Health Promotion: A Critical Support to ART Adherence in NYC Medical Case Management Programs

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Background
- The New York City Department of Health and Mental Hygiene (NYCDOHMH) Medical Case Management (MCM) Program integrates Health Promotion education (HP) into services to improve health literacy among people living with HIV (PLWH)
- HP is designed to help PLWH remain in HIV care and adhere to antiretroviral treatment (ART). MCM staff follow a curriculum adapted from Brigham and Women’s Hospital Prevention and Access to Care and Treatment Project (PACT)
- The HP curriculum includes 16 topics covering HIV biology, care management, risk reduction (RR), and ART adherence

Objectives
- We evaluated the HP component of the MCM Program so that we may better support our agencies in delivering this service
- The aim of the analysis was to evaluate HP topic use, barriers and facilitators to delivering HP, and strategies to effectively deliver HP

Methods
- Quantitative
  - We examined the frequency in which HP topics were covered among MCM clients enrolled 2013-2014
  - Data were drawn from the Electronic System for HIV/AIDS Reporting and Evaluation (eSHARE), which is used by HIV service providers to report activity to DOHMH
- Qualitative
  - We conducted semi-structured group interviews with MCM staff during 11 site visits between September 2016 and February 2017 about HP topic use, barriers and facilitators, and strategies to effectively deliver HP
  - Using notes from the interviews, two coders conducted concurrent content analysis yielding 12 key themes

Results
- Quantitative
  - Among 2,284 clients, 77% were enrolled for at least 6 months.
  - Only 21% of clients at least started all 7 core HP topic areas during their first year of enrollment
  - On average, 2 HP sessions occurred per client per month
  - The most common topic areas covered were ART adherence (75%), living with HIV (67%), ART medication handling (65%), and medical appointments (60%)
  - The least covered topic areas focused on RR: safe relationships (26%), substance use (31%), and sexual behavior (35%)
- Qualitative
  - Interviews confirmed the need for frequent adherence discussions due to ART adherence challenges, viral load fluctuations, client literacy and comprehension, and client crises jeopardizing adherence
  - Staff reported RR topics (substance use and sexual behavior) are difficult to facilitate
  - Staff reported age, cultural, and language differences as barriers to HP delivery (Figure 1)
  - Staff reported rapport building, motivational interviewing (MI), and managing triggers as effective HP delivery strategies (Figure 2)

Discussion
- Moving through the HP curriculum is not sequential. Staff initiate and repeat topics based on client need, level of understanding, and readiness
- HP on ART adherence is revisited when clients are not adherent to ART regimen, have an increase in viral load, or clients change medication
- Staff reported differences in age, culture, and language as barriers to facilitating HP especially when covering sensitive RR topics like substance use and sexual behavior
- Staff reported the need for updated HP content that covers recent developments in HIV (i.e., PrEP and PEP and once a day pill treatment options), additional topics (i.e., mental health, social networks, hepatitis C, tobacco, stigma, and disclosure), supplemental resources including literature, webinars, and videos

Conclusion
- Based on findings, we collaborated with a consultant to develop Risk Reduction Approaches for HP training to help staff identify and strategize around common barriers to effective HP conversations between client and worker (e.g. stigma, gender, culture, HIV status, and recovery status)
- We are redesigning the HP curriculum to reflect recent developments in HIV care and treatment, accommodate different levels of education and learning styles, and incorporate technology in HP delivery
- Future evaluation should explore the relationship between HP and clinical outcomes

Acknowledgements
We would like to thank NYC MCM staff and Julie Barnes, LMHC

Table 1. Topic areas covered

<table>
<thead>
<tr>
<th>Topic areas</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Curriculum Introduction*</td>
<td>78%</td>
</tr>
<tr>
<td>Living with HIV*</td>
<td>67%</td>
</tr>
<tr>
<td>ART medication handling*</td>
<td>65%</td>
</tr>
<tr>
<td>ART adherence*</td>
<td>76%</td>
</tr>
<tr>
<td>ART side effects</td>
<td>46%</td>
</tr>
<tr>
<td>What is HIV*</td>
<td>51%</td>
</tr>
<tr>
<td>Social support*</td>
<td>55%</td>
</tr>
<tr>
<td>Medical appointments and providers*</td>
<td>60%</td>
</tr>
<tr>
<td>Health maintenance</td>
<td>48%</td>
</tr>
<tr>
<td>RR: Sexual behaviors</td>
<td>35%</td>
</tr>
<tr>
<td>RR: Substance use</td>
<td>31%</td>
</tr>
<tr>
<td>RR: Safety in relationships</td>
<td>26%</td>
</tr>
<tr>
<td>Healthy living</td>
<td>33%</td>
</tr>
<tr>
<td>Curriculum wrap up</td>
<td>4%</td>
</tr>
</tbody>
</table>

Figure 1. Barriers and facilitators to HP delivery

- **Barriers**
  - Differences in age, culture, and language
  - Client comprehension
  - Denial of HIV status
  - Client stage of change
- **Facilitators**
  - Viral load changes
  - Intake assessment
  - Provider concern
  - Change in health status
  - Client crisis

Figure 2. Strategies used among MCM staff

- **All**
  - Asking open ended questions
  - Reflecting back what the client said
  - Summarizing what was discussed during the encounter
  - Allowing the client to lead the discussion
- **Managing Triggers**
  - Helping the client to identify triggers
  - Brainstorming strategies to avoid or reduce substance use

Abstract #133
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