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Seasonal Affective Disorder in Vermont

Diagnosis and Treatment from the Primary Care Perspective

Thomas Chittenden Health Center, Williston, VT

Hannah Johnson, UVM Larner College of Medicine, Class of 2020

May to June, 2018

Mentors: Adriane Trout, MD; Rick Dooley, PA-C; Joe Haddock, MD;

Pam Dawson, MD; Patty Towle, ANP; Dan Donnelly, MD

Seasonal Affective Disorder:

- Seasonal Affective Disorder (SAD), describes recurrent episodes of major depression, mania, or hypomania with seasonal onset and remission¹
- Most common subtype is winter depression¹
- Major depressive symptoms of fall-winter onset SAD and nonseasonal depression are the same: depressed mood, anhedonia, change in appetite or weight, sleep disturbance, loss of energy, neurocognitive dysfunction, psychomotor agitation or retardation, guilt or worthlessness, suicidal ideation¹
- SAD major depressive episodes usually include additional atypical features: hypersomnia, hyperphagia, carbohydrate craving, weight gain¹

Treating SAD:

- In randomized trials, almost 60% of patients had never been treated for depression despite a reported average of 13 previous seasonal depressive episodes¹
- Evidence-based Treatment:^{2,9}
 - Light therapy: artificial light every morning during symptomatic months
 - Psychotherapy: cognitive behavioral therapy
 - Medication: antidepressants such as the SSRIs sertraline and fluoxetine
- Additional adjunctive interventions:²
 - Sleep hygiene
 - Daily walks outside, even on cloudy days
 - Aerobic exercise
 - Enhanced indoor lighting
 - Dawn simulation (beginning in early hours of the morning, light gradually becomes brighter until the user wakes up)
- Barriers to treatment:
 - Undiagnosed illness
 - Light therapy: expensive, time intensive
 - CBT: stigmatized, shortage of mental health providers in Vermont
 - Exercise: amount of daily physical activity varies seasonally; poor weather is a barrier to exercise among various populations³

Public Health Cost of SAD

- 10-20% of depressive episodes follow a seasonal pattern⁴
- United States national prevalence:⁵
 - SAD: 6%
 - Winter blues: 14%
- SAD prevalence increases with latitude in North America:⁶
 - 1.4% in FL⁷
 - 4.7% in NYC⁵
 - 9.7% in NH⁶
- Depression in Vermont:
 - 22% of Vermont adults have depression⁸
 - 56% of Vermont adults with any mental health condition receive treatment⁸
- Winter blues at Thomas Chittenden Health Center (TCHC):
 - Patients report lack of exercise during the winter, and resume daily walks, etc. once the weather improves
 - Patients report better mood come springtime

Community Perspective part 1: Interview with Dr. Kelly Rohan, PhD, UVM Dept of Psychology

On choosing between light therapy and CBT: “Most patients would choose light therapy. Out of 177 people we randomized, only a handful expressed a preference for CBT at baseline. People have really high expectations for light therapy which makes sense because it’s been around since 1980s; people know about it and it makes intuitive sense. From a provider perspective, I would hope providers would think about compliance before prescribing light therapy. Patients must use it every day during symptomatic months, which are about 5 months per year. Individuals’ schedules must be amenable to at least 30 minutes of light therapy every morning. Prophylactic therapy is also a must, otherwise there is high risk for relapse. Regarding CBT, if a patient is expressing a lot of negative thoughts, like hating winter and how awful it is when the days are short, or ruminating about how bad they feel, they might be a good candidate for CBT.”

On increasing access to diagnosis and treatment for Vermonters suffering from SAD: “Primary care providers screen for depression; questionnaires were developed for this purpose. It’s a matter of adding to what they’re already doing, and asking, ‘does it have a seasonal pattern?’ It would be easy enough to follow up with some questions and to get screening information relative to seasonality.”

On insurance coverage of treatment: “It is probably easier to get CBT covered because most insurance plans would cover evidence-based psychotherapy, like CBT, for depression. SAD is depression, just with a seasonal pattern, so any empirically-based treatment like antidepressants should be covered. Coverage for light therapy depends on the plan. I use a letter the patients can submit to their insurance. Purchasing online, light boxes range from \$150 to \$450. However, we don’t recommend starting on your own without a doctor’s advice. Light therapy is a circadian intervention, and it can be hard for the layperson to figure out the timing and dose.”

On getting physical activity during Vermont winters: “There are only a couple of small studies of exercise intervention in SAD, and they do demonstrate positive effects of exercise. Additionally, CBT encourages fun activities, which may or may not include exercise. For people who are active in the summer, we encourage ways to be active in winter. Modify whatever you do in the summer to make it possible in the winter - layers of clothing, yacktracks, snowshoes, whatever it takes to make it safe. If you like cycling, use winter tires on bikes. If someone doesn’t want to go outside, there are gyms, exercise videos, and other ways to be active year-round. You have to be creative in how you adjust your routine.”



Community Perspective part 2: Interview with Patty Towle, ANP, TCHC

- “Probably close to 60 or 70% of the depression I treat seems to have a seasonal pattern.”
- “The three big things my patients struggle with during the winter are darkness, coldness, and the feeling of isolation.”
- “For a lot of people, difficulty getting out of the house is the main barrier to treatment. Access to being seen in clinic isn’t a barrier. Once they come to clinic and we diagnose it, there are few barriers to treatment; most people can get medications that are covered. If they don’t come ahead of time, getting out in the winter is difficult. People can get in a bad cycle of not wanting to physically get out of their house and then winter makes it more difficult.”
- “Exercise can help make patients with depression feel better, but always poses a risk during winter, especially for the elderly. Exercise as a treatment modality is already hard to get people to engage in, and winter makes it worse. Even if I tell patients that exercising can help significantly, less than 10% will actually exercise because they hate the winter so much.”
- “Other ways I encourage patients to cope with SAD include counseling, like CBT, which is tried and true. Staying socially engaged is very important, so I encourage spending time with friends, making more attempts to have family over, that kind of thing. In nice weather, people are out and about, even just sitting on their porch. In winter, people stay inside and suffer from being socially isolated.”



Intervention and Methodology

- An informational resource for patient education was created, written in accessible language
- The resource is intended to increase patient awareness of SAD and the existing treatment options, and encourage patients to seek help
- Large posters were printed for display at TCHC
- Page-sized handouts were distributed to the providers at TCHC for patients to take home

Feeling SAD? Get help to beat the Winter Blues!

What is SAD?

Seasonal Affective Disorder, or SAD, describes episodes of a mood disorder with seasonal onset and remission. The most common type is **winter depression**. The milder form of SAD is commonly known as "**winter blues**."

You may have SAD if you answer "yes" to most of these questions:

- Do you feel worse (more sad) in the winter?
- Do you eat more in the winter?
- Do you gain weight in the winter?
- Do you sleep more in the winter?
- Do you have less energy in the winter?
- Do you socialize with other people less often in the winter?
- Is the depression helped by sunnier weather?
- Does the depression get better during travel to a sunnier location or a location with a longer period of natural daylight each day?
- Does the depression end during the spring and/or summer?

What are the evidence-based treatments?

- **Light therapy:** artificial light every morning during winter months
- **Psychotherapy:** cognitive behavioral therapy (CBT)
- **Medication:** antidepressants such as the SSRIs sertraline and fluoxetine

Talk to your primary care clinician about a prescription or referral today!

What else can I do to feel better during the winter?

- Sleep hygiene (good sleep habits)
- Daily walks outside, even on cloudy days
- Better indoor lighting
- Use a device that creates dawn simulation (beginning in early hours of the morning, light gradually becomes brighter until the user wakes up)
- Winter sports: skiing, snowshoeing
- Indoor aerobic exercise: treadmill, stationary bike, group classes
- Yoga
- Meditation
- Develop hobbies, such as cooking, knitting, reading, painting
- Socialize with friends and family
- Play with pets, kids, or grandkids

Advice from SAD expert and UVM psychology professor Dr. Kelly Rohan, PhD

"Cognitive behavioral therapy encourages fun activities, which may or may not include exercise. For people who are active in the summer, we encourage ways to be active in winter. Modify whatever you do in the summer to make it possible in the winter - layers of clothing, yak-tracks to prevent slips and falls, snowshoes, winter bicycling tires, whatever it takes to make it safe. If someone doesn't want to go outside, there are gyms, exercise videos, and other ways to be active year-round. You have to be creative in how you adjust your routine!"

To learn more about Seasonal Affective Disorder, visit www.nimh.nih.gov/health/topics/seasonal-affective-disorder or talk to your health care provider.

Response

- Providers recognized the need for mental health treatment: “Rates of suicide have increased by 30% within the past 20 years”
- Providers reinforced the challenges that Vermont winters pose to their patients: “It’s nearly impossible to encourage my patients to get outside in winter”
- Providers were enthusiastic about displaying the posters and utilizing the handouts

Limitations

- The poster was not displayed until the end of the rotation, therefore the effectiveness on patient education was unable to be assessed
- This project was initiated in spring; it will be increasingly relevant during the fall to winter months, the most common time of onset of SAD
- The poster is fairly dense with information, and patients' eyes may wander to other distractions in the waiting room
- Patient motivation is an important factor in whether or not they seek help

Recommendations for Future Interventions

- Distribution to other family medicine practices
- Providers and medical students could use the resource to review SAD and treatment options with their patients
- Office staff could survey patients struggling with the winter blues or SAD before and after exposure to the handout, to determine if it was effective in increasing patient awareness about treatment options
- Future medical students could create:
 - A compilation of community resources that provide indoor exercise options, especially for the elderly
 - A guide to safely engaging in outdoor wintertime activities
- The resource could be converted to a *dot phrase* to be printed on discharge summaries for patients with SAD or the winter blues

References

1. Avery D, Roy-Byrne PP, Solomon D. Seasonal affective disorder: Epidemiology, clinical features, assessment, and diagnosis. UpToDate. Last updated 11/09/17. <https://www-uptodate-com.ezproxy.uvm.edu/contents/seasonal-affective-disorder-epidemiology-clinical-features-assessment-and-diagnosis> (Accessed on 6/5/18).
2. Avery D, Roy-Byrne PP, Solomon D. Seasonal affective disorder: Treatment. UpToDate. Last updated 3/21/17. <https://www-uptodate-com.ezproxy.uvm.edu/contents/seasonal-affective-disorder-treatment> (Accessed on 6/9/18).
3. Tucker P, Gilliland J. The effect of season and weather on physical activity: A systematic review. *Public Health* , Volume 121 , Issue 12 , 909 – 922.
4. Magnusson A. An overview of epidemiological studies on seasonal affective disorder. *Acta Psychiatr Scand*. 2000 Mar; 101(3):176-84.
5. Rosenthal NE. *Winter Blues: Everything You Need to Know to Beat Seasonal Affective Disorder*. New York, NY: Guilford Press; 2006.
6. Mersch PP, Middendorp HM, Bouhuys AL, Beersma DG, van den Hoofdakker RH. Seasonal affective disorder and latitude: a review of the literature. *J Affect Disord*. 1999 Apr; 53(1):35-48.
7. Rosen LN, Targum SD, Terman M, Bryant MJ, Hoffman H, Kasper SF, Hamovit JR, Docherty JP, Welch B, Rosenthal NE. Prevalence of seasonal affective disorder at four latitudes. *Psychiatry Res*. 1990 Feb; 31(2):131-44.
8. Vermont Department of Health, 2016
9. Rohan KJ, Mahon JN, Evans M, et al. Randomized Trial of Cognitive-Behavioral Therapy Versus Light Therapy for Seasonal Affective Disorder: Acute Outcomes. *Am J Psychiatry* 2015; 172:862.

Interview Consent

Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work. The interviewer affirms that he/she has explained the nature and purpose of this project. The interviewee affirms that he/she has consented to this interview.

Yes Patty Towle, ANP / No _____

Yes Kelly Rohan, PhD / No _____

