The Effect of Cognitive Behavioral Therapy for Insomnia (CBT-I) Adapted to Health Care Workers

Philippe Stenstrom, PhD[1], Maude Bouchard PhD[1], Taís Araújo, PhD[1], Cherie La Rocque, PhD[1], Régine Denesle, MSc[1,2]

[1]HALEO Preventive Health Solutions; [2]Center for Advanced Research in Sleep Medicine, Hôpital du Sacré-Cœur de Montréal, Montreal, Canada

Introduction

Insomnia is a common issue among healthcare workers, yet research on the effectiveness of Cognitive Behavioral Therapy for Insomnia (CBT-I) within this population is limited.

The current study examined the effects of a therapist-led, video-conference-enabled CBT-I program (HALEO), on the insomnia symptoms of healthcare workers (HCW).

Additionally, we assessed the effects of the program on symptoms of depression and anxiety and sleep medication use.

Methods

Patient sample
One hundred and twenty (120) adult HCWs (mean age = 43.38) from 4 Canadian hospitals, suffering from clinically significant insomnia as defined by a score of >14 on the Insomnia Severity Index (ISI).

Protocol
1. Online or in-app screener
2. Call with sleep care coordinator
3. Five to six-week online CBT-I intervention

Intervention
Five to six weekly 30-minute online CBT-I sessions with a licensed therapist, supported by a digital platform and mobile app.

Outcome measures
- Insomnia Severity Index (ISI)
- Hospital Anxiety and Depression Scale (HADS)

The ISI and HADS questionnaires were filled out at the beginning of therapy (baseline) and just before the final therapy session (post-therapy).
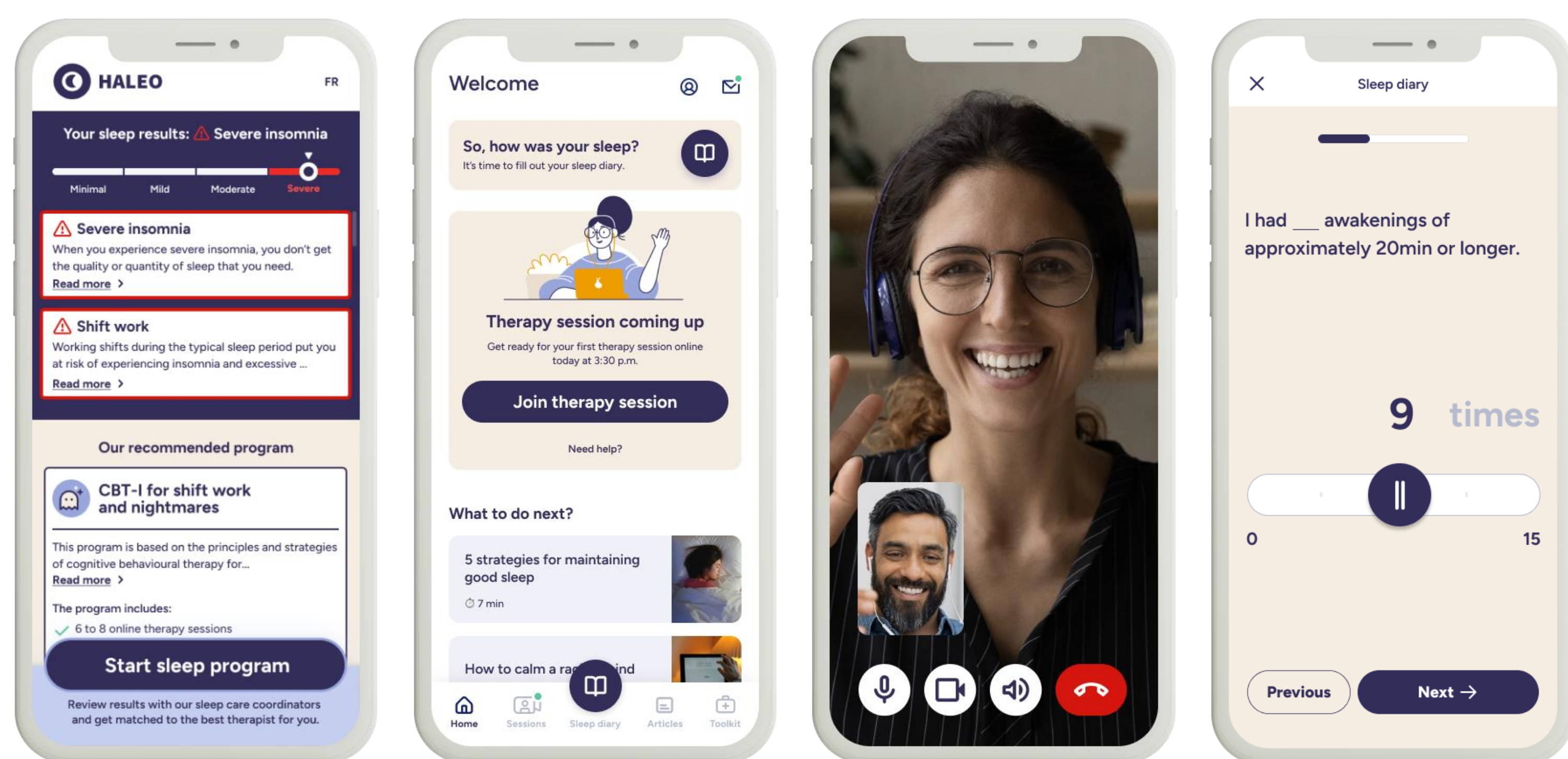
Post-therapy questions
- **Sleep medication use across therapy**

How did your use of this medication change across the program? Choices were: Stayed the same; Increased; decreased or stopped.

Analysis
Data were analyzed with two-tailed Student paired t-tests.

Results

One hundred and eight (108; 90%) patients completed the program (10% drop-out rate) and 105 filled out a post-therapy questionnaire.

ISI scores were significantly lower post-therapy (M = 8.63, SD = 4.76) compared to baseline (M = 18.67, SD = 2.77; t(104) = 20.87) p < .001, Cohen's d = 2.04).

Out of the 54 participants reporting using sleep medication, 29 (54%) reported reduced sleep-medication use across therapy, and 2 (4%) reported an increase.

HADS-D scores, measuring the severity of depression symptoms, were found to be significantly lower post-therapy (M = 5.28, SD = 4.07) compared to baseline (M = 7.68, SD = 4.57; t(102) = 6.83) p < .001, d = 0.67).

HADS-A scores, measuring the severity of anxiety symptoms, were also significantly lower post-therapy (M = 7.03, SD = 3.47) compared to baseline (M = 9.16, SD = 3.96; t(102) = 7.40) p < .001, d = 0.73).

Insomnia symptoms

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Depression symptoms

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Anxiety symptoms

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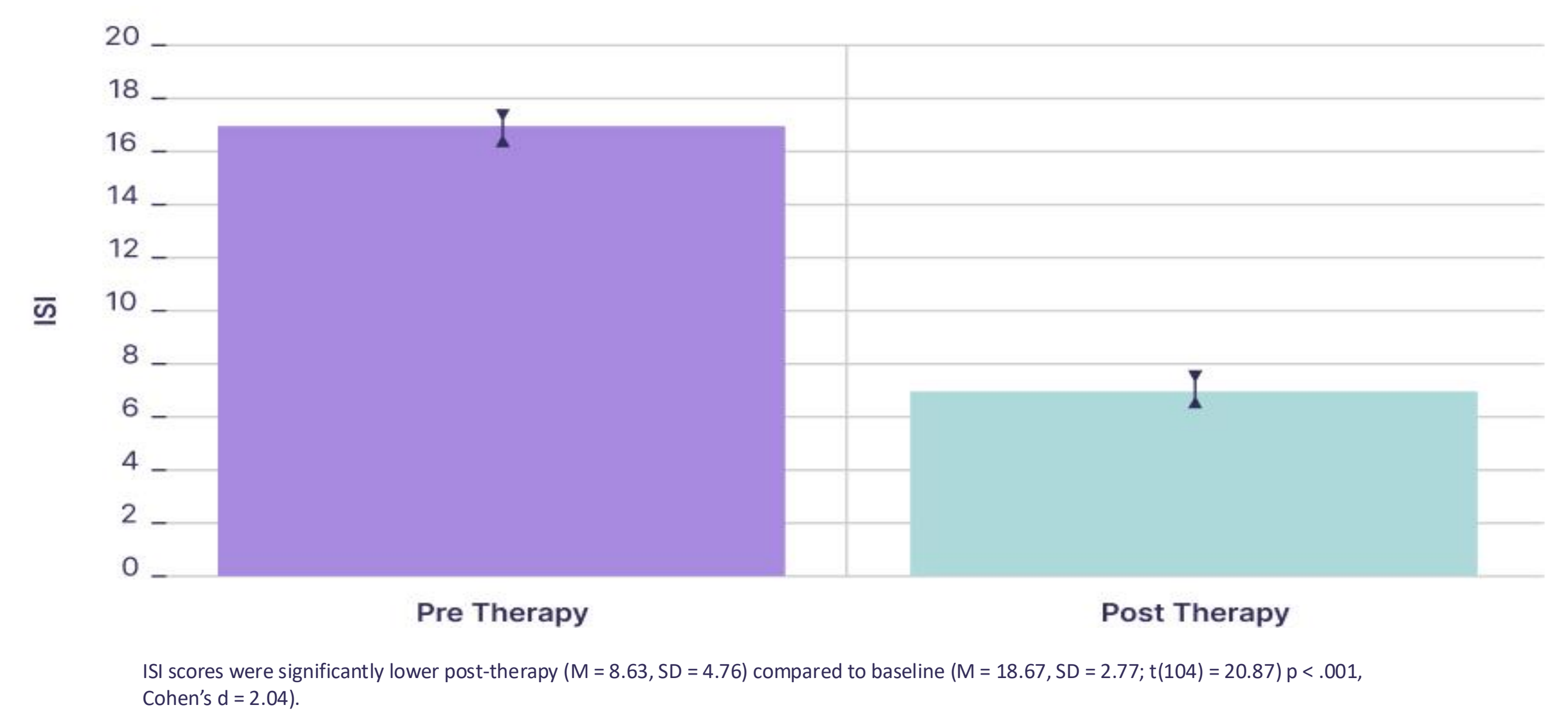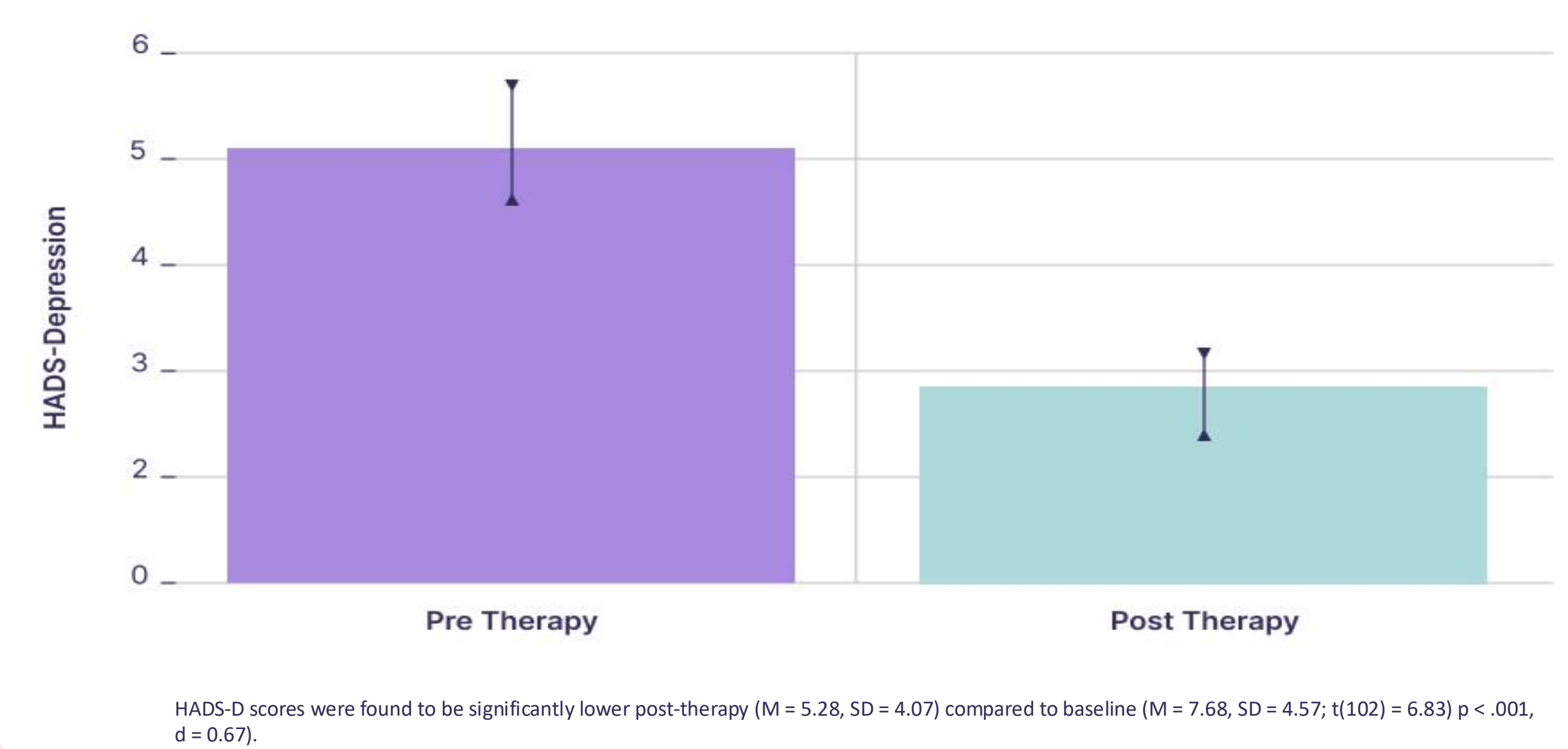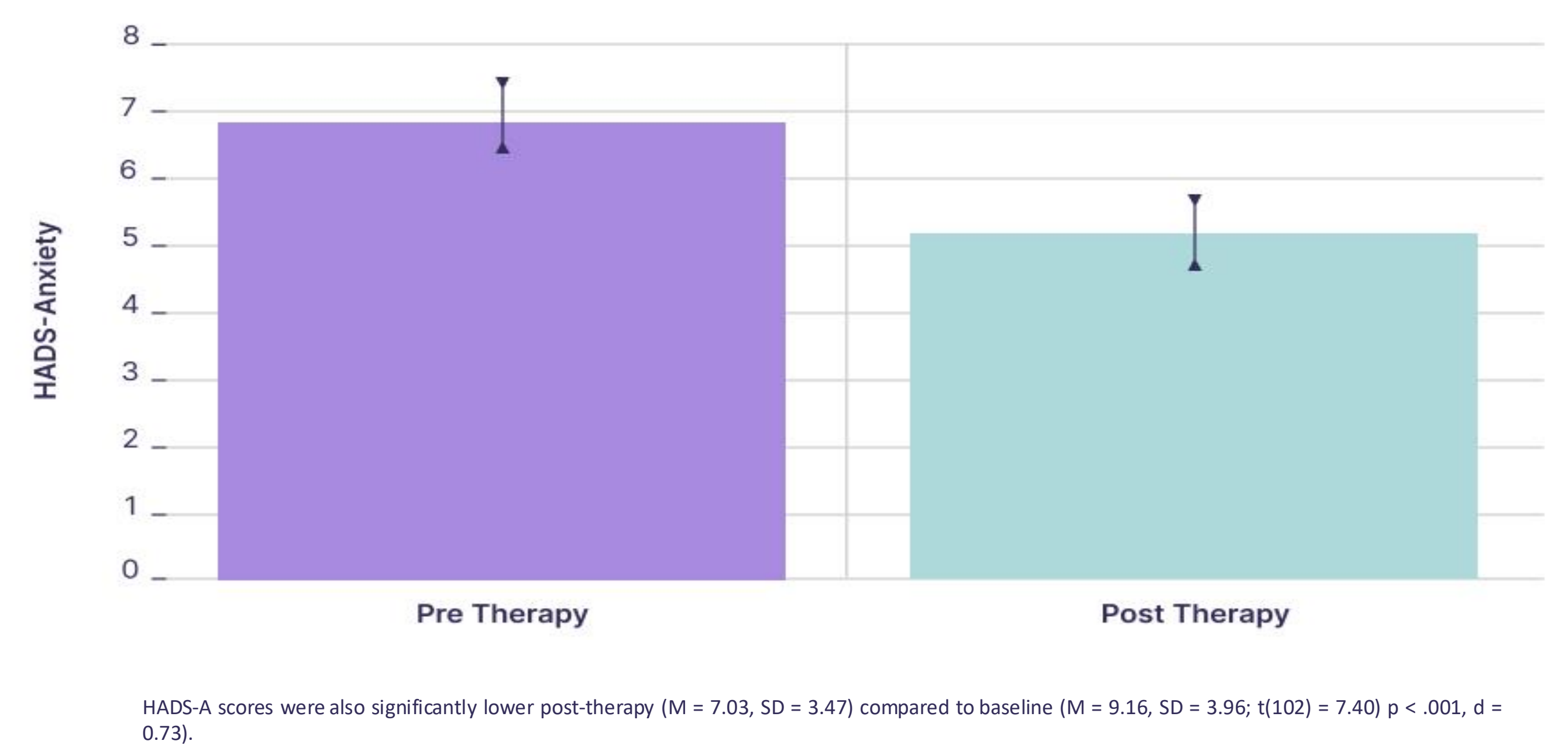
Discussion

The results indicate that therapist-led CBT-I delivered through videoconference and supported by a digital platform is effective in reducing insomnia, depression, and anxiety symptoms in healthcare workers suffering from clinical-level insomnia.

The results suggest that 5 to 6 (M = 5.58) 30 mins videoconference-enabled sessions, complimented by a mobile app, is effective in obtaining significant clinical outcomes in this population, while obtaining a 90% completion rate. Furthermore, the completion of the program was associated with 54% of participants reducing medication use for sleep.

Conclusion

The therapist-led, video-conference-delivered CBT-I program significantly reduced insomnia, depression and anxiety symptoms in healthcare workers, and had a low drop-out rate (10%).

Shorter, accessible interventions, tailored to the needs of healthcare workers, and delivered via telehealth on a digital platform, offer a promising treatment option for this population.

Want to see for yourself?
Download the **HALEO App**
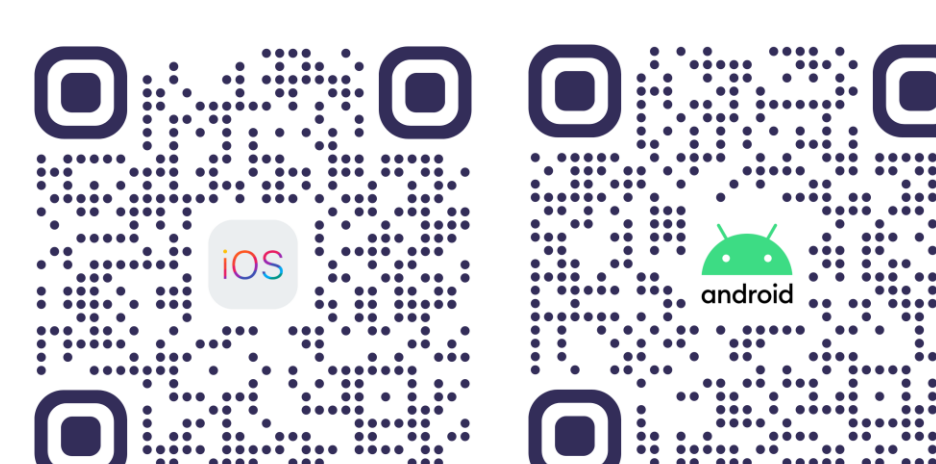
Contact
Philippe Stenstrom, PhD
philippe@haleoclinic.com
linkedin.com/in/philippe-stenstrom-349a20b3
@HALEO_clinic