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***Non-Pharmacologic and Virtual
Treatment of Depression in
Parkinson's Disease***

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Objectives

- To describe the prevalence and impact of depression in Parkinson's disease (PD)
- To review efficacy data related to the application of cognitive-behavioral therapy to the treatment of depression in PD
- To highlight the promise of telemedicine to leverage access to informed mental health care for the PD community in general, and for Veterans with PD in particular

Depression in Parkinson's Disease

- Common and functionally relevant
- Affects > 50% of PWP
- Significant negative effects on PWP and families
 - ❖ Physical and cognitive decline
 - ❖ Earlier initiation of dopaminergic replacement
 - ❖ Medication non-adherence
 - ❖ Greater prospective fall risk
 - ❖ Increased health service utilization and costs
 - ❖ Poor QOL
 - ❖ Caregiver burden

Depression in Parkinson's Disease

- ****BUT, DESPITE THESE DETRIMENTAL OUTCOMES****
 - ❖ Under-diagnosed
 - ❖ Sub-optimally treated
- Effective and **accessible** treatment approaches are critical in order to optimize global PD management

Suboptimal Depression Treatment: The Fox Insight Experience

Depression Treatment Rates by GDS Severity

No. %	Mild (≥ 5) N = 7169	Moderate (≥ 8) N = 3091	Severe (≥ 12) N = 1417
Treated	2881 (40.19%)	1559 (50.44%)	805 (56.81%)
Untreated	4288 (59.81%)	1532 (49.56%)	612 (43.19%)

Reference: Dobkin et al., 2020 {Movement Disorders}

Suboptimal Depression Treatment: The Fox Insight Experience

Depression Treatment Rates by Specialist Care (N = 4362)

No. %	Specialist	Non-Specialist
Treated	456 (20.60%)	431 (20.07%)
Untreated	1758 (79.40%)	1717 (79.93%)

Reference: Dobkin et al., 2020 {Movement Disorders}

Current Treatment Approaches

- Antidepressants are typical first-line intervention
 - ❖ Mixed data re: efficacy, tolerability, and patient acceptability
 - ❖ Many older adults and PWP prefer non-pharmacological treatments and/or combination approaches
- Cognitive-behavioral therapy (CBT) is promising
 - ❖ 3 RCTs by my team to date
 - ❖ Samples sizes have ranged from 72-90
 - ❖ Depression effect sizes large

Examples of 1:1 Interventions

- **Increasing meaningful and social activities**

- OLD
- NEW
- MODIFIED



- **EXERCISE !!!!!**

- **Problem solving for physical limitations**

- Pacing of activities
- Appropriate daily goals/ less rigid demands
- Plan around “off-time”
- Walk 10 minutes 3x a day instead of 30 minutes at a time
- Follow through with referrals for PT, OT, and Speech



Examples of 1:1 Interventions

- **Anxiety management and relaxation**

- Breathing exercises
- Progressive muscle relaxation
- Guided visualization
- Worry control



- **Sleep hygiene**

- Using bed for sleep only
- Relaxing before bedtime
- Keeping regular sleep hours
- Limiting excess time in bed, daytime naps, caffeine, or alcohol in the evening

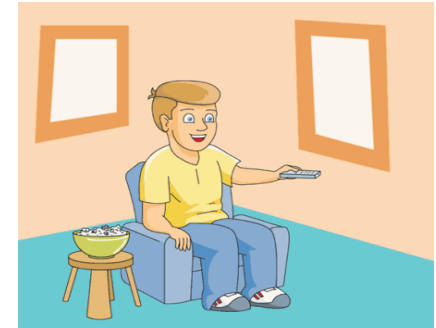


Examples of 1:1 Interventions

- **Thought monitoring and restructuring**

- ❖ Rethink the big picture

- Catch the negative thought
- Press pause
- Rewind
- Replay



- **Multiple methods/techniques**

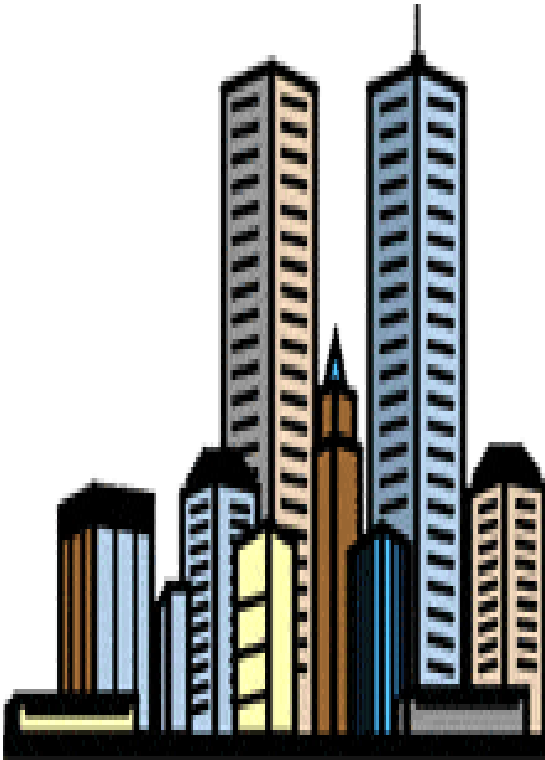
Examine the “Evidence”

- **Situation:** Freezing in the bathroom
- **Automatic Thought:** I’m helpless
- **Evidence For:** I was alone in the bathroom in the middle of the night and unable to move.
- **Evidence Against:** This happens quite a bit, so I planned in advance. I had my cell phone in my pocket. I called my wife on the house phone and she helped me back to bed.
- **Rationale Response:** Even though I was physically unable to move my feet, I was able to help myself out of the situation (thus I am not helpless).

Summary Sheet

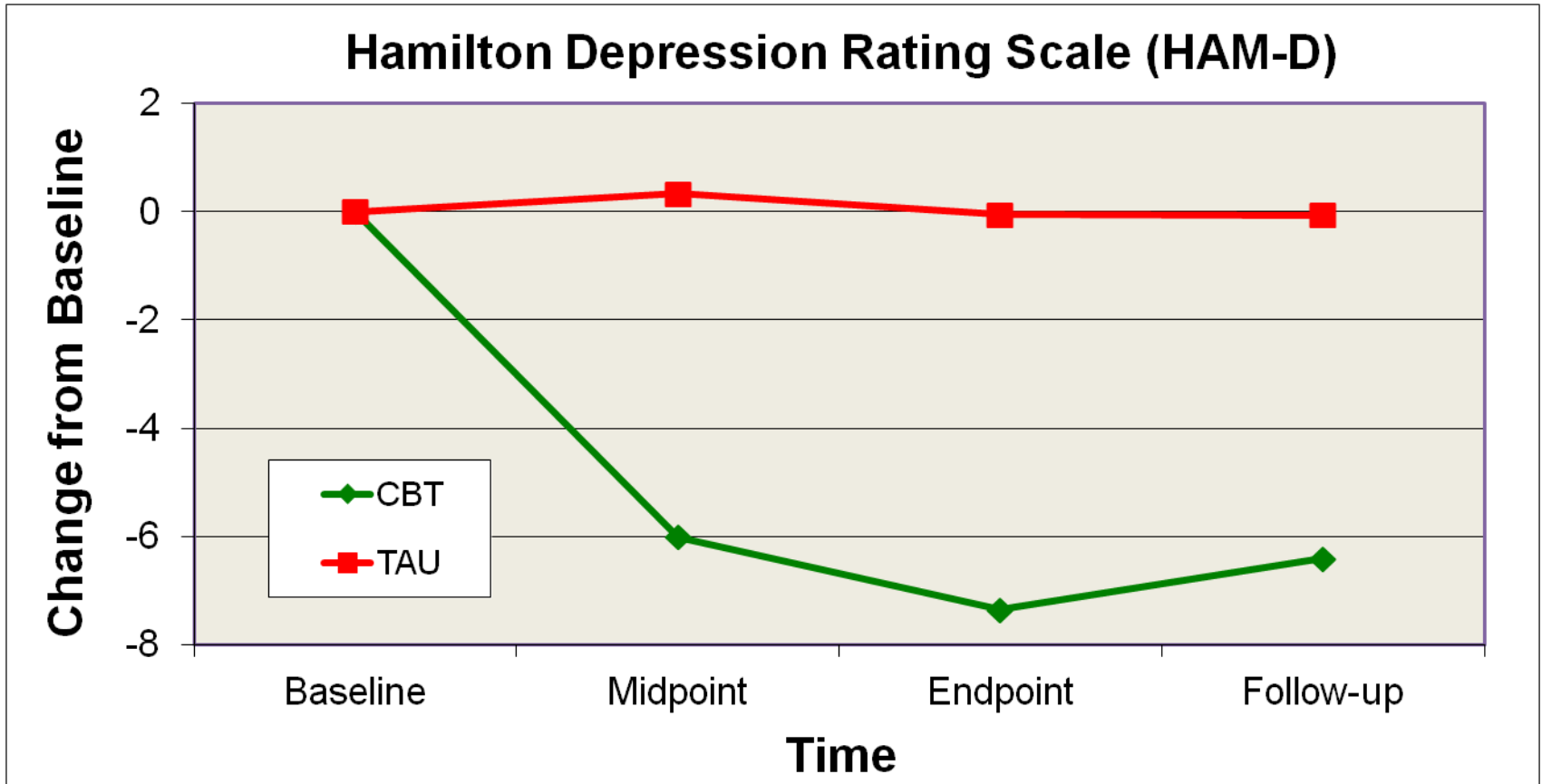
Negative Thought	Revised Thought
I am not accomplishing anything anymore.	I am still accomplishing many things for my family and community, even though I am no longer working in my business.
I am rapidly deteriorating.	The neurologist said that I was the same that I was six months ago; exercise is helping to keep my symptoms stable.
Our future is bleak	We can still have a meaningful life despite the symptoms of Parkinson's disease.
Nobody at the party will talk to us.	At least some people at the party will talk to us. It is highly unlikely that we will be completely ignored.

Traditional Brick and Mortar Trial



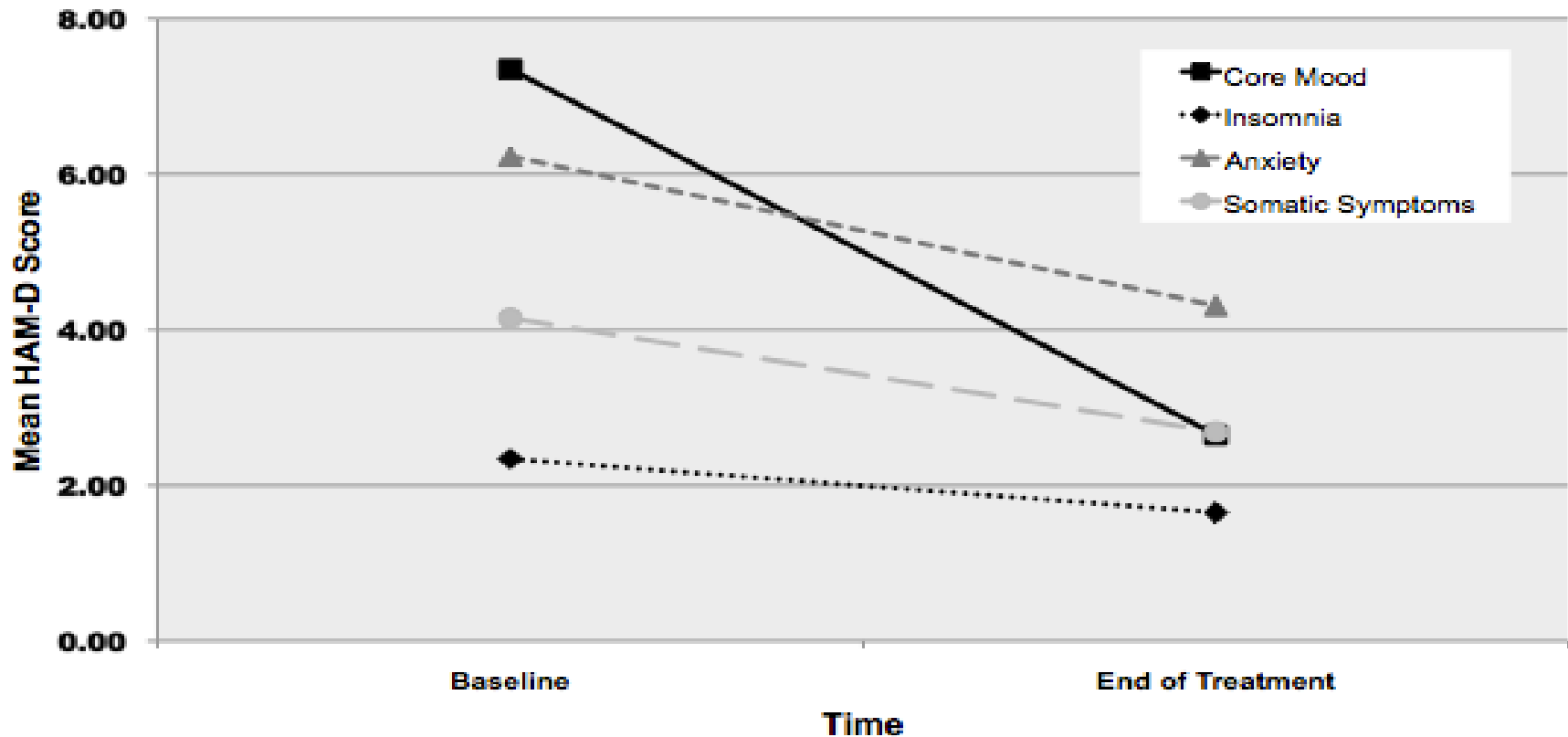
***Dobkin, RD et al., Cognitive-behavioral therapy
for depression in Parkinson's disease: a
randomized controlled trial; American Journal of
Psychiatry, 168: 1066-1074, 2011***

Depression Outcomes



Which Depressive Symptom Profiles Respond Best to CBT?

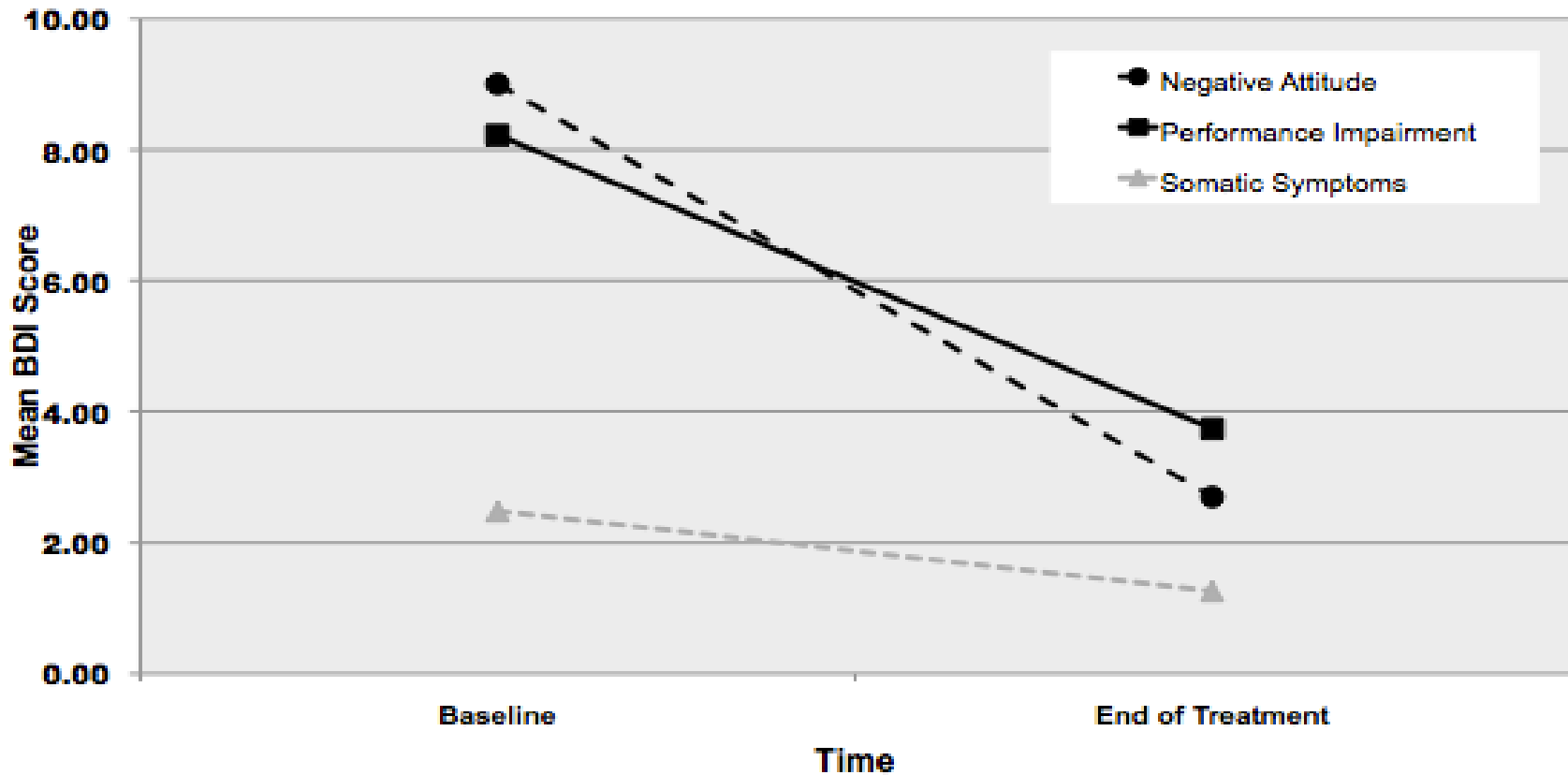
Figure 1. Change in HAM-D Symptoms



Dobkin, RD, Mann, SL, Interian, AI, Gara, MA, Menza, MA. Cognitive-Behavioral Therapy Improves Diverse Profiles of Depressive Symptoms in Parkinson's Disease. *International Journal of Geriatric Psychiatry*, 2019 Feb 4. doi: 10.1002/gps.5077. [Epub ahead of print]

Which Depressive Symptom Profiles Respond Best to CBT?

Figure 2. Change in BDI Symptoms



Dobkin, RD, Mann, SL, Interian, AI, Gara, MA, Menza, MA. Cognitive-Behavioral Therapy Improves Diverse Profiles of Depressive Symptoms in Parkinson's Disease. International Journal of Geriatric Psychiatry, 2019 Feb 4. doi: 10.1002/gps.5077. [Epub ahead of print]

Barriers to Care

- **ACCESS** to PD-informed psychotherapy is limited by physical, geographic, and workforce **BARRIERS**
- Large national survey of PD community (N=769)
 - ❖ 93% (n=640) believed that mental health treatment was integral to PD care
 - ❖ 60% (n=412) could not access local care
- Problems also extend to the Veteran community
 - ❖ In fact, depression remains a key quality standard inadequately addressed in VA PD care.

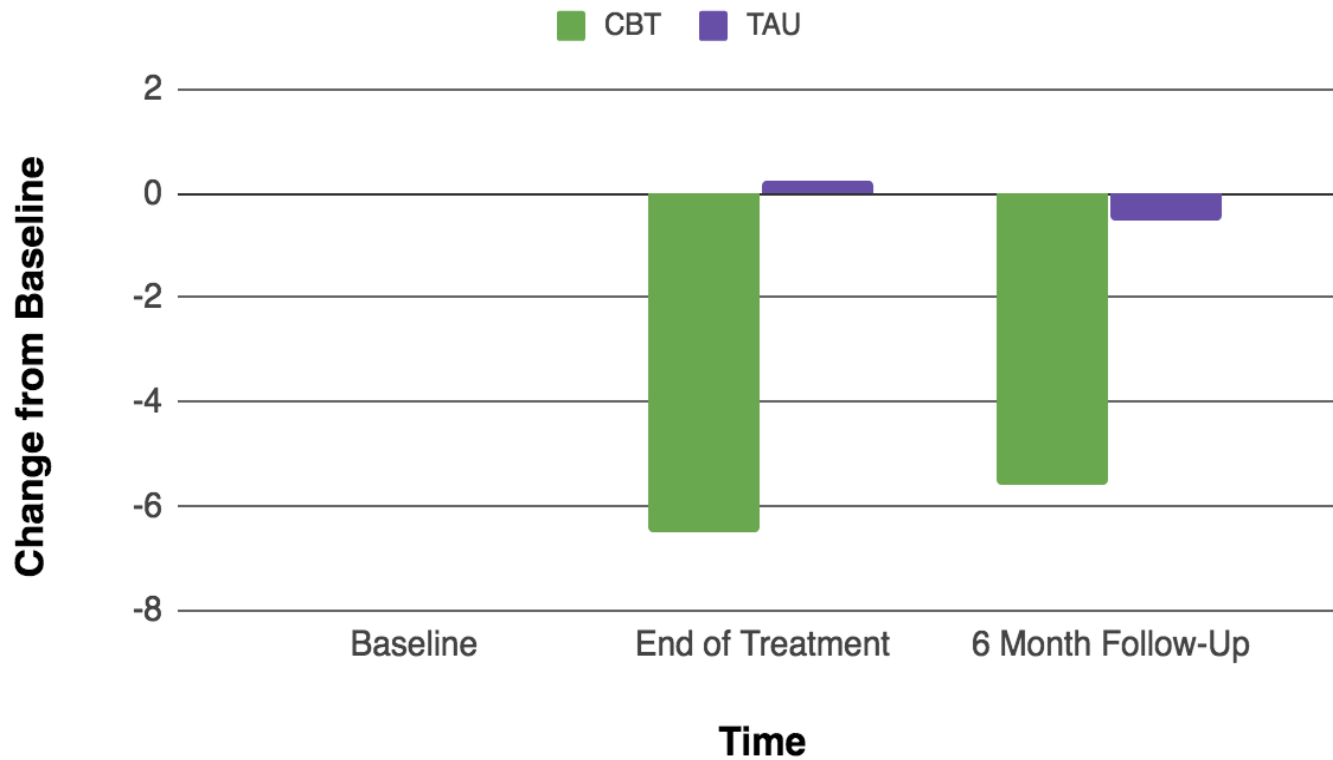
Hot of the Press: Telemedicine Outcomes



Dobkin, R. D., Mann, S. L., Gara, M. A., Interian, A., Rodriguez, K. M., & Menza, M. Telephone-based cognitive behavioral therapy for depression in Parkinson disease: A randomized controlled trial. Neurology. 2020; 94: e1764-e1773

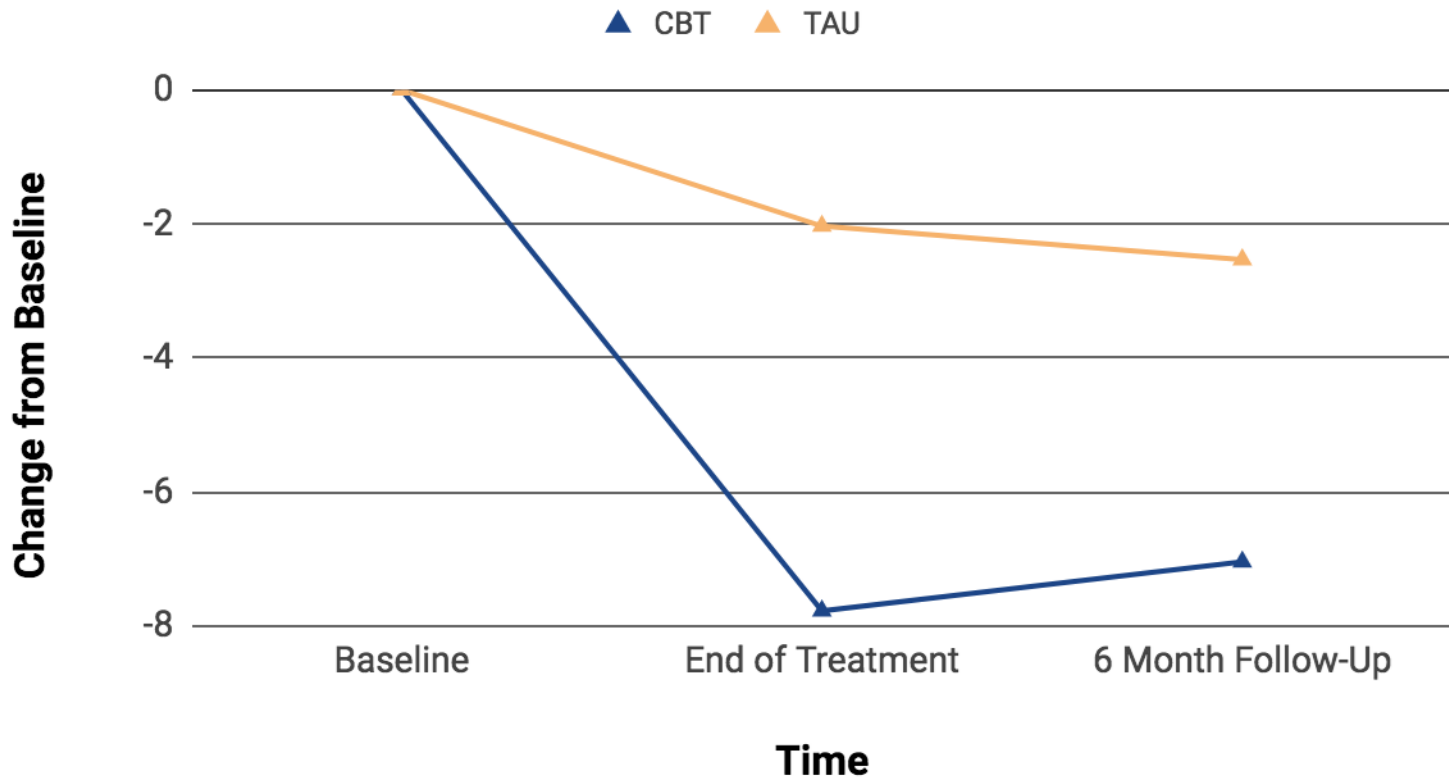
Telemedicine Depression Outcomes

Hamilton Depression Rating Scale (HAM-D)



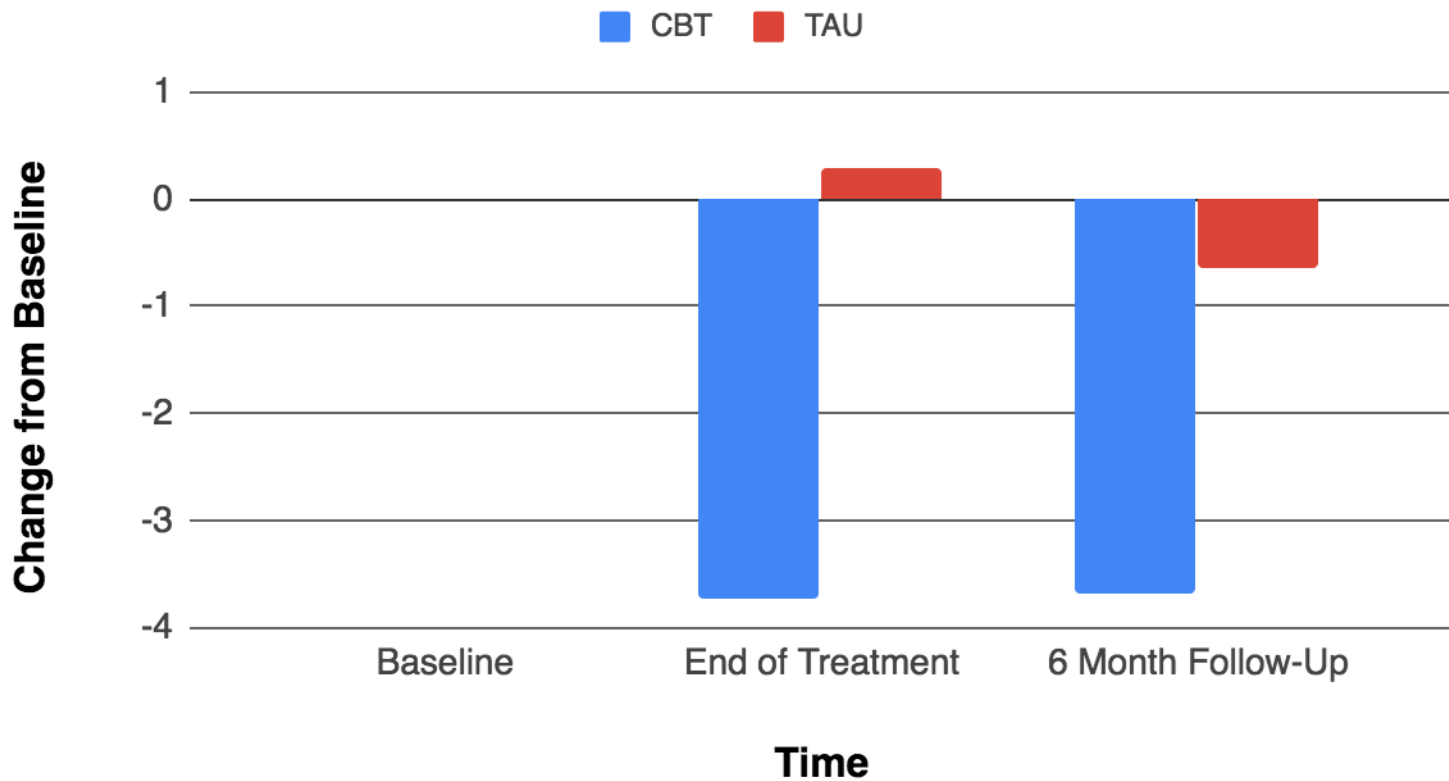
Telemedicine Depression Outcomes

Beck Depression Inventory (BDI)

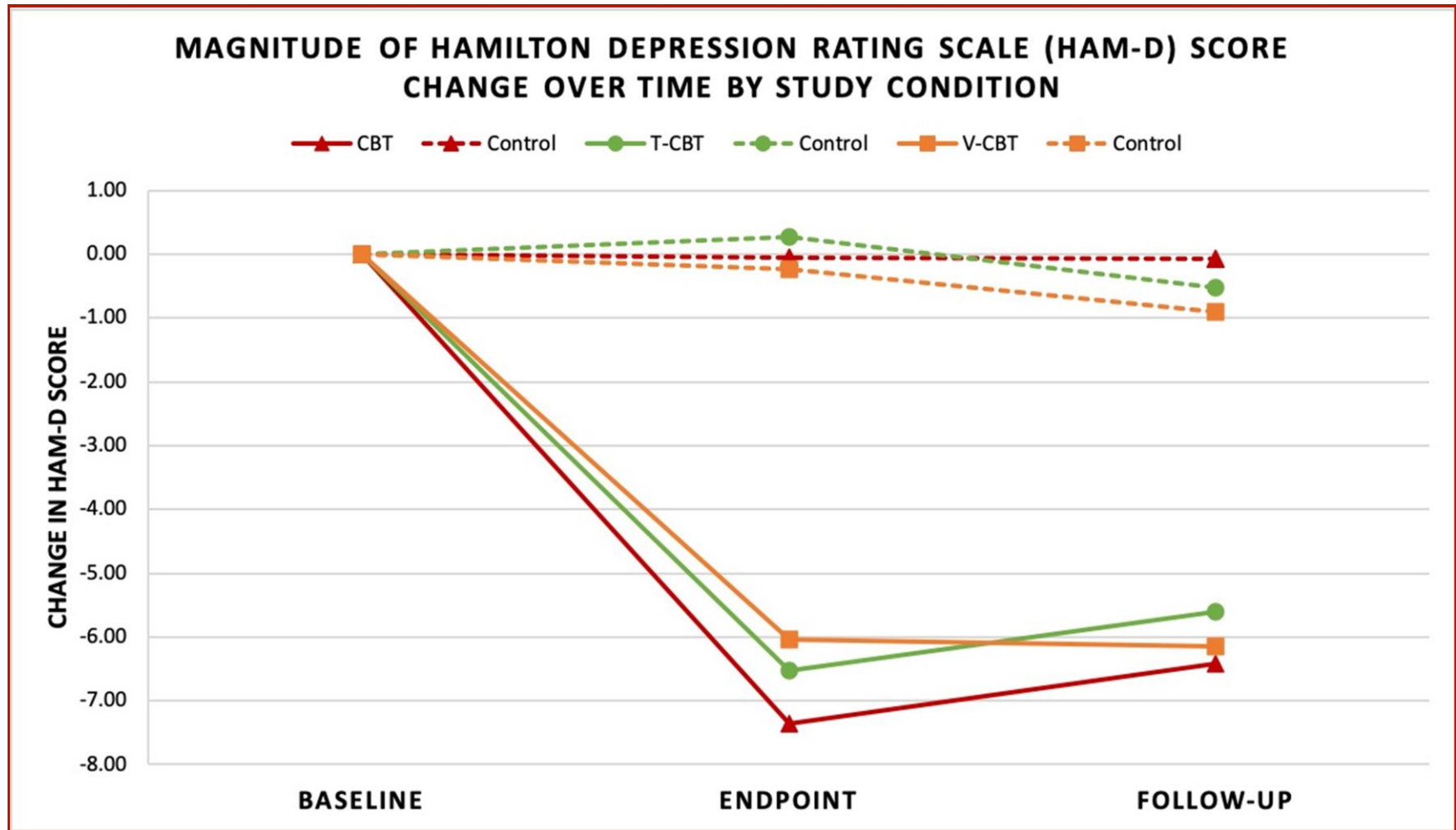


Telemedicine Anxiety Response

Hamilton Anxiety Rating Scale (HAM-A)



Traditional vs. Telemedicine Effects of CBT on Depression in PD



References: Dobkin et al., 2021 ; Dobkin et al., 2020 ; Dobkin et al., 2011

Self-Assessment Questions

- **Is your mood as good as you would like it to be?**
- **Please describe your average day, step by step.**
- **Which of these activities are you currently engaged in?**
 - Socializing with family members and friends?
 - Exercising?
 - Engaging in hobbies?
 - Engaging in other leisure activities?
 - Volunteering?
 - Working?

Self-Assessment Questions

- Please describe activities that you engage in that bring you meaning, joy, and pleasure.
- Since the diagnosis of PD, are you as actively involved in things you used to enjoy? *Please describe*
- Have you decreased the time you spend on any of your activities? Have you stopped any activities altogether? *Please describe*
- What does the PD diagnosis mean to you?
- What strategies are you using to cope with the daily challenges that PD presents?

Self-Assessment Questions

- Does worrying take up a lot of time, interfere with other activities or weigh heavily on your mind?
- Does worrying take away from your enjoyment of life?
- Does fear often guide what you do or don't do?
- Do you overestimate the probability of danger in many situations?
- Are you frequently anxious about the unknown?
- Do you predict the future negatively?
- Do you often focus on the worst case scenario?

(Leahy and Holland, 2000; Foa and Wilson, 2001)

Themes to Guide Self-Assessment

- **Newly diagnosed and early PD**
 - Are you overestimating the extent of your physical disability and functional limitations?
- **More advanced PD**
 - Are you underestimating your ability to cope effectively with the challenges PD presents?

Self-Help Books

- When Panic Attacks - *Burns*
- Feeling Good Together - *Burns*
- The Mindful Way Through Anxiety - *Orsillo and Roemer*
- The Mindful Way Through Depression - *Williams et al.*
- The Feeling Good Handbook - *Burns*
- The Anxiety and Worry Workbook - *Clark and Beck*
- Overcoming Depression One Step at a Time - *Addis and Martell*

Conclusions

- **YOUR MOOD IS ONE CRITICAL ASPECT OF LIVING WITH PD THAT YOU CAN CONTROL!**
- **DON'T SUFFER IN SILENCE!**
- **EFFECTIVE TREATMENTS ARE AVAILABLE!**

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