

Wisconsin Public Psychiatry Network Teleconference (WPPNT)

- This teleconference is brought to you by the Wisconsin Department of Health Services (DHS) Bureau of Prevention, Treatment, and Recovery and the University of Wisconsin-Madison, Department of Psychiatry.
- The Department of Health Services makes no representations or warranty as to the accuracy, reliability, timeliness, quality, suitability or completeness of or results of the materials in this presentation. Use of information contained in this presentation may require express authority from a third party.

1



From Exercise to St. John's Wort: Integrative Treatment for Mental Illness



Claudia L. Reardon, MD
Assistant Professor
UW School of Medicine & Public Health

August 28, 2014

2

What are we talking about?

“A group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine”



National Center for Complementary and Alternative Medicine (NCCAM), National Institutes of Health. What is complementary and alternative medicine? [Internet]. 2012.

3

Agenda

- Why talk about this?
- What the evidence shows for the more commonly used treatments:
 - Physical therapies
 - Herbal remedies
 - Nutraceuticals
- Summary and recommendations

4

Why talk about this?

- 40% of U.S. adults use at least 1 integrative treatment annually¹
- May be particularly attractive to patients with psychiatric conditions, since seeking treatment more stigmatized than in other areas of medicine
- Patients often do not tell us about these treatments, and we often do not ask
- What are the risks?
 - Unknown purity of substances (no FDA regulation)
 - Side effects
 - Drug interactions
 - Delay of other efficacious treatment in serious mental illness

1. Barnes PM, et al. 2008.

5

Case example: Teddy

- Teddy is a 7 year old little boy with severe, treatment-resistant ADHD, which interferes greatly with school and home functioning.
- We have tried and failed numerous stimulant and non-stimulant medications.
- Mom brings in Teddy to a follow up visit and explains that they have now tried the “Feingold diet”, and Teddy’s ADHD symptoms are significantly improved.
- During the session, Mom looks at Teddy with relief and happiness, and he does seem more calm and content than usual.

6

Teddy (2)

- What issues does this case bring up?
 - Your patients will bring up treatment modalities you have never heard of. That is okay! Admit you know little about it, and then either do research on it, or tell their physician about it, or ask that they tell their physician about it.
 - We probably still want to consider evidence-based treatments for patients with significant mental illness, in case the symptoms recur
 - Conveying negativity/judgment about an integrative treatment, even if it has little research to support its effectiveness, may do more harm than good

7

Why Feingold for ADHD?

Because the research says it works ...
and the moms say it works ...
and the kids say it works ...



8

What the evidence shows: physical remedies



Exercise

- Depression: 2013 Cochrane Review suggests that exercise is moderately more effective than a control intervention for reducing symptoms of depression¹
- Anxiety: AEROBIC exercise seems to be key (unlike in MDD, for which both aerobic and strength training have benefit), may require longer sessions (30-40 minutes), but minimal literature on patients with actual anxiety disorders²⁻⁵
- **Bottom line:** Exercise probably helps depression and anxiety, and confers multiple physical health benefits, so we should recommend it to almost everyone

1. Cooney GM, et al. 2013. 2. Rakel. 2007. 3. Paluska, et al. 2000. 4. Martinsen EW, et al. 1989. 5. Herring, et al. 2010.

10

Yoga

- What is it? Yoga essentially=mindfulness + exercise (each of which alone has evidence for treating or preventing relapse of depression)
- Depression: seems to be effective
- Anxiety: limited published data
- Very rare risk of meditation-induced mania or psychosis in vulnerable patients



Ravindran AV and da Silva TL. 2013.

Light therapy

- Depression: seems to be effective for both seasonal and non-seasonal unipolar and bipolar depression
- Could cause mania in patients with bipolar, esp if not on mood stabilizer medication
- Anxiety: little data
- Well-tolerated (headaches)
- Usually partially covered by insurance
- **Bottom line:** well-tolerated, effective treatment that is particularly appropriate for Wisconsinites

Ravindran AV and da Silva TL. 2013. Complementary and Alternative Medicine in Major Depressive Disorder: the American Psychiatric Association Task Force Assessment of the Evidence, Challenges, and Recommendations. 2010.



Sleep deprivation

- *Total sleep deprivation* lasts up to 40 hours, and *partial sleep deprivation* allows 3-4 hours of sleep per night
- Depression: appears effective for unipolar and bipolar depression (total vs partial appear equally effective, though more literature on total)
- Could cause mania in patients with bipolar
- **Bottom line:** very effective, but no one does it anymore

Ravindran AV and da Silva TL. 2013.

13

Acupuncture

- Insufficient data to recommend (studies done in English are generally of poor or heterogeneous quality; most studies are published in Chinese) but at least it tends not to be harmful



Ravindran AV and da Silva TL. 2013.

What the evidence shows: herbal remedies



15

St. John's Wort



- Widely used in Europe
- May be effective for mild to moderate treatment (not as great for severe depression)
- **Beware:** many drug-drug interactions! If a patient is also on prescription psychiatric medications, there is a good chance they have a dangerous interaction!

Complementary and Alternative Medicine in Major Depressive Disorder: the American Psychiatric Association Task Force Assessment of the Evidence, Challenges, and Recommendations. 2010.

16

Case example: Melinda

- 32 year old woman with a history of depression presents 12 weeks pregnant, having stopped her fluoxetine and trazodone upon finding out that she was pregnant.
- You talk with her about the risks and benefits of taking fluoxetine and trazodone when pregnant. It is only in the course of that discussion that she realizes she should probably mention that she started taking melatonin for sleep, assuming that, since 'natural', it would be safe in pregnancy.

17

Melinda (2)

- What issues does this case bring up?
 - We need to systematically ask all patients about vitamins, herbs, and supplements!
 - What is 'natural' is not always safe
 - Children and pregnant/breastfeeding women may be populations that are particularly vulnerable to side effects

18

Melatonin

- Insomnia: it works (decreases time to sleep onset, increases total sleep time, improves sleep quality)
- Effects do not decrease with time (versus other sleep meds to which people can become tolerant)
- Less effective than other prescription treatments for insomnia
- **Bottom line:** very reasonable option for treatment of insomnia given few side effects (no morning hangover) and low addiction potential



Ferracioli-Oda E, et al. 2013. 19

Valerian root

- Insomnia: it probably works for mild to moderate insomnia
- Anxiety: people use it for anxiety, but there is insufficient evidence to recommend it for that
- Generally well-tolerated (little morning hangover) and safe per reports, but unclear if dependence, tolerance, withdrawal, and interactions (eg, with prescription sleep meds and alcohol) might be issues



Nunes A, et al. 2011.
Bent S, et al. 2006.

Case example: John

- John is a 40 year old man with a prior psychiatric history of episodic mild depression and anxiety under times of increased stress who has never been treated by mental health providers previously.
- He presents for a psychiatric intake at UW with a chief complaint of "I'm okay now, but I want to optimize everything I can in my life so the depression and anxiety don't come back."
- He (appropriately) doesn't want medications, but is interested in any healthy lifestyle or dietary changes he can make.

21

John (2)

- Upon discussing options, John and his psychiatrist agree to a plan of:
 - Aerobic exercise for 30 minutes on most days of the week (walking with his dog, with a starting "dose" of 10 minutes 5 days per week and working up from there)
 - A mindfulness group for patients who have had prior episodes of depression
 - Omega 3 fatty acids 1000 mg twice daily

22

What the evidence shows: nutraceuticals



23

Omega-3 fatty acids

- Depression: effective for unipolar and bipolar depression
- Minimal side effects (upset stomach, fishy taste, maybe bleeding)
- **Bottom line:** probably well-tolerated treatment that may be physically and psychiatrically beneficial (ie, I worry less about this than just about any other supplements). At the very least, our patients would probably do well to follow AHA recommendations for 2 servings of fish per week (especially fatty fish=salmon, mackerel, herring, lake trout, sardines, albacore tuna).



Ravindran AV and da Silva TL. 2013.
Complementary and Alternative Medicine in Major Depressive Disorder: the American Psychiatric Association Task Force Assessment of the Evidence, Challenges, and Recommendations. 2010.

SAM-e

- One of the more rigorously studied supplements for depression
- Demonstrated effective for depression in many studies (maybe even comparable to standard antidepressants when used as monotherapy)
- Some evidence even for treatment-resistant depression (when added to antidepressants)



Freeman MP. 2012.
Ravindran AV and da Silva TL. 2013

5-Hydroxytryptophan

- Depression/anxiety: preliminary evidence supports its use
- This is the precursor of serotonin
- Possible interaction with many prescription psychiatric medications that increase serotonin



Weeks BS. 2009.

26

Folate

- Current data do not support its use as monotherapy for MDD, but some (inconsistent) evidence supports its efficacy as an augmenting agent
- May be particularly reasonable in reproductive-aged women, as it is known to reduce the risk of birth defects
- L-methylfolate (\$\$) may be more effective than cheap folic acid vitamins
- Minimal side effects



Freeman MP. 2012.

27

Case example: Joan

- Joan is a 21 yr old woman college near-elite level athlete who presents with concerns from her primary care team physician about possible bipolar disorder.
- She describes times lasting up to 1-2 days in which she experiences elevated mood, decreased need for sleep, increased goal-directed behavior, and extreme amounts of exercise.
- She denies taking any medications other than a birth control pill.

28

Joan (2)

- She doesn't officially meet criteria for bipolar disorder, so I delay making an official diagnosis or starting treatment. Rather, I have her complete my usual mood diary for patients who have possible bipolar disorder, and this includes mood ratings from 0 (depressed) to 10 (euphoric), amount of sleep, and use of any meds/vitamins/herbs/supplements/caffeine every day for 1 month.
- It turns out that on the days she is feeling "manicky", she is ingesting multiple Red Bulls and Monster energy drinks.
- Additionally, her birth control pill interacts with caffeine and further increases caffeine levels in her system.
- She is at great risk for exceeding the NCAA allowable urinary threshold for caffeine and thus being disqualified if she is tested during national competition.

29

Joan (3)

- What issues does this case bring up?
 - Before assuming someone has depression, bipolar disorder, anxiety, or psychosis, we should understand everything they are putting into their body, and how the timing correlates with their symptoms
 - Young people and athletes do not often realize the huge amount of caffeine (and questionable other substances) they are consuming via a variety of "energy drinks", nutrition bars, gels, chews, etc.



30

Summary and recommendations

- Open the door for discussions with patients about integrative treatments (“What prescription medications, over the counter medications, vitamins, herbs, and supplements do you take?”; include this question in written intake forms)
- Educate our patients that “natural” does not always mean “safe”
- When the ingredients of a commercial product are unknown, we can consult the *NIH Dietary Supplement Label Database*, the *Natural Standard* website, or the product’s website

31

Summary and recommendations (2)

- Patients who use integrative treatments should be asked their reasons for use
- If we have a collaborative, non-judgmental, and scientifically rigorous view of integrative treatments, then our patients will be more likely to use these treatments only in the setting of carefully monitored treatment

32

Resources

- NIH Dietary Supplement Label Database: www.dsld.nlm.nih.gov/dsld/
- Natural Standard: www.naturalstandard.com
- National Center for Complementary & Alternative Medicine (an NIH site): <http://nccam.nih.gov>

33

Thank you!



clreardon@wisc.edu

34