The Phenomenology of Major Depression and the Representativeness and Nature of DSM Criteria

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How should DSM criteria relate to the disorders they are designed to assess? To address this question empirically, the author examines how well DSM-5 symptomatic criteria for major depression capture the descriptions of clinical depression in the post-Kraepelin Western psychiatric tradition as described in textbooks published between 1900 and 1960. Eighteen symptoms and signs of depression were described, 10 of which are covered by the DSM criteria for major depression or melancholia. For two symptoms (mood and cognitive content), DSM criteria are considerably narrower than those described in the textbooks. Five symptoms and signs (changes in volition/motivation, slowing of speech, anxiety, other physical symptoms, and depersonalization/ derealization) are not present in the DSM criteria. Compared with the DSM criteria, these authors gave greater emphasis to cognitive, physical, and psychomotor changes, and less to

neurovegetative symptoms. These results suggest that important features of major depression are not captured by DSM criteria. This is unproblematic as long as DSM criteria are understood to index rather than constitute psychiatric disorders. However, since DSM-III, our field has moved toward a reification of DSM that implicitly assumes that psychiatric disorders are actually just the DSM criteria. That is, we have taken an index of something for the thing itself. For example, good diagnostic criteria should be succinct and require minimal inference, but some critical clinical phenomena are subtle, difficult to assess, and experienced in widely varying ways. This conceptual error has contributed to the impoverishment of psychopathology and has affected our research, clinical work, and teaching in some undesirable ways.

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The tower of Babel never yielded such confusion of tongues, as the chaos of melancholy doth variety of symptoms.

-Robert Burton, Anatomy of Melancholia, 6th edition, 1651 (1, p. 456)

The introduction of operationalized diagnostic criteria in DSM-III has had many benefits for psychiatric practice and research. However, its wide use has produced an unanticipated side effect—the reification of the DSM criteria (2). In our training, clinical work, and research, we typically evaluate only DSM criteria, as if they constituted all anyone would want to know about the disorder in question (3). Focusing solely on the symptoms and signs in DSM risks producing an impoverished view of psychopathology (4) and has encouraged the rise of diagnostic literalism (5).

In this article, I first evaluate these claims empirically for one of the most common and important of psychiatric disorders: major depression. In this historical inquiry, I ask: How well do the A criteria for major depression used in DSM-III through DSM-5 capture the descriptive approach taken to clinical depression in the post-Kraepelin Western psychiatric tradition circa 1900-1960? (I chose this period because the clinical features associated with what we now call depression were considerably more diverse in earlier epochs [6]). I focus initially on textbooks as the best place to obtain expert opinion about the important symptoms and signs of depression. I next review the phenomenology of depression described by Aubrey Lewis in what is the most detailed survey of the phenomenology of depression written in the 20th century (7). I then evaluate how well our clinical descriptive tradition for depressive illness is represented in the DSM criteria.

Then, in light of this historical analysis, I review the question: How should DSM criteria relate to the disorders they are designed to assess? I suggest that U.S. psychiatry, as a field, has tended to reify DSM criteria. This approach reflects a conceptual error—a category mistake. That mistake is taking an index of a thing for the thing itself. The criteria proposed in DSM-III and subsequent DSM editions are practical means to identify disorders with what are hoped to be good reliability, sensitivity, and specificity. They do not constitute the disorders they seek to identify. This conceptual error is central to the problem of psychopathologic impoverishment. Its correction has important implications for the ways in which the DSM criteria are used in research, clinical care, and especially teaching.

METHOD

I identified textbooks of psychiatry or psychological medicine published from ~1900 to 1960, and written or translated into English, from three major sources: Amazon.com, the National Library of Medicine, and Forgotten Books (forgottenbooks.com). Textbooks were rejected if they did

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not adopt the Kraepelinian diagnostic perspective on affective illness or if the information they contained on the symptoms and signs of major depression was too sparse to be useful. When multiple editions were available, I reviewed the earliest edition. In total, 19 textbooks, published from 1899 to 1956 from five countries (nine from the United States, seven from the United Kingdom, and one each from Germany, France, and Switzerland), met inclusion criteria.

I reviewed the relevant sections of text in historical order starting with the 6th edition of Kraepelin's *Psychiatry* textbook (8), creating categories for signs and symptoms as needed as I progressed through the textbooks. After going through all the texts, developing and testing the categories, I went back over them a second time to ensure consistent application of the categories. In the key table, I included short quotations or paraphrases to give a sense of the authors' "turn of phrase" in their descriptions.

Nine issues arose during this process. First, I focused on the general descriptions of what the author termed either "depression" or (for many of the earlier authors who did not use this category) "melancholia" (terms included depression, melancholia, depressive states, state(s) of depression, depressed type, types of depression, depressive phase, depressive psychosis, and depressed reaction). For the purposes of this essay, I refer to this syndrome as major depression. Second, I never accepted symptoms or signs only described in case reports. Third, if the author described depressive subtypes, I generally took representative symptoms from those of mild to moderate severity. I did not include symptoms or signs only noted for severe or stuporous depression. Fourth, I did not accept symptoms or signs that were described only for "involutional melancholy," as most authors considered it distinct from "depression" or more typical "melancholia." Fifth, I did not include signs or symptoms that were present in "mixed states."

Sixth, I did not describe the delusions or hallucinations associated with major depression, as these are not part of the DSM A criteria. Seventh, none of these authors separately described the symptoms and signs of depression occurring in the course of unipolar versus bipolar illness, so I could not make that distinction. Eighth, many authors described a brief set of symptoms or signs that they judged to be central or primary to the depressive syndrome: I noted these by an asterisk in the table. Ninth, several authors provided rather long lists of associated somatic symptoms. In these situations, I summarized those that seemed most prominent.

RESULTS

Textbooks' Descriptions of Symptoms and Signs

Mood disturbances in the course of major depression were described by all 19 textbook authors (Table 1). However, a number of them were broader than the "feels sad, empty, hopeless" described in DSM-5 criterion A1. Common additional terms included "gloomy," "painful," "misery," "worried," "wretched," "blue", and "lonesome." Twelve of the

authors commented on loss of interest using language broadly similar to DSM-5 criterion A2, often using terms indicating apathy or indifference.

All authors described specific cognitive content as characteristic of depressed patients. While guilt and worthlessness were frequently noted, other common descriptors included hopelessness, pessimism, self-accusation, self-derogation, feelings of inadequacy and of being a failure, and a specific focus on prior moral shortcomings, often of a sexual nature. The depressive cognitive content was therefore considerably broader than that incorporated in the relevant DSM criterion A7: "Feelings of worthlessness or excessive or inappropriate guilt."

All but one author described changes in cognitive functioning, most typically of slowness of thought and difficulty with concentration, consistent with major depression criterion A8, "diminished ability to think or concentrate."

Depression-related changes in volition and motivation were described by 15 authors and were typically distinguished both from the more physical feelings of fatigue and the difficulty in decision making. Most commonly, this was described as lack of initiative, loss of will, or inability to work. This symptomatic domain is not included in the DSM-5 A criteria for major depression.

Difficulties with decision making were noted by seven authors and are well captured by part of criterion A8, "indecisiveness." Anhedonia was described by seven authors, most commonly as a loss of feeling of affection for loved ones and natural enjoyment. This symptom is relatively well represented by the relevant part of criterion A2: "markedly diminished pleasure."

Psychomotor changes were reported by all but one author, 12 of whom described only aspects of psychomotor retardation and six of whom also commented on agitation. These signs are well presented in DSM-5 criterion A5. Fatigue, exhaustion, and feelings of being tired out, symptoms well captured by DSM criterion A6, were described by only eight authors. Speech that was slow, hesitant, indistinct, and/or monosyllabic was described by all but two authors. This symptom is not included in DSM-5.

Disturbed sleep was noted by 14 authors, most typically described as insomnia or disturbed or unrefreshing sleep. Early morning awakening was described by three authors. This symptom is well covered by "insomnia" in criterion A4. However, "hypersomnia," also noted in this criterion, was not described as a symptom of depression by any of the authors.

Various aspects of anxiety, including panic attacks and obsessive fears, were noted by 14 authors, but anxiety is not included in the DSM criteria for major depression. Poor appetite and weight loss were described by, respectively, 10 and nine textbook authors, consistent with DSM criterion A3. However, none of the authors noted increased appetite and weight gain, which are also described in this DSM criterion.

Other physical symptoms and signs, noted by 17 authors, was the most difficult symptom category to summarize. Most commonly described were gastrointestinal complaints, but

diminished libido, amenorrhea, and headaches were also often noted. Also frequently described were changes in facial expression and posture. These phenomena are not captured by any part of the A criterion in DSM-5 major depression.

Suicidal thoughts and ruminations were described by 13 of the authors, and this symptom area is well covered by DSM criterion A9, which includes "recurrent thoughts of death," "recurrent suicidal ideation," or suicide attempt or plan. Seven authors described circadian shifts in depressive symptoms, all noting that the symptoms were more severe in the morning. This is not in the DSM A criteria for major depression but is reflected in specifier criterion B2 for "melancholic features."

Depression-associated depersonalization and derealization were noted in 12 of the textbooks. A number of descriptions were provided, including everything feeling changed or unreal, seeing the world through a mist, and perplexity. No DSM-5 criteria for major depression describe this kind of depressive symptomatology.

Prominent Symptoms and Signs

Fifteen authors noted a subset of symptoms and signs of major depression they regarded as of particular importance or centrality to the syndrome. As seen in Table 1 (bottom row), this analysis indicated that these authors, in aggregate, strongly endorsed three symptoms/signs of depression as being of special diagnostic importance: lowered mood, impairment in cognitive function, and psychomotor changes. All three of these are well reflected in the DSM criteria for major depression. The next most common central symptom, volitional changes, was noted by only 20% of these authors and is not described in DSM-5 criteria. Of note, only one author described neurovegetative changes in sleep, appetite, or weight as a central symptom of depression.

Criteria for Depression Proposed by Muncie

One of the authors-Muncie (22), in a 1939 textbookproposed a relatively complete set of diagnostic criteria for depression, which for historical interest is presented in Table 2. Compared with the DSM-5 criteria, Muncie's criteria included symptoms of depersonalization and derealization and gave greater emphasis to physiological symptoms and changes in facial expression and posture.

Lewis's Monograph

In 1934 Aubrey Lewis (7) described the "clinical features" of 61 cases of "depressive state," all examined and treated by Lewis in 1928–1929 in the Maudsley Hospital, London. This 102-page monograph provides considerably greater details of depressive symptoms and signs than any of the textbooks consulted. I can only hope to capture some relevant main themes of this rich paper. First, Lewis comments on all but two of the symptoms and signs that I developed from the textbook review, so there is a high degree of consilience between these two sources of information (Table 3). Second, as with the texts, his descriptions of the mood changes are

much richer than those provided by DSM-5. Third, he strongly emphasizes the importance and diversity of changes in cognitive content, demonstrating even more clearly than the textbooks the relative narrowness of the "worthlessness and guilt" description provided in DSM criterion A7. Fourth, he comments on but does not emphasize the depressionrelated changes in volition. Fifth, he highlights the close relationship between depressive and anxious symptoms, and he specifically notes the relatively high frequency of episoderelated obsessions and compulsions. Sixth, he comments prominently on the depression-related signs of change in posture and facial expression. Finally, in accord with the textbook writers, he notes in considerable detail the relatively frequent symptoms of depersonalization and derealization.

Quantitative Analysis

Finally, I took each of the 18 symptoms and signs developed in the textbook review and divided them into three categories: well covered by DSM criteria, partly covered by DSM criteria, and not at all covered by DSM criteria. As seen in Table 4, ten of the 18 symptoms and signs were well described by the DSM A criteria for major depression and one by a criterion for melancholia. Two symptoms and signs (mood changes and changes in cognitive content) were partly covered by DSM criteria. Five symptoms and signs were not reflected in the DSM criteria for major depression.

DISCUSSION

Empirical Conclusions

The goal of the historical portion of this essay was to determine how well the phenomenology of depressive illness described in the post-Kraepelinian Western psychiatric tradition is captured by the current DSM symptomatic criteria for major depression. I begin by reviewing the nine major conclusions of this investigation.

First, the description of the core mood symptom for major depression in DSM-5, "depressed ... sad, empty, hopeless," was narrower than that provided by the textbook authors and by Lewis. Terms like "painful," "miserable," "wretched," "dull," "broken-hearted," and "in agony" were used by various authors to reflect the diverse subjective manifestations of the dysphoric mood that is widely agreed to be central to the depressive syndrome.

Second, the descriptive literature placed greater relative emphasis on the cognitive and attitudinal changes associated with depression than do the DSM criteria, where these features constitute only one criterion, characterized solely by worthlessness and guilt. In agreement with Beck (27), the classical authors consistently emphasized the importance and diversity of cognitive changes in depression. In addition to worthlessness and guilt, other cognitive content was emphasized, including hopelessness, gloom, and a range of diverse self-accusatory and self-derogatory themes.

Third, second to mood changes, the most frequently noted key symptom of major depression was changes in cognitive

TABLE 1. Symptoms and Signs of Depression as Described by Authors of 19 Textbooks of Psychiatry Published Circa 1900–1960^a

Author, Year (Reference)	Mood	Interest	Cognitive Content	Cognitive Function	Volition/ Motivation	Decision Making	Anhedonia	Psychomotor Changes
Kraepelin, 1899 (8)	Gloomy, utterly miserable	Nothing can arouse interest, indifferent	Hopeless, future gloomy, without purpose	Thinking difficult, psychic inhibition*	Lack of initiative,* work very difficult	Very difficult	Nothing gives pleasure	Psychomotor inhibition
De Fursac, 1905 (9)	Painful,* sad, gloomy	Indifferent to everything*	Pessimistic	Psychic inhibition*	Abulia*	Constant indecision	Experiencing no affection	Slow
Paton, 1905 (10)	Emotional depression		Self-insufficiency and unworthiness	Retardation in thought, difficulty thinking	Inability to think or act			Slow, with difficulty
Dana, 1907 (11)	Mental depression*	Apathy, loss of interest	Hopeless	Slowness, difficulty in thinking* and attention	Weakness of will, attempts at work are futile	Hopeless indecision		Psychomotor retardation,* but agitation also seen
Craig, 1912 (12)	Feeling of depression*	Loss of interest	Self-accusation	Slowing of thought and action*	Inability to work			
White, 1913 (13)	Emotional depression*		Self-accusatory, hypochondriacal	Difficulty thinking*	Incapable of effort			Psychomotor retardation*
Cole, 1913 (14)	Mental pain, abject misery, wretchedness	Lack of interest in family or others, apathetic	Future impossible, feeling of impending evil, pervaded by painful emotions	Difficulty in association				Gait is slow but can pace, be restless
Buckley, 1920 (15)	Depression of emotional tone,* sadness	No interest in anything	Hopelessness, personal inadequacy	Retardation of thought,* slug- gishness, poor attention	Reduced; efforts made with difficulty		Lost all feeling of affection	Retardation,* all action slowed
Jelliffe, 1923 (16)	Emotional depression*		Self-accusatory, inadequacy, hypochondriacal	Difficulty thinking*	Incapable of effort, interference when trying to exert will			Psychomotor retardation*
Bleuler, 1924 (17)	Depressive mood,* painful		All experiences colored painfully; focus on imagined misfortune	Retardation of mental stream*	Reduced resolution of acting*			Retardation of motility,* move- ments slow and weak, but can be restless, wailing
Yellowlees, 1932 (18)	Unhappiness, emotional dullness	No interest in anything, general indifference	Focus on their moral failings, ideas of unworthiness		From lack of initia- tive to grave impair- ment in volition		Complete emotional unresponsive- ness*	Lowering of activity, ⁵ general slowness, bu sometimes pacing restlessly
Sadler, 1936 (19)	Emotional depression,* painful, gloomy	Lost all interest	Unworthiness, guilt, hopeless, self- accusatory, discouraged	Difficulty thinking,* slowed down	Devoid of ability to initiate action			Psychomotor retardation,* all actin slowed down
Noyes, 1936 (20)	Despondency, "blue"		Hopelessness, unworthiness, gloomy	Difficulty thinking	Unable to carry out activities	Indecision		Movements slow, inhibited
Gordon, 1936 (21)	Depression*	Lose all usual interests	Hopelessness,* unworthiness*	Difficulty concentrating	Everything a burden		Lacks the natural enjoyment of life	Slowness of thought and action, but some times agitation, weep ing, hand wringing
Muncie, 1939 (22)	Depressed, blue, sad, lonesome, worried, homesick*		Ideas of self- derogation, unworthiness, guilt, sin*	Thinking difficulty	Inhibition, lack of initiative			General slowing of motility*
Henderson, 1944 (23)	Depression*	Unable to take interest	A failure, hopeless, a disgrace	Difficulty in thinking* and concentrating			Loss of feeling	Psychomotor retardation* but can be agitated
Curran, 1945 (24)	Sadness,* listlessness	Apathetic	Guilt, self-reproach	Retarded thinking*		Indecision		Motor retardation*
Mayer-Gross, 1954 (25)	Depression, indifference, misery	Loss of interest	Feeling of insuffi- ciency, future dark and gloomy, hopeless	Diminished quickness of thought	Loss of willpower, incapable of initiating actions	Inability to reach decisions	Loss of enjoyment	Retardation
Ulett, 1956 (26)	Emotional depression,* melancholy		Guilt, self- accusation, self- deprecation	Slowness and difficulty in thinking*		Painful uncertainty		Psychomotor retardation*
Number of times noted	19	12	19	18	15	7	7	18
Number of times prominent (of 15)	13	0	2	12	3	0	1	11

^a An asterisk (*) indicates that the symptom or sign was judged by the author to be prominent. "Depression" is described variously by these authors as depressive states, state(s) of depression, types of depression, depressed type, melancholia, depressive phase, depressive psychosis, and depressed reaction.

Energy	Speech	Sleep	Anxiety	Appetite	Weight	Other Physical Symptoms	Suicidal Behavior	Circadian Effects	Depersonalization/ Derealization
Tired, worn out	Quiet and hesitant	Greatly impaired	Obsessional ideas common	Much reduced	Usually drops significantly	Palpitations, heaviness; limp facial expression and posture	Does not want to live		Deeply perplexed
	Indistinct, few words	Diminished, unrefreshing, disturbed	Spells	Anorexia	Loss of weight	Headache, vague pains, constipation			Everything appears strange
	Slow or unable to speak		Apprehension to marked anxiety						
		Insomnia	Often anxiety	Loss of appetite	Emaciation	Dyspeptic troubles; pre- cordial distress, consti- pation; menstrual irregularities; loss of libido	Suicidal ideas and impulses		Stupefied by gloom
	Slow		Vague fears				"Potential suicides"	Depression more acute in morning	
	Speaks slowly, monosyllabic					Limp posture and facial expression			Disaggregation of the personality
		Only snatches of sleep, nights are wretched and sleepless	Morbid apprehensions	Loses all appetite		Dyspepsia, constipation, lost sexual drive, scanty menstruation, dry skin, specific facial expressions	Suicidal intention frequently expressed		
Fatigue, exhaustion	Commonly absent		Not infrequent state of fear			Weakness			Unlike themselves/ surroundings have changed
Unable to make any effort, lack of energy		Disturbed	Anxiety attacks, apprehension, nameless dread	Poor	Loss of weight	Constipation, cold extremities, flexion of body			
	Quiet, slow		Often, compulsive fears			Specific facial expression, weakness, headache	Suicidal impulses		Loss of emotion, everything strange, colorless; depersonalization
	Slow, low- pitched, dull	Often insomnia		Refusal of food		Gastrointestinal disturbance	Suicidal tendency		
Fatigue, exhaustion	Low tone, monosyllabic	Disturbed, un-refreshing	Irritability			Headaches, indigestion, constipation; careworn expression	Danger of suicide	At worst in morning	Complain of unreality of the environment
Fatigue	Slow and in low tone	Insomnia				Headache, hypochon- driacal complaints; typical posture, stooped			
	Delay in responses	Insomnia	Worry over trifles			Intestinal upset, constipation, face is very aged	Common	Often worst in early morning	In a fog
Fatigue	Slowed	Principally early morning awakening*		Poor*	Weight loss*	Menstrual irregularity, reduction in erections, reduced libido; stooped posture, constipation*	Suicidal preoccupations*	Early morning worst*	Depersonalization, puzzle, perplexity*
Fatigue, exhaustion	Typically, re- duced speech, but can be increased	Frequently disturbed, always unrefreshing	Not infrequently present	Reduced		Headache, dyspepsia, constipation, careworn expression	Danger of suicide	Worst in morning	Environment seems unreal
		Insomnia, especially early awakening	Frequent		Loss	Loss of sexual desire,* constipation, amenorrhea, sallow complexion*	Suicidal ideas*	Worse in morning	Depersonalization, feels changed, lifeless, derealization
Fatigue, heaviness of limbs	Retardation	Sleeplessness, unrefreshing sleep	Exaggerated fears and anxieties, anxiety attacks	Loss of appetite		Constipation, reduced sexual desire, amenorrhea, distinct posture, facial expression	Common	Worse in morning	Depersonalization; world through a mist
	Slowly and in low tone	Insomnia, early rising		Failure to eat	Weight loss	Libido is lost, constipation, menstrual disorder, depressed countenance	Suicidal ruminations		
8	17	14	14	10	9	17	13	7	12
0	0	1	0	1	1	2	2	1	1

TABLE 2. Criteria for Depression Proposed by Muncie in 1939^a

Criterion	Name	Description
1	Mood	Depressed, melancholy, blue, sad, lonesome, worried, homesick, and noted in the facial expression
1.a	Mood equivalent	Depersonalization, feelings of unreality ^b
1.b	Mood equivalent	Puzzle and perplexity
2	Cognitive content: appropriate to mood	Self-derogatory, self-depreciatory ideas, ideas of unworthiness, guilt, sin, the source of trouble for others
3	Suicidal preoccupations	Natural consequence of mood and content
4	General slowing of motility	Of musculature, speech, thinking, including feelings of inhibition, lack of initiative, fatigue
5	Diurnal variation	Early morning after waking worst, the evening better
6	Physiological alterations	
6.a	Insomnia	Principally early morning awakening
6.b	Poor appetite	
6.c	Weight loss	
6.d	Reduction in sexual functions	In women, menstrual irregularity. In men, reduction in frequency of erections. In both sexes, reduction or loss of sexual desire.
6.e	Reduction in muscular tone	Stooped posture
6.f	Slowed motility	Constipation, lowered blood pressure, pulse
6.g	Reduction in basal metabolism	

^a From Muncie's Psychobiology and Psychiatry (22).

functioning, typically characterized by difficulties in thinking and concentrating. These symptoms, while noted in the clinical and neuropsychological literature (28), have rarely, in the post-DSM-III world, been regarded as central to the clinical presentation of major depression.

Fourth, these authors describe a range of somatic symptoms and signs in depressed patients that receive little attention in DSM. Gastrointestinal changes, especially constipation, was commonly observed, as were menstrual and libidinal changes. Observations of dried skin and characteristic changes in facial expressions and posture were also frequently noted. Somatic symptoms of major depression may be more common in non-Western cultures, especially China, and it has been claimed that this is due to a "mentalization" of depression in Western culture (29). The widespread use of DSM criteria for major depression, which exclude consideration of somatic symptoms, may have contributed to this trend.

Fifth, the textbook authors gave less importance to the neurovegetative features of depression—changes in sleep, appetite, and weight—than the DSM criteria do. No author noted them as key depressive symptoms.

Sixth, consistent with recent work (30), these authors gave greater prominence to changes in psychomotor functioning, especially psychomotor retardation, than is our current practice. This was noted as a key depressive sign by over two-thirds of authors who listed such symptoms. However, only five of the 19 textbook authors described psychomotor agitation as a common symptom of depression or melancholia. In addition, several others referred to sections on "mixed" states where they described such cases.

Seventh, nearly two-thirds of the textbook authors described a domain of symptomatology in depression rarely

noted in the post-DSM-III world: derealization and depersonalization. These are poignantly described by Curran:

The typical affect is that of sadness, but has been described as being qualitatively ... different to that normally experienced ... the typical depressed mood thus shades into depersonalization in which the patient feels changes—strange, lifeless, detached, automatic. Sometimes, instead of feeling that they themselves have changed, the patients lay emphasis on a change in the outer world which seems dead or macabre (24, p. 157).

This point is well captured by a recent first-person report:

It was as if the whatness of each thing ... the essence of each thing in the sense of the tableness of the table or the chairness of the chair ... was gone. There was a mute and indifferent object in that place. Its availability to human living ... in the world was drained out of it. Its identity as a familiar object that we live with each day was gone ... the world had lost its welcoming quality (31, pp. 212–213).

Some pathological experiences in depression may not be best understood as "symptoms that a person has" (e.g., sore throat, insomnia) but rather a fundamental change in a person's "being in the world" (32). That is, hopelessness or guilt can become an "existential state" rather than a "symptom."

Eighth, nearly all authors commented on changes in the speech of depressed patients, most typically describing it as slow, low in volume, with long pauses. This sign is not in DSM-5.

Finally, the symptomatology of atypical depression—particularly the "reverse" vegetative features of increased eating/weight and hypersomnia—was not described in the classical literature. One of these symptoms (hypersomnia) was introduced into the Feighner criteria (although it was not

b "In some cases at least, the expression of depersonalization ... [may result from] ... the fact that the misery is of such a degree as to beggar description in positive terms "

TABLE 3. Symptoms and Signs of Depression as Described by Lewis in 1934^a

Symptom Area	Description
Mood	Depressed, miserable, dreadful, brokenhearted, worried, frightened, low, unhappy, despondent, awful, in agony, desperate, and reflects "the complex quality of experienced totality"
Interest	Little or no interest in their surroundings
Cognitive content	Hopeless, nothing to live for, useless, inadequate, degradation, attribution to self of evil motives, self- reproach and self-accusation. These are "among the most striking of melancholic symptoms"
Cognitive function	Difficulties with concentration and focus. Muddled. But in some patients, due to a constant press of thoughts. "Difficulty in thinking, not slowness of thought, is the essential feature." Feelings of inadequacy more important than performance.
Volition/motivation	No will power
Decision making	
Anhedonia	Rarely noted compared with loss of interest. One patient stated, "I can't enjoy anything."
Psychomotor changes	General slowing of action. But agitation seen in one-quarter of patients. Wringing of hands, picking. Also descriptions of "inner restlessness"
Energy	Tired, worn out, exhausted
Speech	Around a third of patients "talked a great deal" and another third said "little"
Sleep	
Anxiety	"The relation of anxiety to depression is intimate." Apprehension very common, fear of something unpleasant happening. Seen both "in attacks or as a lasting state." Thirteen patients demonstrated compulsive symptoms. Obscene thoughts, repeating picking ("I feel I must do that; I know it's wrong"), washing, "I can't keep my thoughts off my private parts. It's dreadful."
Appetite	"Refusal of food is one of the prominent features of any depressive state."
Weight	Loss is common
Other physical symptoms	Headaches, other "aches and pains" common. Drooping slack posture, facial expression "more easily recognized than described"
Suicidal behavior	26 patients attempted suicide; 12 others often spoke of suicide
Circadian effects	Infrequently seen in this sample
Depersonalization/derealization	Feel dazed, queer, different, no feeling at all, don't feel myself; 19 cases with depersonalization—"I have no feeling at all in me," "I feel all dead"; 21 cases with derealization—"everything changed and unreal," "a veil or mist interposed between them" and reality

^a From Lewis's monograph "Melancholia: A Clinical Survey of Depressive States" (7).

in the two earlier sets of diagnostic criteria for depression that influenced the Feighner criteria [33, 34]). Increased eating and weight gain were introduced into the Research Diagnostic Criteria (35) for major depression and carried over into all subsequent editions of DSM.

Conceptual Issues With Our Current Approach to **DSM** Criteria

This historical inquiry provides a useful framework in which to reflect on the way to answer the following question: How should DSM criteria relate to the disorders they are designed to assess? I wish to argue that many in our field have made a serious category mistake in the ways in which we have understood and used the DSM criteria. Put succinctly, we have confused an index of a thing with the thing itself.

Let me explain. As in all diagnostic systems, DSM criteria were designed to index (i.e., measure or assess) syndromes—to describe signs and symptoms that permit the clinician to classify individuals as being affected or unaffected, with good efficiency, reliability, sensitivity, and specificity. To use major depression as an example, if the criteria work well, then individuals who meet the criteria for major depression have a high likelihood of really having depression and being neither psychiatrically well nor having another syndrome, such as panic disorder. But meeting the DSM criteria for major depression is not the same thing as

having major depression. The DSM criteria do not constitute clinically significant depression.

To illustrate this critical but abstract concept, let me give three examples. First, early World Health Organization (WHO) criteria for myocardial infarction (MI) were simple (36). Definite MI required these three criteria:

- 1. Clinical history of ischemic type chest pain lasting for more than 20 minutes
- 2. Changes in serial ECG tracings
- 3. Rise and fall of serum cardiac biomarkers such as creatine kinase-MB fraction and troponin

These criteria were well validated, and they predicted definitive diagnostic tests for MI, especially angiography, which directly identifies arterial stenosis or blockage. Thus, we would use these criteria because they index having an MI-they provided a pragmatic and well-validated way to identify this syndrome. However, few would argue that these criteria constitute "having an MI"-that is, that having an MI is simply meeting those three criteria. Rather, an MI occurs when heart muscle dies from ischemia. This is often but not always accurately indexed by these criteria.

Second, the Apgar score (37, 38) was proposed in 1953 by Virginia Apgar as a rapid way to assess immediate postpartum neonatal health. It contains five items (heart rate, respiratory effort, reflex irritability, muscle tone, and color) that can be

TABLE 4. The Degree of Coverage by DSM-5 Criteria for Major Depression of the 18 Symptoms and Signs of Depression Assessed by Textbook Authors

Symptom Area	Degree of Coverage by DSM Criteria			
Mood	Partly covered, criterion A1			
Interest	Well covered, criterion A2			
Cognitive content	Partly covered, criterion A7			
Cognitive function	Well covered, criterion A8			
Volition/motivation	Not covered			
Decision making	Well covered, criterion A8			
Anhedonia	Well covered, criterion A2			
Psychomotor changes	Well covered, criterion A5			
Energy	Well covered, criterion A6			
Speech	Not covered			
Sleep	Well covered, criterion A4			
Anxiety	Not covered			
Appetite	Well covered, criterion A3			
Weight	Well covered, criterion A3			
Other physical symptoms	Not covered			
Suicidal behavior	Well covered, criterion A9			
Circadian effects	Well covered, criterion B2 for melancholia			
Depersonalization/derealization	Not covered			

evaluated quickly in the delivery room (38). The Apgar score is practical, reliable, and valid in that it robustly predicts neonatal survival and risk of future cognitive impairment (38). But would anyone wish to argue that a healthy baby is just having a baby with a high Apgar score, or, to phrase it differently, that the construct of infant health can be reduced to an Apgar score?

Third, the intelligence quotient (IQ) originated with Alfred Binet in 1905. Its major function was to predict school performance, and it is still widely used (for example, as the Stanford-Binet Intelligence Scale) as a broad measure of intellectual functioning. Despite its wide popularity and entry into the general vocabulary, it would be a confusion to assert that being intelligent is just having a high IQ measured by constructs such as fluid reasoning, knowledge, quantitative reasoning, visual-spatial processing, and working memory.

There is, of course, a common core to these three examples. We have a latent concept or process that we cannot easily directly assess: MI, general health of a newborn, and intelligence. We develop a method to assess that construct which is practical to apply and is a good predictor of that latent concept. But then we are at risk of a misstep. As pointed out by John Locke, the great English philosopher (and physician), "Another great abuse of words is taking them for things.... How much names taken for things are apt to mislead the understanding" (39, pp. 442–443). Once we have a name—MI, Apgar, IQ, or DSM major depression—we are at risk of confusing our index with the thing itself, that is, what it was developed to measure.

Following from Locke's observation, we can reframe our concept of a category mistake into a more concrete and semantic form: the meaning of the sentence "Mary suffers from depression" is reduced to "Mary meets the DSM-V criteria for major depression." This would be the same error as claiming that "Roger has had a heart attack" is reducible to "Roger meets the WHO criteria for MI" and claiming that "April is a

healthy baby" is just the same as saying "April had a high Apgar score."

Illustrations of the Problems Associated With Our Category Mistake

Why is it a bad idea to conflate our DSM criteria with the disorders themselves? Our historical review of symptoms of major depression presents three illustrative problems. First, for most diagnostic criteria, rapidity and reliability of assessment is critical. The developers of DSM-III explicitly preferred criteria that required low levels of inference, because these are typically more reliable (40). Many of the symptomatic criteria for major depression—such as changes in appetite, weight, psychomotor performance, and sleep—can be quickly and reliably assessed.

But some important features of psychiatric disorders may not be like that. They may be

subtle, and time-consuming to evaluate. Does this mean that such symptoms should be disregarded? If DSM criteria for major depression constitute depression, that would be a logical conclusion.

But many of our classical textbook authors believed that derealization was an important clinical feature of major depression. We can understand why this did not make it into DSM: It is a subtle concept, time-consuming to evaluate, and perhaps of limited reliability. Yet, senior clinicians of earlier generations thought it was a critical feature of the depressive syndrome that reflected their patients' lived experiences. Should we not evaluate it or teach it to our students because it is not in DSM?

Second, developers of diagnostic criteria are also appropriately concerned about specificity. A symptom could be quite clinically important, but if it is shared by many other syndromes, it would likely not make a good diagnostic criterion. Most of our textbook writers considered anxiety to be a prominent and clinically important part of the presentation of major depression. If we conflate our criteria with our disorders, we are then in the awkward position of suggesting that anxiety is not important in major depression because it is not in our criteria.

Third, to be practical, diagnostic criteria need to be succinct. For the key major depression criteria A1 and A7, DSM-5 lists three and two descriptors, respectively. As illustrated by our textbook writers, these lists are too short to capture adequately the range of human experience of the mood state of depression and the range of self-derogatory/pessimistic depressive cognitions.

Consequences of Our Category Mistake

Reification has many meanings, but in this context it reflects the process whereby we have taken DSM criteria as too sacrosanct. Hyman trenchantly writes, "Unfortunately, the disorders within these classifications [DSM and ICD] are not generally treated as heuristic, but to a great degree have become reified" (2, p. 156). Many of us have become diagnostic literalists with respect to DSM, stymied by an excessive respect for own creation. DSM criteria are imperfect approximations created by a very human process that, although scientifically informed, could not be claimed by any knowledgeable individual to be infallible. These criteria have been enshrined in our diagnostic algorithms and structured interviews, and are so often required by journal and grant reviewers that they approach the tokens of an orthodox faith. By losing sight of the indexical function of our diagnostic criteria and confounding the criteria with the disorders themselves, we open the door to reification.

Furthermore, if meeting DSM criteria constitutes a psychiatric disorder, why should we evaluate anything but the DSM criteria? This view is deeply problematic. Psychiatry is the inheritor of the richest tradition of description in all of medicine because the features of the disordered mind/brain system that is the subject of our discipline are so diverse, so innately fascinating and profound in the degree to which they illuminate the human condition. Part of the process of good clinical care is to explore the experiences of our patients. This helps us better understand their experiences, and this sense of shared understanding can be directly therapeutic. This cannot be done without knowledge of the world of psychopathology outside of DSM. DSM might provide a guide to but can hardly be a replacement for our rich psychopathological tradition.

From a historical perspective, psychiatry has been appropriately proud of the "DSM revolution." However, we still lack gold-standard validators like coronary angiography. The presence of such validators helps illustrate the difference between indexing and constituting a disorder. Given our pride in our diagnosis and our lack of definitive validators, it is understandable that our field has had undergone a "conceptual creep" in which our criteria have mistakenly become our disorder.

Potential Limitations

My historical review of symptoms and signs of major depression should be interpreted in the context of three potentially important methodological limitations. First, the nature of psychiatric practice changed during the 20th century, with outpatient care constituting a larger proportion of our work, especially after 1960. Many of the classical textbook writers were seeing severely depressed patients in hospitals. By the time DSM-III was published in 1980, the majority of depressed patients were being seen in ambulatory settings and were often more mildly ill. Second, none of these authors distinguished between depressions occurring in bipolar illness and those occurring in unipolar illness. It is possible, although unlikely given modest symptomatic differences seen for depression in major depression as compared with bipolar illness (37), that some of the differences between the symptoms described and those listed in the DSM-5 criteria result from admixture of patients with bipolar illness. Third, as noted above, the goals of those who develop diagnostic criteria are

not the same as those of the textbook writers, with the former being much more concerned with brevity, reliability (and hence low inferential content), and specificity.

There are two potentially important concerns about my critique of this common approach to DSM criteria. First, readers might conclude that I am critical of the basic concept of operationalized criteria and the ensuing DSM-III revolution. Nothing could be further from the truth. The benefits of these changes to the clinical and research agendas of psychiatry have been immense. It is only against this background that I have attempted to address concerns for the negative consequences of the DSM-III revolution, which in my view arise in part from our misconstruing their true purpose as indices of disorders. Second, the most deflating critique of my view on the category mistake common in our field might be phrased as follows:

All you have done is pointed out the difference between diagnostic criteria and clinical evaluation. Since DSM-III, DSM has contained an "associated features" section that describes common symptoms and signs of the disorder not included as diagnostic criteria. We use diagnostic criteria for referral or treatment decisions but then put them aside and do our complete clinical evaluation.

While this argument has force, it falls short in three major ways. First, it fails to recognize the degree to which many mental health clinicians have conflated clinical evaluation and assessment of DSM criteria in our clinical work, research, and teaching. We often see a clinical evaluation as simply the evaluation of DSM diagnostic criteria. Second, it does not explain the diminution in psychopathological expertise and interest since the advent of DSM-III (4). Third and most importantly, the critique does not address the underlying conceptual problems of diagnostic literalism and reification that arise directly from our category mistake of confusing our fallible diagnostic criteria with the categories they are designed to assess.

CONCLUSIONS

The DSM symptomatic criteria for major depression do a reasonable but incomplete job of assessing the prominent clinical symptoms and signs of depressive illness as described in the Western post-Kraepelinian psychiatric tradition. In their use as diagnostic criteria, this is unproblematic because, across all of medicine, diagnostic criteria are designed to index rather than exhaustively describe a clinical syndrome. That is, criteria need only to identify true cases with sufficient sensitivity and specificity, and not to reflect complete catalogs of important symptoms and signs. But it is problematic when we focus our teaching, our clinical work, and our research solely around DSM criteria. In our teaching, our trainees need to understand that the DSM criteria for depression, while a good place to start a diagnostic evaluation, do not represent all the relevant symptoms and signs that merit evaluation. In our clinical work, we should make an effort to explore the diversity of the depressive experiences of our patients, some of which

clearly lie beyond the bounds of the DSM criteria. For our research, if we focus only on DSM criteria for major depression, how can we further improve on our current criteria?

I suggest that, to many intents and purposes, we have been misusing the DSM diagnostic criteria because we have confused them with the diagnostic entities they are designed to assess. To be explicit, our DSM criteria for major depression are a good index of the clinical syndrome of depression. But, as my historical survey suggests, this depressive syndrome is not entirely constituted by the DSM criteria. Recognizing and correcting this approach to DSM should help us enjoy the many benefits our increasingly researchbased criteria can afford to our field while diminishing its negative effects of reduced interest in our rich descriptive heritage and of excessive diagnostic literalism and reification.

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