CHAPTER

1

Seasonal Affective Disorder: Diagnostic Issues

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Definition and diagnostic criteria

Seasonal affective disorder (SAD), otherwise known as winter depression, was first systematically described by Dr. Norman Rosenthal and colleagues in their classic 1984 paper describing SAD and its treatment with light therapy. SAD was conceptualized as a type of depression with recurrent winter depressive episodes (which included both major and minor depressive episodes, although at least one had to be major) and full remission of symptoms (or a switch into hypomania or mania, if bipolar) in the spring and summer.

Since then, the diagnostic criteria for SAD have undergone revision in various diagnostic systems leading up to the DSM-IV (the prevailing diagnostic manual used in psychiatry). In DSM-IV, SAD is not listed as a separate diagnosis but instead is defined as a subtype of depression with recurrent major depressive episodes (MDEs, Table 1.1). In summary, an MDE consists of at least two weeks of either pervasive (during most of the day, on most days) low mood or significantly reduced ability to experience pleasure (anhedonia), in conjunction with a cluster of at least five of nine characteristic symptoms. These symptoms must cause significant distress and/or seriously affect function at work, home, or with others. Finally, other causes of depressive symptoms, including bereavement, medical conditions, medication side effects and substance abuse, must be ruled out.

Diagnostic Tip

People are sometimes loath to describe themselves as "depressed". Some may have specific associations with the word "depressed" that make it seem like an inaccurate description ("My mother was in bed all day with depression: I'm not like that"). Others may have fears of being labeled, appearing weak, or being stigmatized. There are many descriptors for feeling depressed (blue, low, down, empty, melancholy, blah, etc.) and it may be useful to ask about these should "sadness" be initially denied.

Some people describe low interest and enjoyment as feeling "bored" or "apathetic". Low interest is often masked by related symptoms of low energy or motivation, which can also reduce participation in pleasurable activities. Asking about enjoyment of passive activities that do not require effort, such as listening to music or watching television, may differentiate interest from activity level.

Table 1.1. DSM-IV criteria for major depressive episode (MDE).

A Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure. **Note:** Do not include symptoms that are clearly due to a general medical condition, or mood-incongruent delusions or hallucinations.

(1) depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad or empty) or observation made by others (e.g., appears tearful). **Note:** In children and adolescents, can be irritable mood

(2) markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation made by others);

(3) significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. **Note:** In children, consider failure to make expected weight gains

(4) insomnia or hypersomnia nearly every day

(5) psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)

(6) fatigue or loss of energy nearly every day

(7) feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick)

(8) diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)

Table 1.1. (cont.)

	(9) recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide
B	The symptoms do not meet criteria for a Mixed Episode.
C	The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
D	The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hypothyroidism).
E	The symptoms are not better accounted for by bereavement, i.e., after the loss of a loved one, the symptoms persist for longer than 2 months or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation.

DSM-IV categorizes subtypes of MDEs as episode specifiers (based on the cross-sectional symptoms during an episode) and as course specifiers (based on the pattern of depressive episodes) (Table 1.2). The "With Seasonal Pattern" specifier, equivalent to SAD, can apply to both unipolar major depressive disorder (MDD) and to bipolar disorder (either Type I – with manic episodes, or Type II – with hypomanic episodes). Although the pattern of seasonal episodes is not specified, the overwhelming majority of people with seasonal pattern suffer from fall/winter depressions. From now on, when referring to SAD, we mean the DSM-IV definition of recurrent MDD with a seasonal winter pattern.

Making a diagnosis of SAD can be challenging because it is based on recognizing and characterizing of depressive episodes that go back many years. Table 1.3 lists the DSM-IV criteria for seasonal pattern. Some of these criteria are evidence-based, while others are more controversial. And, while the criteria may seem straightforward, the clinical presentation may be more difficult. We will illustrate some key diagnostic issues as we examine each criterion in more detail.

Table 1.2. DSM-IV specifiers for major depressive episodes.

Episode specifiers	Course specifiers
• With melancholic features (non-reactive mood, anhedonia, weight loss, guilt, psychomotor retardation or agitation, morning worsening of mood, early morning awakening) • With atypical features (reactive mood, oversleeping, overeating, leaden paralysis, interpersonal rejection sensitivity) • With psychotic features (hallucinations and/or delusions) • With catatonic features (motor signs and symptoms, uncommonly seen in clinical practice)	• With seasonal pattern (equivalent to seasonal affective disorder) • With postpartum onset (within 1 month of delivery) • With rapid cycling (more than four episodes in one year, applies to bipolar disorder)

Table 1.3. DSM-IV criteria for seasonal pattern specifier.

Episode specifier
With Seasonal Pattern (can be applied to the pattern of Major Depressive Episodes in Bipolar I Disorder, Bipolar II Disorder, or Major Depressive Disorder, Recurrent)
A There has been a regular temporal relationship between the onset of Major Depressive Episodes in Bipolar I or Bipolar II Disorder or Major Depressive Disorder, Recurrent, and a particular time of the year (e.g., regular appearance of the Major Depressive Episode in the fall or winter). Note: Do not include cases in which there is an obvious effect of seasonal-related psychosocial stressors (e.g., regularly being unemployed every winter).
B Full remissions (or a change from depression to mania or hypomania) also occur at a characteristic time of the year (e.g., depression disappears in the spring).
C In the last 2 years, two Major Depressive Episodes have occurred that demonstrate the temporal seasonal relationships defined in Criteria A and B, and no nonseasonal Major Depressive Episodes have occurred during that same period.
D Seasonal Major Depressive Episodes (as described above) substantially outnumber the nonseasonal Major Depressive Episodes that may have occurred over the individual's lifetime.

Regular time of onset

Onset of an episode is very difficult to pinpoint, in part because symptoms often come on gradually. Additionally, even in people with well-established SAD, the episode onset can vary from year to year, depending on factors such as weather patterns and life stresses. Practically, patients can usually specify regular onset within a given month, e.g., October or November. We also find it useful to ask about the month when symptoms are typically at their worst (in our clinical samples, usually January), because treatment may need to be adjusted during this time. Note that SAD also occurs in the southern hemisphere, where the winter months are opposite to those in Canada!

Not due to seasonal stressor

While it may be intuitive to exclude depressive symptoms caused by regularly occurring seasonal stressors, in practice this can be difficult to determine. For example, many occupations have stressors with a seasonal component, which then requires clinical judgment as to whether all symptoms can be attributed to the seasonal stressor.

Clinical example

Robert is a retired man who reports recent onset of depressions during the last few winters. On examination, his low mood was associated with his friends leaving town each winter for vacations, which he could not join because of financial reasons. Likewise, relief of symptoms was more connected to their time of return than to any particular time of year. He himself stated that the loneliness was the major factor in his depression. He was therefore not diagnosed with SAD.

Some patients may not have a clear idea themselves about the relationship between seasonal stressors and depressive symptoms. Consider the common scenario of a college student, where return to school coincides with the fall season onset of depressive symptoms. Are the SAD symptoms simply due

to academic stresses? A careful history may reveal that the symptoms are independent of stress.

Clinical example

Vicky is a college student who experiences onset of depressive symptoms in the fall, coincident with October midterm exams. However, a careful history reveals that the symptoms start in early October, well before the exam period. Also, she had faced exam stresses in the spring/summer without experiencing similar symptoms. Based on these findings, Vicky's symptoms were attributed to SAD.

Full remissions in the spring/summer

Just as there is variability in onset time, so can there be variability in offset time. Again, patients usually are able to recall the month when they are feeling back to their usual selves. A more difficult distinction is whether a switch into hypomania occurs, because patients often do not view this as abnormal (see "Differential diagnosis"). Other patients will also report full remission in the summer, but on prospective monitoring will have residual depressive symptoms (see "Variants of SAD"). To detect these situations, it is very useful to have a summer assessment.

Clinical example

Ethan describes clear episodes of winter major depression with normal mood in the summer, thus meeting criteria for SAD. After successful winter treatment with light therapy, he was assessed the following summer. He noted that he did not feel as well as he remembered, especially on cloudy days, and still had many symptoms of depression. The summer reassessment showed that Ethan had a more chronic and nonseasonal course of depression than he realized.

SAD episodes in last two years and no nonseasonal episodes

The rationale for including this criterion was to ensure that the seasonal pattern is an active clinical issue and not just a past condition. By limiting to the last two episodes, the intent was to reduce recall bias, since recent symptoms and course are more likely to be accurately remembered.

Unfortunately, there is no evidence to support the validity or necessity of this criterion. The pattern of episodes for patients with SAD can vary and sometimes patients will "skip" a winter episode or have a longer-than-usual episode (i.e. extending into spring and summer). This may be due to external factors, such as weather conditions (e.g., an uncommonly dark and cloudy spring), a significant life stressor (e.g., break-up of a relationship in the summer), the use of antidepressant medications, or living in more southerly latitudes.

Clinical example

Roger had a regular pattern of winter MDEs for four consecutive past years. He started using bupropion, with effect, and continued using the medication without an episode the following winter. He then discontinued the bupropion in the summer because he wanted to try light therapy the next winter. He had his usual onset of depressive symptoms in November and met criteria for an MDE. However, he no longer met DSM-IV criteria for seasonal pattern because he did not have an episode last year when he was taking bupropion. In Roger's case, the use of antidepressants masked the regular winter pattern of episodes.

Vicky had a clear pattern of SAD when she lived in Toronto, but then moved to Phoenix to study for a year. During the sunny winter in Phoenix, she did not experience any symptoms. However, on return to Toronto the following year Vicky again had characteristic symptoms in the winter – but she no longer met DSM-IV criteria for SAD because of her time in Arizona.

In summary, examining the overall clinical picture is more informative than restricting to the last two years. Given the controversy over this issue, even among specialists in the field, we support allowing clinical judgment to over-ride this criterion when appropriate. We tend be more stringent in applying the "two-year rule" to patients with new-onset SAD who were previously untreated.

Seasonal substantially outnumber nonseasonal episodes

Previous versions of the DSM used a ratio of 3:1 for seasonal to nonseasonal episodes, but again there are no data for this criterion. Consequently, DSM-IV is purposely vague about the definition for "substantially outnumber" and it remains within clinical judgment. For someone with several previous nonseasonal depressions, we tend to put more weight on the pattern of recent episodes.

Other diagnostic tips and traps

Accuracy is always an issue when dealing with retrospective recall. Short of keeping a journal, few people self-monitor to the point of tracking all the symptoms of depression over the course of each episode. Sometimes people are overly enthusiastic about the diagnosis, in part because of its novelty or their desire for light therapy, which may lead them to mistakenly report seasonal episodes.

Clinical example

Dolores reads a lot and is convinced that she suffers from SAD. However, her doctor of many years clearly documented her previous depressive episodes and a chart review shows no evidence of seasonal pattern. Further exploration revealed that she was disenchanted with medications and was hoping to use light therapy. While disappointed about not having SAD, Dolores was glad to find out that light therapy may also be helpful for nonseasonal depression.

Conversely, we have seen some skeptical patients who see only a chain of coincidences when confronted with a clear pattern of winter depressions. Careful charting of episodes, inspection of old charts and, if possible, collateral information from family members can help clarify seasonal patterns.

Clinical example

Ted is a man in his fifties who had been skeptical throughout his life of the idea of having a mental illness. However, in reviewing his life history, he couldn't help but notice that every relationship breakup that he had ever suffered had occurred in the fall months. Further history revealed untreated winter depressions over many years and a diagnosis of SAD was made.

Since patients usually present in the winter during a depressive episode, we find it simpler to first establish a diagnosis of MDE, since it is easier for patients to describe current signs and symptoms. Once the current episode is characterized, we turn our attention to establish regular onsets of previous depressive episodes, starting from the most recent and working backward. If the current episode is mild or equivocal, then it may be more productive to look back at the person's most severe depressive episode, or the one best remembered, in order to see whether it meets criteria for MDE. Finally, we check on summer symptoms and whether full remission occurs, and whether they have had hypomanic or manic episodes, or nonseasonal depressive episodes. Only with all this information can one make the diagnosis of SAD with confidence.

Prevalence and burden

The quality of studies on the epidemiology of SAD has varied widely. Many studies used self-report questionnaires (such as the Seasonal Pattern Assessment Questionnaire, SPAQ) which were designed as screening tools and not as diagnostic instruments, and/or examined specific populations