On The Implications Of Changing Constructs Of Pain And Addiction Disorders In The DSM-5: Language Games, Ethics, And Action

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Abstract

"…if the term defined is used in different ways and… spoken without distinguishing between them, then it is not clear to which of them the definition rendered applies, and one can then bring a captious objection on the ground that the account does not apply to all the things whose definition he has rendered… for if the expression used is not adequate to the subject in any of its senses, it is clear that he cannot have defined it aright." Aristotle[1]

THE NATURE OF PAIN

The nature of pain – as a symptom, disorder, and manifest illness – gives rise to both certain moral responsibilities of care, and ethical, legal and social issues, questions and problems that affect the pain patient, clinician and profession and practice of pain medicine. I posit that pain reflects the proverbial "mind-body" problem, at least to the extent that the definition and explication of physiological mechanisms of pain fail to capture the phenomenology of pain (i.e. - its noxiousness), or the subjective experience of the pain patient. The subjectivity-objectivity gap is manifest in attempts to assess and treat pain and its resultant effects.[2] Nosological descriptions and categorizations of pain and pain syndromes provide important insights to the pathophysiological substrates that contribute to, and are involved in particular types of pain, and recent efforts to hone these classifications are noteworthy and important.[3,4] Yet, the clinical – and existential – benefit of such nosologies and taxonomies (to the clinician and perhaps most importantly the patient) remain limited without further explanation of the potential biological, psychological – and perhaps social- effects that any pain disorder can- and often will – incur.

Our group and others have posed the viability of a "spectrum construct" that depicts the complexity of substrates and mechanisms that contribute to, and evoke pain as a co-morbid constellation of physical and psychological features, signs and symptoms.[5-7] Our hope is that clarification of these variables will create a more salient description of pain that enables a more meaningful approach to assessment and therapeutics. But however useful such nosological nomenclature may be to pain care, it is still situated within more encompassing descriptive frameworks of medicine, and ultimately society at-large. Thus, it becomes important to consider if – and how – certain terminologies and descriptors are aligned or misaligned with extant terms, concepts and constructs, and the ideas and implications that they generate and/or sustain.

WITTGENSTEIN'S LANGUAGE GAME IN DIAGNOSIS

The philosopher Ludwig Wittgenstein argued that words in and of themselves do not have meaning, per se, but rather, assume meaning through the way(s) that they are used: "…in the practice of the use of language, one party calls out the words, the other acts on them. I shall…call the whole, consisting of language and the actions into which it is woven, the "language-game". Now what do the words of this language signify? – What is supposed to show what they signify, if not the kind of use that they have?" [8]In the context of medicine, diagnosis ascribes to and enables this game. Stemming from the antiquarian Greek diagignoskein – to distinguish, the act of diagnosis links a name to a set of features, frames the term within the boundaries of that set of features, and makes particular claims about what these features "mean". Such "meaning" is imparted by the signification of the diagnostic term to the clinician (i.e.- "what is wrong with this patient and what can and should be

done to treat her?"), the patient (i.e.- "how will this condition affect my life; what do I know of others with this condition?), and to society (i.e.- "patients with this condition are called X, and are viewed in particular ways").[9,10]

Physician-philosopher John Z. Sadler states that in this way, diagnosis (as a verb) is an epistemic act that reveals and interprets information, and (as a noun) is a denotative-signifier that fosters classification.[11] In relating these dimensions of diagnosis to the dynamic relationship between knowing and doing, Jay Rosenberg has argued that "diagnosis demands action", which in the medical context is actualized through the reciprocity of treatment and prognostication (that is, a "knowing ahead" to speculate upon the effects of care upon the future course of illness).[12] However, I have stated before, and re-iterate here that medicine is not enacted in a social vacuum, and therefore it is important to examine the ways that current and proposed diagnostic schemas can affect, and are affected by social and legal meanings, values and attitudes.[7, 13] This becomes evermore meaningful if and when diagnostic architectonics shift, and we are forced to confront changing constructs of normality and abnormality, and the various clinical, cultural and ontological dimensions that are impacted by such distinctions.

THE SHIFTING CONSTRUCTS OF DSM-5

The Fifth Edition of the Diagnostic and Statistical Manual of the American Psychiatric Association (i.e.- the DSM-5) is currently in phase-I field trials, with phase-II trials scheduled for 2011 and 2012. Pending university- and solo practitioner-setting field trials' revision, the DSM-5 is scheduled to be released for open use in mid-2013. The DSM-5 is the culmination of a 10 year planning process that conjoined the American Psychiatric Association, National Institutes of Health (NIH), World Psychiatric Association (WPA) and World Health Organization (WHO) in evaluating the relative merits, limitations, and weaknesses of the DSM-IV, toward developing and implementing a new series of assessment and diagnostic criteria that would be coordinated with International Classifications of Disease (ICD) categories. While the planning committee(s) recognized the benefit of (some level of) continuity with the prior edition of the DSM, it was deemed equally important to de-limit the formulation of clinically useful, research-based new criteria, and thus the scope and extent of changes from the DSM-IV were not restrained, a priori.[14]

In the main, the DSM-5 aims to establish clearer boundaries between normal and pathologic states, assume a more biologically-based (truly nosological) categorization of psychiatric disorders, recognize disorders' spectra, and thereby (1) appreciate signs and symptoms that cut across various conditions, and (2) institute dimensional classifiers that better describe presentation of characteristic features of spectrum pathology. While classifications of the DSM-IV remain unchanged, several categories have been revised, others have been eliminated, and some new classifications are to be added.[15] Although a complete review of the DSM-5 is beyond the scope of this essay, two diagnostic categories of the DSM-IV that will be revised are of particular importance, namely Pain Disorder and Substance Abuse/Dependence, as the implications of these diagnoses directly intersect the conduct and ramifications of medicine, ethics, and law.

PAIN DISORDER AS COMPLEX SOMATIC SYMPTOM DISORDER

The DSM-IVTR diagnosis of Pain Disorder (Associated with Psychological Factors; or Associated with Psychological Factors and a General Medical Condition; see Table 1) will be subsumed under the new broad category of Complex Somatic Symptom Disorder in the DSM-5 (see Table 2).

Table 1:DSM-IV(TR) Categories of Pain Disorder(s)

Pain Disorder Associated With Psychological Factors (307.80): psychological factors are judged to have the major role in the onset, severity, exacerbation, or maintenance of the pain. (If a general medical condition is present, it does not have a major role in the onset, severity, exacerbation, or maintenance of the pain.) This type of Pain Disorder is not diagnosed if criteria are also met for Somatization Disorder.

Pain Disorder Associated With Psychological Factors and General Medical Condition (307.89):both psychological factors and a general medical condition are judged to have important roles in the onset, severity, exacerbation, or maintenance of the pain. The associated general medical condition or anatomical site of the pain is coded on Axis III.

Table 2: Proposed DSM-5 Revisions: Pain (Disorder) as a Component of Complex Somatic Symptom Disorder

Complex Somatic Symptom Disorder (CSSD; to include DSM-IV diagnoses of Somatization Disorder, Undifferentiated Somatoform Disorder, Hypochondriasis, Pain Disorder Associated With Both Psychological Factors

and a General Medical Condition, and Pain Disorder Associated With Psychological Factors)

To meet criteria for CSSD, criteria A, B, and C are necessary.

A. Somatic symptoms: One or more somatic symptoms that are distressing and/or result in significant disruption in daily life.

B. Excessive thoughts, feelings, and behaviors related to these somatic symptoms or associated health concerns: At least two of the following are required to meet this criterion:

(1) High level of health-related anxiety.

(2) Disproportionate and persistent concerns about the medical seriousness of one's symptoms.

(3) Excessive time and energy devoted to these symptoms or health concerns.*

C. Chronicity: Although any one symptom may not be continuously present, the state of being symptomatic is chronic (at least 6 months).

For patients who fulfill the CSSD criteria, the following optional specifiers may be applied to a diagnosis of CSSD where one of the following dominates the clinical presentation:

-Predominant somatic complaints (previously, somatization disorder)

-Predominant health anxiety (previously, hypochondriasis). If patients present solely with health-related anxiety with minimal somatic symptoms, they may be more appropriately diagnosed as having an anxiety disorder.

-Predominant Pain (previously pain disorder). This classification is reserved for individuals presenting predominantly with pain complaints who also have many of the features described under criterion B. Patients with other presentations of pain may better fit other psychiatric diagnoses such as adjustment disorder or psychological factors affecting a medical condition.

For assessing severity of CSSD, metrics are available for rating the presence and severity of somatic symptoms.

Therein, Pain Disorder will remain a sub classification defined as: "…reserved for individuals presenting predominantly with pain complaints who also have many of the features described under criterion B (i.e.- Excessive thoughts, feelings, and behaviors related to these somatic symptoms or associated health concerns.) Patients with other presentations of pain may better fit other psychiatric diagnoses such as major depression or adjustment disorder." [15] While these new categorizations are not problematic per se, I believe that it is important to recall the operational definition of pain provided by the International Association for the Study of Pain (IASP), which states that pain is "…an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage. Pain is always subjective. Each individual learns the application of the word through experiences related to injury in early life. It is unquestionably a sensation…but it is also always unpleasant and therefore also an emotional experience".[16] Thus, the inextricability of the psychological experience and physiological event of pain is important to any construct or conceptualization of its presentation and diagnosis.

While the induction of pain can occur anywhere within the nociceptive neuraxis, its actual sensation and perception is ultimately a brain event; therefore the colloquialism that pain (qua pain; i.e. - as a noxious experience with emotional manifestations) is "in the head" is as matter of fact, not wholly erroneous. This is not to minimize the event or castigate the sufferer (as being factitious or a malingerer); I have argued to the contrary that a deeper and more meaningful appreciation of the neurocognitive and phenomenological dimensions of pain are important to 1) insuring the primacy of patients' best interests in the selection and provision of care; 2) re-establish the multidisciplinary resources necessary to assess and treat pain as a multi-factorial, bio-psychosocial disorder, and 3) de-stigmatize (a) psychiatric and psychological presentations that are co-morbid to pain, (b) psychiatric/psychological approaches to pain care, and (c) the patients who require and obtain these services.[10]

To be sure, the DSM-5 may offer an opportunity to better characterize pain, and in this way might fulfill the role of diagnosis in framing the disorder and determining the type and extent of care required. For example, an Axis I diagnosis of chronic pain as a presentation of CSSD, when coupled to an Axis III general medical condition (such as fibromyalgia) and Axis IV psychosocial stressors would certainly depict pain as a complex, multi-dimensional and multi-symptomatic disorder. However, while the changes proposed

for DSM-5 are intended to clarify diagnosis of pain syndromes, I wonder whether the medical field and its administrative and economic infrastructures (e.g.- insurance providers, etc) are prepared for such change(s). Without a preemptive or at least concomitant shift in the current climate and conduct of pain care to recognize the profoundly interactive physiological and psychological dimensions and presentations of pain (and the pain patient), I fear that the nomenclature and descriptions used to define pain disorders in the DSM-5 might create ambiguity concerning 1) the "reality" of pain; 2) the need for both physiological and psychological care, 3) the type (and exigencies) of pharmacotherapeutics required, and 4) the disposition of economic resources necessary to sustain such approaches.

SUBSTANCE USE, ABUSE, DEPENDENCE AND ADDICTION – WHAT'S IN A WORD?

These issues are brought to the fore when considering the proposed DSM-5 changes to classifications of substance use/abuse/dependence disorders. Without doubt, the categories used in DSM-IV(TR) were less than wholly adequate, and there has been – and continues to be – debate about the validity and merit of terms such as "abuse", "dependence" , and "addiction" in pain medicine, psychiatry and non-psychiatric medical contexts. The intended goal(s) of the DSM work group on Substance Use Disorders was to impart some homogeneity of meaning, and thus clarify the terms used to describe 1) physiological properties of rightward shifts in dose-response effects as a consequence of repeated administration of opioids and other drugs (such as stimulants and cannabinoids) under medical supervision; 2) inappropriate unsupervised use of opioids and other agents (even if prescribed); and 3) physiological and psychological craving and compulsion for opioids and/or other drugs (see Table 3).

Table 3: DSM-5 Proposed Substance Use Disorder (Including Opioids)

A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by 2 (or more) of the following, occurring within a 12-month period:

1. recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use; substance-related absences, suspensions, or expulsions from school; neglect of children or household)
2. recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by substance use)
3. continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication, physical fights)
4. tolerance, as defined by either of the following: a. a need for markedly increased amounts of the substance to achieve intoxication or desired effect b. markedly diminished effect with continued use of the same amount of the substance (Note: Tolerance is not counted for those taking medications under medical supervision such as analgesics, antidepressants, ant-anxiety medications or beta-blockers.)
5. withdrawal, as manifested by either of the following: a. the characteristic withdrawal syndrome for the substance (refer to Criteria A and B of the criteria sets for Withdrawal from the specific substances) b. the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms (Note: Withdrawal is not counted for those taking medications under medical supervision such as analgesics, antidepressants, anti-anxiety medications or beta-blockers.)
6. the substance is often taken in larger amounts or over a longer period than was intended
7. there is a persistent desire or unsuccessful efforts to cut down or control substance use
8. a great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects
9. important social, occupational, or recreational activities are given up or reduced because of substance use
10. the substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance

11. Craving or a strong desire or urge to use a specific substance. Severity specifiers: Moderate: 2-3 criteria positiveSevere: 4 or more criteria positive Specify if: With Physiological Dependence: evidence of tolerance or withdrawal (i.e., either Item 4 or 5 is present)Without Physiological Dependence: no evidence of tolerance or withdrawal (i.e., neither Item 4 nor 5 is present)

Charles O'Brien, chair of the work group, has stated that clarification of these terms will be important to differentiate patterns of drug use observed in chronic pain patients, and that the DSM-5 terminology will useful in ensuring that pain patients are not deprived or denied the proper pharmacological treatment(s) they require.[14,17] I agree with Dr. O'Brien, but remain cautious for a number of reasons. First, is that there is a building body of evidence to suggest that certain pain patients may be predisposed to opioid insensitivity due to pain-induced changes in endogenous analgesic substrates.[18] Such patients may require fairly high doses of opioids – even initially, that must be frequently rotated and/or escalated to elicit therapeutically relevant effect(s).[19] Moreover, stimulants[20] and cannibinoids[21] have been posed as useful adjuncts to potentiate the action, and/or reduce certain side-effects of opioid therapy. While these agents may be medically indicated for pain control, let us not forget that they are controlled substances, and as O'Brien has noted, "…types of physical dependence are completely normal for some medications, such as…painkillers".[14] This undergirds my second concern: Given that the prescription, use, and potential misuse of controlled substances remains one of the most legally contentious areas of pain care, I believe that issues can and will arise if the final accepted nomenclature for these disorders is re-titled Addiction and Related (Substance Use) Disorders, as had been proposed (at one point). As O'Brien, Volkow and Li rightly claim: "…addiction is a perfectly acceptable word" when applied in appropriate medical contexts.[22] However, as these authors note, the term 'addiction" is not only socially pejorative, but may incur medical and legal implications and burdens, as well.

The DSM-5 work group on Substance Use Disorders has "…had extensive discussions on the use of the word "addiction." It has been confusing to physicians and has resulted in patients with normal tolerance and withdrawal being labeled as "addicts." This has also resulted in patients suffering from severe pain having adequate doses of opioids withheld because of fear of producing addiction." [22]Here we once again confront Wittgenstein's language game in practice. The naming, framing and claiming functions of diagnosis can also generate "blaming" effects, and significant problems can arise when a physician (a) is confronted with a patient who has been diagnosed as having "addiction" (and thus labeled "an addict"), and (b) chooses to accept and treat such a patient. The clinician is faced with the "to treat or not to treat" question – and all of the medico-legal ramifications that follow thereafter (potential medical and legal sanctions; dealing with issues of abandonment, etc.).[10]

This speaks to my third concern – the proposed DSM-5 classifications of pain disorders (i.e. - as a Complex Somatic Symptom Disorder), either alone or in combination with Addiction and Related Disorders/Substance Use/Opioid Use Disorder, may implicitly ascribe pain to a psychological malady, and may bias clinicians against 1) the use of opioids, stimulants or cannabinoids, or 2) treating such patients altogether for fear of incurring medico-legal sanction. Of course, addicted patients can suffer pain, and the presence of the former is not prima facie justification for refusing to care for the latter. However, in the current, litigious environment of medicine, this situation is becoming increasingly common, and so the question is not "to treat or not to treat", but how to treat - the pain patient who is using escalated doses of opioids, stimulants and/or cannabinoids - in ways that are biomedically right, ethically sound, and within the parameters of professional guidelines and the law?

An additional issue arising from the DSM-5 classifications of pain and addiction disorders is whether such conceptualization might compel increased reliance upon neuro- and other biotechnologies for diagnosis and medico-legal assessment. Without doubt, technologic advances in genetics, proteomics, neuroimaging (e.g.- functional magnetic resonance imaging, fMRI), and neurophysiological testing (e.g.- quantitative encephalography, qEEG; magnetoencephalography, MEG; functional near infrared analysis, fNIR etc) are important to pain care.[23] However, the current iterations of these approaches at best can afford only inferential information toward establishing diagnoses of pain and addictive disorders: Definitively predictive genetic models of human pain are as yet lacking[24], reliable phenotypic biomarkers for pain remain elusive[25], and while neuroimaging and neurophysiological technologies enable

detailed depiction of the living brain, here too caution must be taken in interpreting what such images actually "mean".[26] In all, recognition of the capabilities as well as the limitations of these (or any) techniques and technologies is fundamental to right and good use. Yet, as we have recently noted, there is a growing tendency to rely upon technology to provide objectivity, and by extension, a sense of security in assessment, diagnosis, and the decisions and actions of care.[27,28]. I expect that this will only increase given the medico-legal and economic contingencies arising from the DSM-5 categorizations of pain and addiction. Simply put, the higher the stakes, the greater the perceived need for certainty. This can increase the potential for inappropriate use of such neurotechnologies, and/or interpretation of the findings they yield[10, 23,28] and bolsters the need for a progressive and cosmopolitan neuroethics to analyze and address such issues, and guide the scope and conduct of pain research and (multi-disciplinary) therapeutics (inclusive of addiction medicine and psychiatry).[29]

FROM WORDS…CHOICES AND ACTIONS – A CALL FOR RESPONSIBILITY

The DSM-5 has been developed to enhance diagnostic acumen, and in so doing, establish better criteria from which to plan and execute clinical care. But, it is important to address whether medicine is prepared to accept the responsibilities of providing and insuring care for newly defined disorders. Ceteris paribus, classifying pain as a complex somatic symptom disorder is at least semantically appropriate, as this reflects the activity and effects of multiple neural, endocrine, and immunologic (i.e.- somatic) substrates. Similarly, identification of the role and effects of psychological factors in pain is critical to both its definition and treatment. The same can be said of substance use disorders and addiction. Clarifying diagnostic terms is vital to standardize what they signify. But all things are not equal, and the circumstances, effects and implications of medical care (or the lack thereof) extend beyond mere face value. Establishing diagnostic definitions for conditions that the medical establishment is unprepared – or unwilling - to treat is at best little more than an exercise in futility, and at worst can be seen as morally opprobrious and ethically irresponsible. As Rosenberg has claimed, diagnosis demands action.[12]

I opine that such action could assume positively or negatively valent trajectories in medicine, ethics, and law, and thus this is a crucial period - a time of change – that demands prudent reflection, analysis and articulation. The changes proposed by the DSM-5 should be seen as a call for significant revision in the scope and conduct of pain care – if not medicine at-large. We have described particular steps that could be taken to establish and sustain multi-disciplinary, bio-psychosocial pain management that integrates general internal medicine and various specialties (e.g.- pain medicine, psychiatry, neurology, physiatry, addiction medicine, and allied health practices) to provide a form of personalized care.[30] But for this system to be meaningful, feasible and operational requires the conjoint participation of the economic and administrative infrastructures of medicine, as well as the development and implementation of supportive guidelines, policies and law(s).[31-33] To paraphrase Wittgenstein, once we engage the language game, we are bound both by its rules and by its compelling us to act.[8] Instantiating new diagnoses may be important to both physicians and patients, but if – and only if – medicine as a profession and practice is empowered and enabled to care for those conditions that have been characterized.

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