Engagement in a digital health intervention for young Black and Latinx men and transwomen who have sex with men

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Introduction

Digital HIV interventions (DHIs) have demonstrated efficacy in increasing social support, reducing stigma, and promoting engagement in care among sexual minority populations.

However, significant challenges persist in sustaining participants' use of DHIs.

To address a gap in the understanding of DHI engagement, we examined correlates of engagement within a national randomized controlled trial (RCT) among young Black and Latinx men and transwomen who have sex with men (YBLMT) participants.

Methods

HealthMpowerment 2.0 (HMP) was designed to promote HIV prevention behaviors among YBLMT (ages 15-29).

HMP 2.0 is a three-arm RCT. The control group (arm 1) had access to informational-only articles while the intervention group (arm 2 and arm 3 (peer-referral arm)) had full access to the intervention.

Over the study period, participants' temporal interactions with the DHI were collected in real time as paradata.

In this study, we summarized 626 participants' weekly time spent on the DHI over 12 weeks. We used t-tests and chi-square tests to compare demographic characteristics with engagement.

HEALTHMPOWERMENT

Results

The participants had a mean age of 24.84 (SD = 3.34). Most participants (74.28%) self-identified as gay.

The average duration of use was 37.37 minutes (range 0.05-2059.68).

39.7% of the intervention participants and 16.3% of the control participants used the DHI for more than 30 minutes[1] (active users) across their first 12 weeks in the trial (p<0.001).

Participants in the intervention arm spent more time within the DHI as compared to the control arm (50.65 minutes vs. 20.81 minutes; p=0.001) over 12 weeks.

Engagement for both arms was the greatest in week 0 and week 1 and the difference between the study arms was also the greatest during those weeks (see Figure 1).

Participants with an annual income below $20,000 were more likely to be active users (≥30 minutes[1]) compared to non-active users (<30 minutes; 58.7% vs. 45.7% p=0.011).

At the 12-week follow-up assessment, active users reported higher acceptability and engagement with various intervention features than non-active users (ps<0.05).

[1]thresholds used in the previous study *AIDS and Behavior*, 23(5), 1166-1177

Discussion

Participants' DHI engagement declined after few weeks of the trial enrollment.

Given the importance of intervention engagement in DHI, design thinking approaches that consider variability in needs and usage could promote the overall engagement and efficacy of DHIs.
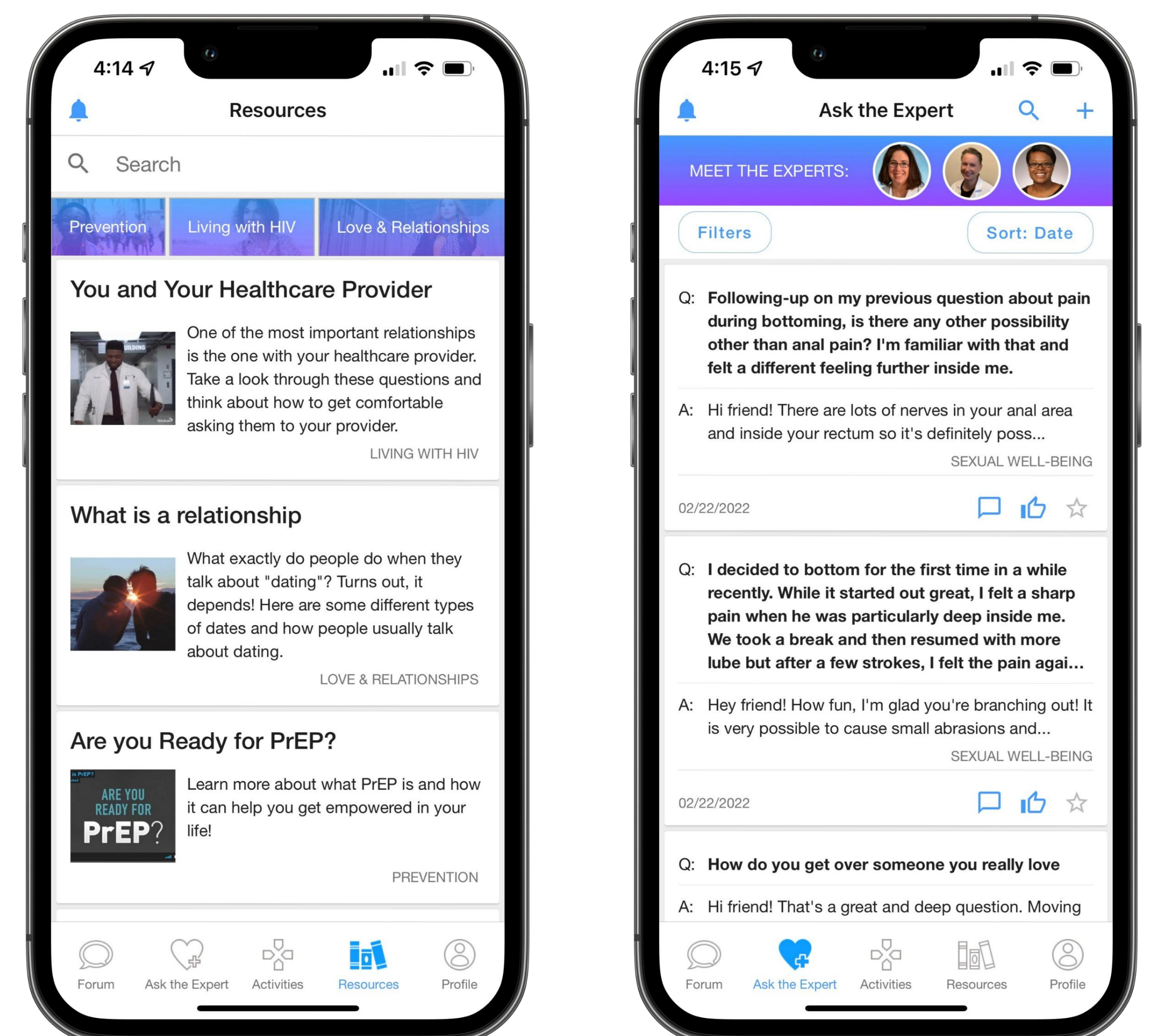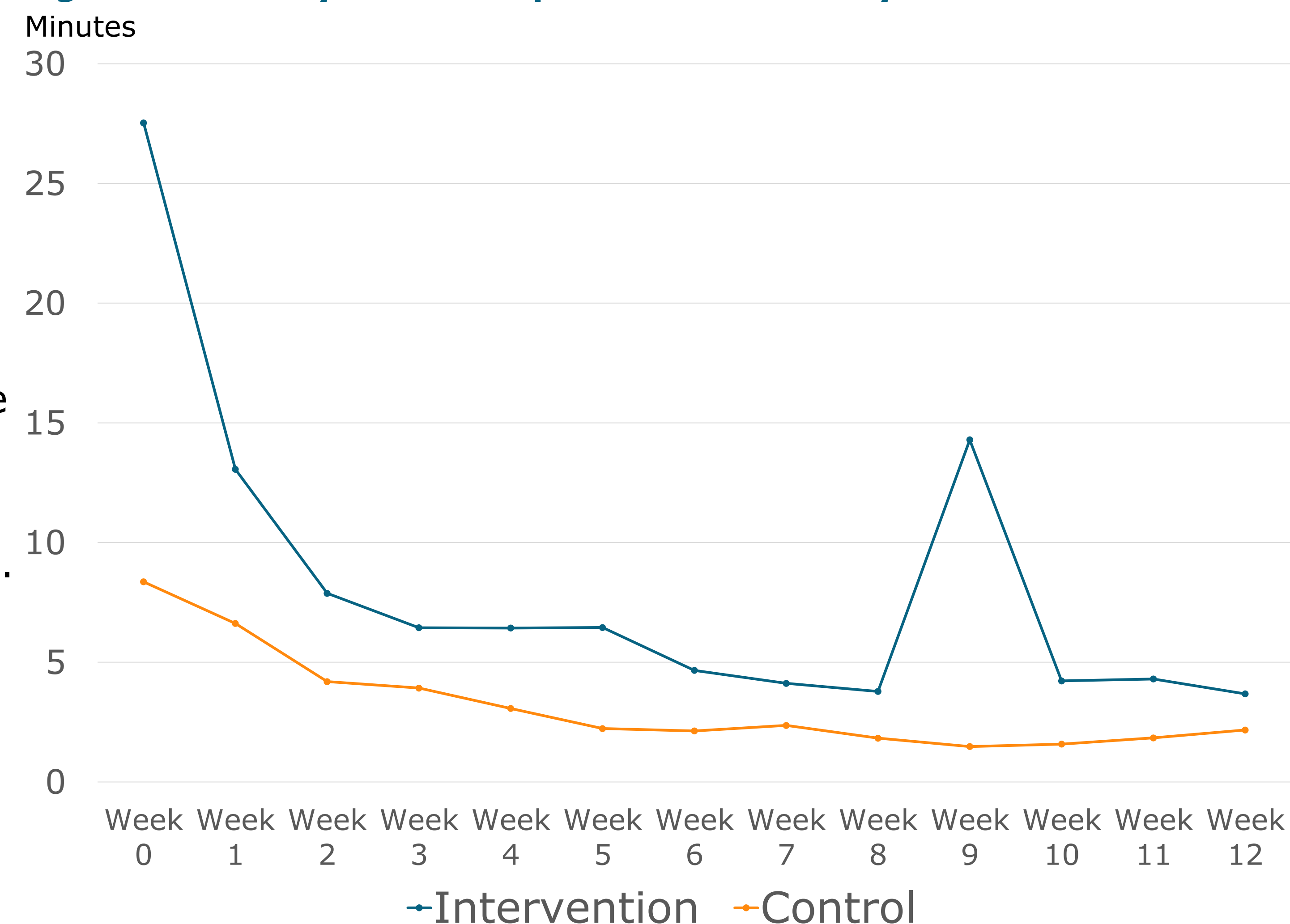

Figure 1. Weekly minutes spent on HMP 2.0 by intervention arm

Minutes

— Intervention — Control

Dissemination

We are still **recruiting study participants**!

Take a picture to **participate** or **share**

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