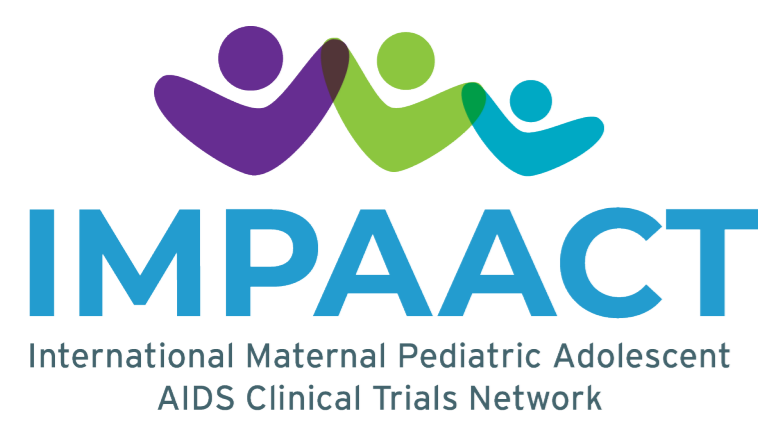


Participant Acceptability and Clinician Satisfaction of Cognitive Behavioral Therapy and a Medication Management Algorithm Compared with Enhanced Standard Care for Treatment of Depression among Youth Living with HIV



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BACKGROUND

- Primary results of the International Maternal Pediatric Adolescent AIDS Clinical Trials Network (IMPAACT) 2002 trial showed that Cognitive Behavioral Therapy (CBT) and Medication Management Algorithm (MMA) (COMB-R) significantly improved depression outcomes in Youth with HIV (YWH) compared with Enhanced Standard Care (ESC)
- This analysis examined and compared the acceptability and satisfaction of these treatments among study participants and clinicians (licensed prescribers and therapists) based on their ratings from multi-question surveys

METHODS

- Using restricted randomization to balance site characteristics, sites were randomized to either COMB-R (CBT administered by a therapist and a licensed prescriber trained in the MMA) or ESC (standard psychotherapy and medication management)
- Between March 2017 and March 2019, 13 U.S. sites enrolled YWH, ages 12-24, diagnosed with nonpsychotic depression
- After intervention conclusion at week 24, acceptability and satisfaction surveys were collected from participants, licensed prescribers, and therapists with higher scores indicating more desirable outcomes
- For this site-randomized trial, site-level means were compared between arms using Wilcoxon tests

RESULTS

- 6 COMB-R sites enrolled 81 participants (69 included in analysis) and 7 ESC sites enrolled 75 participants (71 included); 1 COMB-R site dropped out after randomization
- Reasons for exclusion included dropping out before the Week 24 window (9 participants), missing the Week 24 appointment (6 participants), and no data collected at the Week 24 appointment (1 participant)
- There were no significant baseline differences between included and excluded participants (data not shown)
- The median (Q1, Q3) number of licensed prescribers and therapists was 1 (2, 2) and 1 (1.5, 2.25) in the COMB-R arm and 1.5 (0.75, 3.5) and 1 (1, 2) in the ESC arm; 2 COMB-R and 3 ESC sites had only 1 licensed prescriber and 3 COMB-R and 5 ESC sites had only 1 therapist
- The median (min, max) site-level mean participant acceptability score was 3.7 (3.5, 3.9) in the COMB-R arm and 3.4 (3.3, 3.7) in the ESC arm on a Likert Scale from 1 to 4 with 4 being the most desirable outcome
- The median (min, max) site-level mean licensed prescriber satisfaction score was 3.2 (2.5, 3.4) in the COMB-R arm and 2.4 (2.0, 3.0) in the ESC arm on a Likert Scale from 0 to 4 with 4 being the most desirable outcome
- The median (min, max) site-level mean therapist satisfaction score was 2.1 (1.9, 2.8) in the COMB-R arm and 2.3 (2.0, 2.6) in the ESC arm on a Likert Scale from 0 to 3 with 3 being the most desirable outcome
- 2 ESC sites had a primary care physician prescribe medication and the licensed prescriber survey was completed with a 'Not Applicable' response
- 5 additional ESC sites marked 'Not Applicable' for question 1 or 2 or both on the licensed prescriber survey for participants not taking antidepressant medication

TABLE 1. Site Level Baseline Characteristics

Characteristic	COMB-R (N=6 sites)	ESC (N=7 sites)
% male at birth	41.4 (25.0, 81.8)	50.0 (31.3, 60.0)
Mean age at randomization	21.7 (20.9, 21.9)	21.2 (20.6, 22.8)
% with perinatal transmission	39.6 (36.4, 75.0)	60.0 (33.3, 73.3)
QIDS-C ⁺ depression level	17.3 (14.9, 18.0)	14.3 (13.9, 16.7)
QIDS-SR ⁺ depression level	16.5 (15.0, 17.1)	14.0 (12.3, 15.6)
Mean log ₁₀ HIV-1 RNA viral load [copies/mL]	1.9 (1.8, 2.6)	2.1 (1.9, 2.4)
Mean CD4 count [cells/mm ³]	741.8 (241.7, 281.8)	262.5 (240.0, 287.5)

+Quick Inventory of Depressive Symptomatology-Clinician Rating
 =Quick Inventory of Depressive Symptomatology-Self Report

Median site-level mean participant acceptability and licensed prescriber satisfaction scores were significantly higher in COMB-R sites vs. ESC sites

TABLE 2. Summary of Acceptability and Satisfaction Likert Scores*

Survey (site-level)	COMB-R (N=6 sites)	ESC (N=7 sites)	P-Value Wilcoxon Test
Mean participant acceptability (8 questions); scale from 1 to 4	3.7 (3.5, 3.9)	3.4 (3.3, 3.7)	0.04
Mean licensed prescriber satisfaction (4 questions); scale from 0 to 4	3.2 (2.5, 3.4)	2.4 (2.0, 3.0)	0.01
Mean therapist satisfaction (6 questions); scale from 0 to 3	2.1 (1.9, 2.8)	2.3 (2.0, 2.6)	0.52

*The table shows the median (min, max) of the site-level means

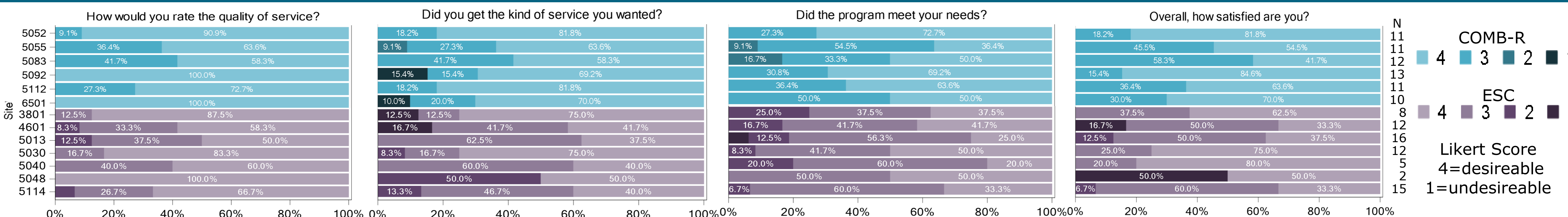


FIGURE 1. Participant Acceptability Survey Responses by Site

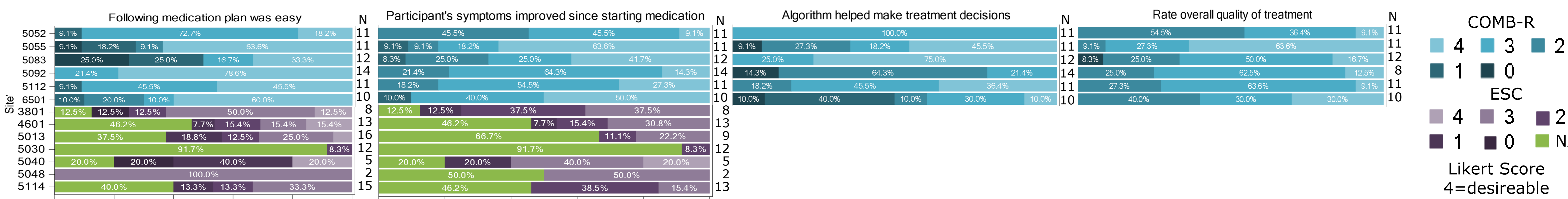


FIGURE 2. Licensed Prescriber Satisfaction Survey Responses by Site

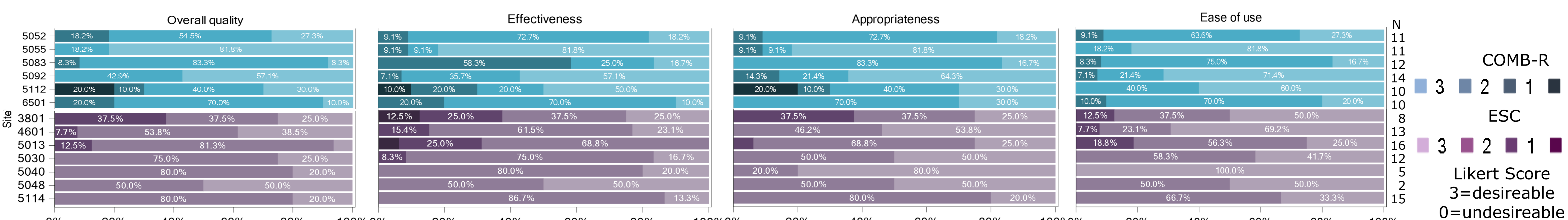


FIGURE 3. Therapist Satisfaction Survey Responses by Site

LIMITATIONS

- Because multiple participants within a site may receive care from the same clinician (i.e., licensed prescriber or therapist) and a clinician may fill out the survey for multiple participants within a site, sites with only one clinician are likely to have less variability in scores than sites with multiple clinicians
- Individual styles of care could influence variability
- Not all participants were prescribed medication; questions about the "medication treatment" could be answered in the context of "prescribed medication" (ESC), "the treatment plan" (ESC), or "the algorithm" (COMB-R)

CONCLUSIONS

- Site-level participant acceptability and licensed prescriber satisfaction were significantly higher in the COMB-R arm compared to the ESC arm
- Site-level therapist satisfaction was not significantly different between the COMB-R arm and the ESC arm
- Results further support the use of CBT and MMA in treating depression among YWH

ACKNOWLEDGEMENTS

The IMPAACT 2002 Protocol Team gratefully acknowledges the dedication and commitment of the 13 sites that participated in this study and their communities and representatives, without whom this study would not have been possible. The authors also wish to acknowledge the IMPAACT 2002 Protocol team, NIAID, NICHD, and NIMH.