



Is psychiatry an unscientific mess?



If you should suddenly experience headaches, double vision and balance problems, your doctor might order an MRI, revealing the presence of a life-threatening glioblastoma.

Or, if you're suffering from dry eyes and dry mouth, a physician might be prompted to perform a blood test for Sjögren's antibodies, rendering a diagnosis of Sjögren's Syndrome.

These are examples of triumphs of the biomedical model of disease, which lends itself to a taxonomy of distinct conditions that are amenable to diagnosis. Once pigeon-holed, they can be treated according to science-based guidelines.

But psychiatry is different, although it attempts to hew to the same paradigm that enables us to classify physical ailments, like an ungainly toddler unsuccessfully mimicking the behavior of its more mature older sibling.

In psychiatry, there is no instrument that is even the equivalent of the simple blood pressure cuff—which registers the potential for a stroke—to predict, for example, the likelihood of suicide by precisely quantitating a patient's degree of depression.

There are no blood or urine tests to accurately measure neurotransmitters, no brain scans to differentiate psychiatric disorders.

In 2013, the American Psychiatric Association published the encyclopedic DSM-5, the fifth edition of its Diagnostic and Statistical Manual.

Critics of DSM-5 argued that the expansion of diagnostic criteria may increase the number of "mentally ill" individuals and/or pathologize "normal" behavior, and lead to the possibility that thousands of individuals will be unnecessarily stigmatized and receive inappropriate psychiatric medication.

Two former heads of the National Institute of Mental Health (NIMH) recently weighed in on the muddled state of psychiatric diagnosis:

"At best, [the DSM is] a dictionary, creating a set of labels and defining each. The weakness is its lack of validity. Unlike our definitions of ischemic heart disease, lymphoma, or AIDS, the DSM diagnoses are based on a consensus about clusters of clinical symptoms, not any objective laboratory measure. In the rest of medicine, this would be equivalent to creating diagnostic systems based on the nature of chest pain or the quality of fever. Indeed, symptom-based diagnosis, once common in other areas of medicine, has been largely replaced in the past half century as we have understood that symptoms alone rarely indicate the best choice of treatment."

All the more troubling because one in five Americans takes at least one psychiatric drug—and many are subject to risky polypharmacy with two or more drugs simultaneously.

And when it comes to dishing psych meds, it's often a matter of trial and error.

Typically, to obtain a psychiatric diagnosis, you have to meet a preponderance of a large number of criteria elaborated in the DSM. But these criteria, while giving the impression of scientific rigor, are mostly subjective and their predictive accuracy is hard to replicate in studies.

For example, a study of ADHD revealed that there were 116,200 possible combinations of symptoms that could land you a diagnosis of hyperactivity; in comparing two samples of kids in Brazil diagnosed with this condition, there was only a 2.6% overlap between the groups. "We also found that the number of ADHD symptoms is a poor indicator of variation in the general ADHD latent trait."

Another study looked at "major depression". It revealed that highly trained specialist psychiatrists could only agree on a diagnosis between 4 and 15% of the time. And this was for *major* depression, not merely garden variety low mood, but rather a condition that causes serious disability and poses a high risk for self-harm.

Just last week a headline in *ScienceDaily* declared "Psychiatric diagnosis 'scientifically meaningless'". It summarized the findings of a study in *Psychiatry Research* entitled "Heterogeneity in psychiatric diagnostic classification".

"Heterogeneity" is what you get when a drunk patron tries to hit a dartboard in a pub. It's the opposite of "Precision Medicine"—particularly disconcerting when psychiatrists wield a dangerous arsenal of potent psych meds with many harmful side effects.

The University of Liverpool authors summarize their findings in a press release:

- Psychiatric diagnoses all use different decision-making rules
- There is a huge amount of overlap in symptoms between diagnoses
- Almost all diagnoses mask the role of trauma and adverse events
- Diagnoses tell us little about the individual patient and what treatment they need

In lieu of the current rigid psychiatric taxonomy, they offer this solution: "*A pragmatic approach to psychiatric assessment, allowing for recognition of individual experience, may therefore be a more effective way of understanding distress than maintaining commitment to a disingenuous categorical system.*"

Or, to put it another way, how can we consign an elderly female who is mourning the loss of a life partner of 50 years to the same diagnostic box as a teenager who is cutting as a form of self-injury? And then compound the problem by administering the same medications to both?

I loved the comments of the study's lead author, Dr. Kate Allsopp: "Although diagnostic labels create the illusion of an explanation, they are scientifically meaningless and can create stigma and prejudice. I hope these findings will encourage mental health professionals to think beyond diagnoses and consider other explanations of mental distress, such as trauma and other adverse life experiences."

Perchance a role for orthomolecular targeting of mood disorders with diet and nutritional supplements? Bio-identical hormone replacement? Exercise? Stress reduction? Therapy tailored to patients' genetic profiles? Leveraging the brain-gut axis via microbiome modulation? One can only hope!

It's a clarion call for bringing *Intelligent Medicine* to psychiatry!