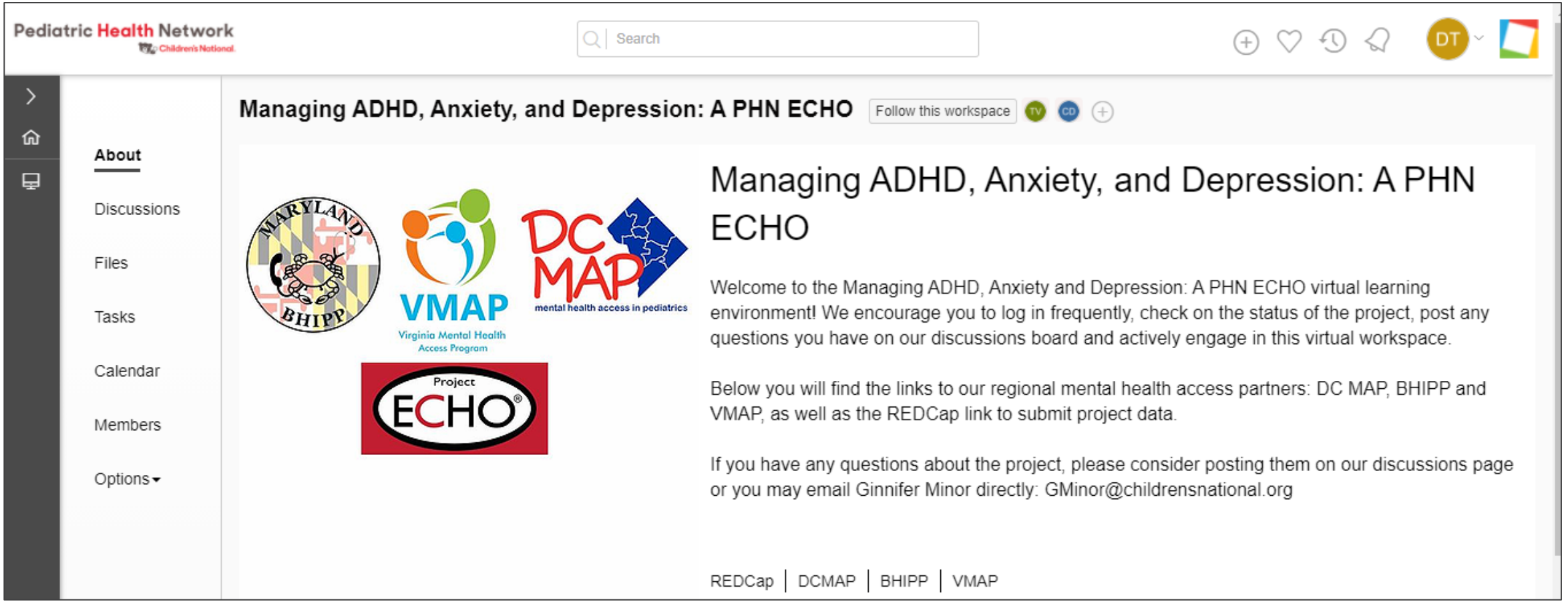
A few notes about today's Webinar

- We will begin at 12:15
- Please enable your webcam throughout today's session
- All 'Spokes' are highly encouraged to participate during the case presentation and discussion portion of the session
- This session will be recorded and made available to Spokes along with all presentation materials

Pediatric Health Network
Children's National
Project ECHO
DC MAP mental health access in pediatrics
MedStar Georgetown University Hospital

QI Collaboration Platform: Glasscubes



https://phn.glasscubes.com

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Our Regional Partners - Ensuring Mental and Behavioral Health Access for Pediatric Patients in the DMV

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No conflicts to disclose:

- No financial or business interest, arrangement or affiliation that could be perceived as a real or apparent conflict of interest in the subject (content) of their presentation.
- No unapproved or investigational use of any drugs, commercial products or devices.

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MedStar Georgetown University Hospital

Managing ADHD, Anxiety, and Depression: A PHN ECHO

DC MAP Clinicians: Jeff Bostic, MD, EdD; Sean Pustilnik, MD; Kathy Katz, PhD ; Laura Willing, MD; Kelly Register-Brown, MD; Melissa Long, MD; Leandra Godoy, PhD

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Treatment of Depression

Treatment Approach

MOOD.COM

- Mood Disorder Primarily?
- Other Disorders/Comorbidity?
- Other Drugs/Medications?
- Compliance?

Lifestyle Changes

- Exercise
  - 4 times/wk for 30+ min
  - Aerobic and Anaerobic
- Nutrition
  - Omega-3 Fatty Acids
  - Smoothies for Fruit/Vegetables
- Sleep
  - Routine, normal daily rhythm
- Engagement with Others
  - Activities Mutually Beneficial with Others
  - Mentors to provide ongoing encouragement

Lifestyle Changes

Protective Factors Against Suicide

1. Circle of friends who are positive & supportive (My3 app)
2. Personal goals/purpose, e.g., participation in art, music, sports
3. Positive family connections
4. Religious or spiritual connections
5. School success

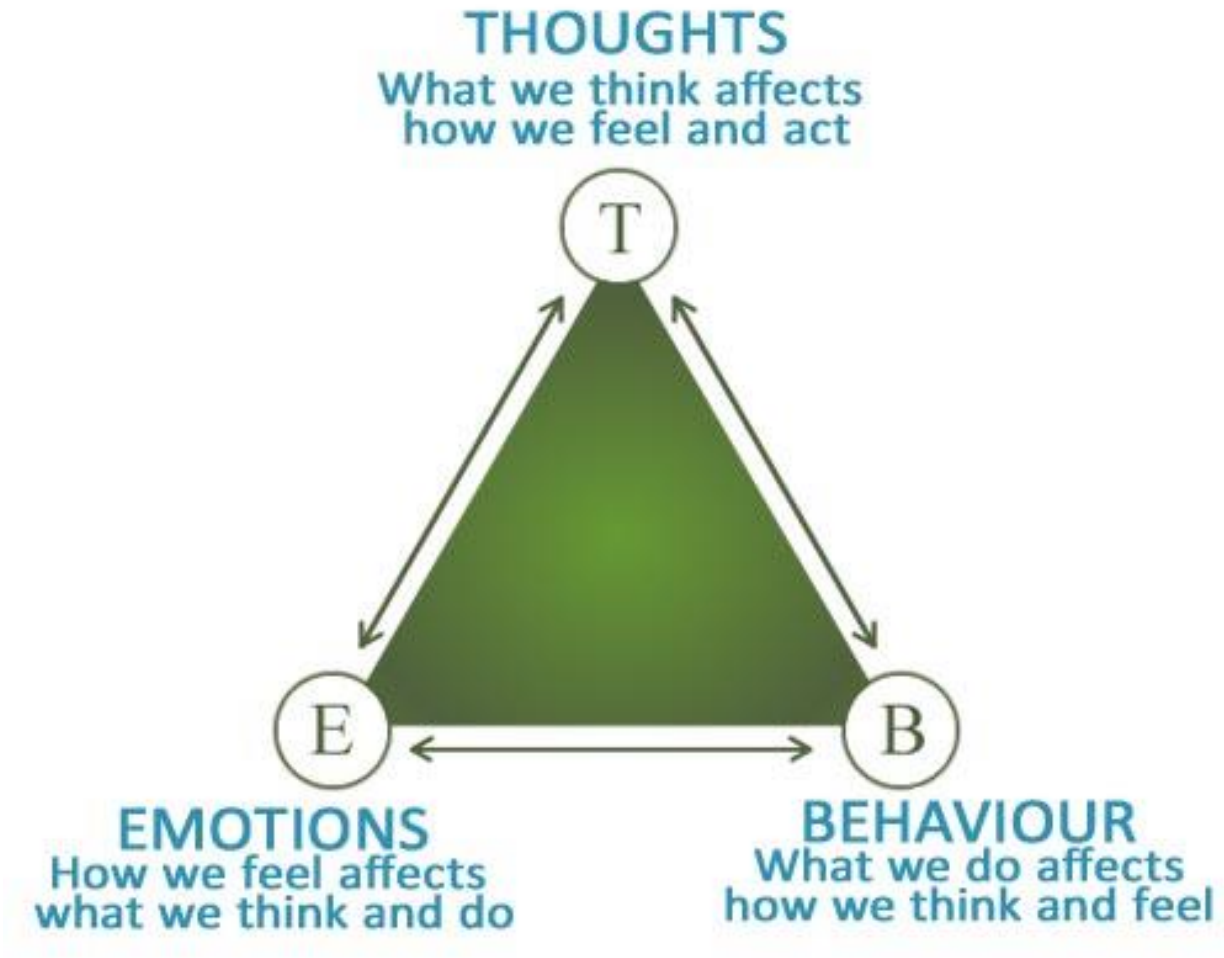
First Line Treatment: *Therapies* for Major Depressive Disorder (MDD)

1) Cognitive Behavioral Therapy

2) Interpersonal Therapy

3) Dialectical Behavioral Therapy

Cognitive Behavioral Therapy



Effectiveness of SSRI's in Youth

- MDD: 61% v. 50% PBO (10% > PBO)
- Anxiety: 52% v. 32% PBO (20% > PBO)
- OCD: 69% v. 39% PBO (30% > PBO)

(Bridge et al., 2007)

Effect Size: 36 trials (6778 Pts)

- MDD ES: 0.20
- Anxiety ES: 0.71

(Locher C et al. (2017)

FDA Approved SSRI's in Pediatrics

SSRIs are used to treat both anxiety and depressive disorders

Prozac (fluoxetine)

- Ages 7+: FDA indicated for MDD **& OCD**
- Start at 5-10mg/day; 10-30mg/day (MDD); Usual Therapeutic Dose: 10-60mg/day (OCD)

Lexapro (escitalopram)

- Ages 12+: FDA indicated for Major Depressive Disorder (MDD)
- Start at 2.5-5mg/day; Usual Therapeutic Dose: 10-20 mg/day

Zoloft (sertraline)

- Ages 6+ yrs: **FDA indicated for *Obsessive Compulsive Disorder (OCD) only***
- Start at 12.5mg/day; Usual Therapeutic Dose: 25-200 mg/day

Luvox (fluvoxamine)

- Ages 8+ yrs: **FDA indicated for *OCD only***
- Start at 25mg/day; Usual Therapeutic Dose: 50-300mg/day

Pharmacokinetic Parameters of the SRIs

	Half-life (hours)	Protein bound (%)	Absorption altered by fast/fed status	Linear kine tics	Dose range (mg/day)
Escitalopram	**27-32**	**56%**	**No**	**Yes**	**10-20**
Citalopram	35	80%	No	Yes	20-60
Duloxetine	12	>90%	No	Yes	40-60
Fluoxetine	96-386	94%	No	No	20-80
Paroxetine	21	95%	No	No	10-50
Sertraline	26	98%	Yes	Yes	50-200
Venlafaxine	5-11	27-30%	No	Yes	75-225

Van Harten , *Clin Pharmacokinet*, 1993; Preskorn, *Clin Pharmacokinet*, 1997; Preskorn, *J Clin Psychiatry*, 1993; *Physician's Desk Reference* , 2005; Forest Laboratories, Data on File

Patient Education for Remission

- Explain delayed onset of action
- Continue treatment 4-6 months after improve
- Reassure that agents not addictive or require ongoing dose increases
- Describe common side effects and what to do if occur
- Discuss consequences of Etoh, Other Substances, Medications

(Stimmel, 2002)

Common Side Effects

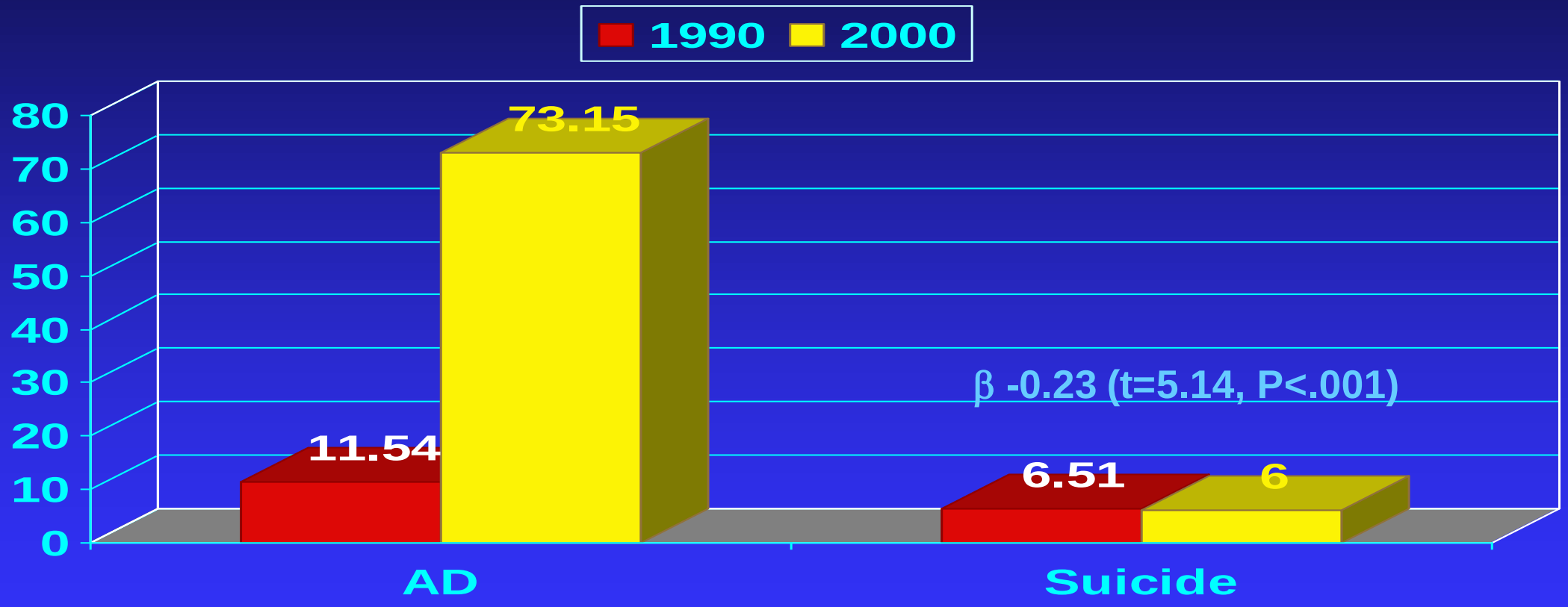
Side Effect	Management
Nausea, Diarrhea; 4-40% (> Fluoxetine, Sertraline)	Titrate slowly; with food, at bedtime; ginger tea, antacids
Headache: ~10%	Usually remits in 1-2 wks; can use acetaminophen
Agitation; Activation: 3-8%	Reduce dose, monitor
Insomnia or Sedation (8%)	Adjust time taken
Sexual Side Effects (loss libido, slowed ejaculation): age-sensitive	Switch agents; cyproheptadine can be given 2 hrs before active

Safety of Antidepressants

What about the Black Box Warning?

- 4400 pts in 26 studies reviewed; no suicides
- Suicide items on rating scales: no difference
- FDA had Columbia (K. Posner) review adverse event data, where 4% (agent) v. 2% (PBO)
- FDA initially encouraged TADS protocol of weekly visits for 4 weeks, then every other week, then monthly for PCP's (but <5% followed these Black Box recs, so were changed to "Closely monitor for clinical worsening and emergence of suicidal thoughts and behaviors")

Antidepressant Medication and Suicide in Adolescents



AD= Antidepressant rate per 1000 Medication Users

Olfson et al., (2003) AGP 60 (10): 978-982

Explaining Treatments to Family

- Medical illness to treat as would diabetes
- Depression Untreated (all ages):
- 40% will attempt suicide
- 2.5% of these attempts fatal
- Over 10 yrs, 2-8% will commit suicide
- Current Course will impact life (school will not postpone events, will get further behind at school, friends will move on, all of family impacted/suffer along with child

Patient (Non)Adherence

- Children preferred reward for taking Rx, yet could not generate on own
- Pts complained parental reminders were annoying, yet responded to "prompts"

(Penza-Clvve SM et al. J Asthma 2004 Apr;41(2):189-97)

- 47% v. 21% Pts receiving motivational interviewing returned to clinic

(AJ Swanson et al., (1999) Motivational Interviewing and Teratment Adherence Among Psychiatric and Dually Diagnosed Patients. J Nerv Ment Dis 187:630-635)

Developmental/Cultural Considerations

- How will the youth describe treatments to extended family/others?
- How does this family understand or accept different treatments?
- How will the youth's peers react to the youth's treatments?
- How will the youth's school staff react to the youth's treatment?

Tracking Progress: *Medication*

- ***How Long on an Antidepressant?***
  - How Much Improvement (>30%)
  - Symptom Impairment reduced such that functioning + with family, peers, school)
  - Discontinue after 6-12 months, during good time
  - Taper by decreasing dose by ½ every week (with Cit/S-Cit/SRT; can stop FLX)

Developmental Cultural Considerations

- How will this "chapter" fit into the youth's life (not on medication forever, etc.)?
- How do families understand or create a "narrative" about the youth's depressive episode?
- What preparation/support does family need for describing episode to extended family, schools, other supportive groups (e.g., church, extracurricular activities)?

Explaining Monitoring to Family

- Symptom Progression
  - How did Pt's symptoms progress, and what should look for early if again appear depressed?

- Ongoing Treatment to Reduce Vulnerability
  - Therapy or "Coaching" to have skills to thwart recurrences and to diminish risks of impaired functioning leading to MH disorders