td>4.3 (0.7)</td>
</tr>
</tbody>
</table>
Results – PrEP Discontinuation >14 days

• Coordination quality
  • Week 13 measure (HR:0.99; 95% CI (0.62-1.57)

• Autonomy support
  • Week 4 : (HR 0.83; 95% CI 0.63-1.09)
  • Week 8: (HR 0.67; 95% CI 0.51-0.90)
Discussion

• Most client’s initiated PrEP at enrollment and had good adherence.
• Consistent with our hypothesis, those with perceived higher autonomy support were less likely to discontinue PrEP.
• This suggests that theory driven interventions using Self Determination Theory to address social, individual, and structural barriers to PrEP can benefit Black MSM irrespective of their PrEP use.
Implications

- Interventions that incorporate Self Determination Theory can be advantageous in optimizing PrEP use in Black MSM.
- Training providers on how to recognize and support the autonomy of patients can facilitate PrEP continuation and also support clients in their decision making on issues that are relevant to their needs.
Thank you!

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• The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.