Higher Reliability? Higher Validity?

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Diagnostic Statistical Manuel (DSM), most popular candidate for “best seller” in clinical psychiatry, is solely based on subjective expressions of experiences and mental states of the patients. Thinking DSM as a kind of “classification” guideline, this guideline has been expected to be shaped by neuroscience and also “guide” future researchs. First published in 1952, DSM; proposing a line from “symptoms” to “syndromes” and ultimately to “disorders” could not construct a dialogue between neuroscience and clinical psychiatry despite of remarkable neuroscientific improvements. Diagnostic procedures still rely on assumption that subjective definitions of the symptom clusters reflect directly “valid” disorders. DSM III (1980) introduced a neo-kraepelinian view and an expactancy for illumination; as a direct consequence of “positivism”; however 36 years thereafter agnostic attitude of clinical psychiatry towards neuroscience continues.

DSM has been designed for a solution to overcome the interrater reliability problem. Could we solve this reliability problem with DSM? Kraemer et al. (1) discussed this problem in their articles “DSM-5: how reliable is reliable enough?” and pointed the importance of the intraclass correlation coefficient. According to the authors most reliable diagnoses have a kappa coefficient reaching 0.5 a mean of total incidental observations with kappa 0 and 100% reliable observation with kappa 1. However epidemiological researches in the field yield not proper results. According to Allen Frances from Duke University (2) kappa coefficient in psychiatric diagnoses and moreover kappa coefficient of some psychiatric diagnoses are less than acceptable level and show a downward trend. For example it is 0.3 for major depressive disorder, 0.4 for alcohol use disorder, 0.2 for generalized anxiety disorder and a coefficient between 0.3-0.4 for personality disorder. As a result we have to discuss the cost benefit of discarding the diagnostic validity at the expense of diagnostic reliability.

There has been always a debate regarding the priority of reliability or validity. Prior to DSM III Spitzer (3) and his friends supported the priority of reliability. Spitzer defined his view as: “A reliable diagnosis could not be valid, but an unreliable diagnosis is always invalid” at the beginning of 70’s. Robins and Guze (4) proposed that schizophrenia with good and worse prognosis could reflect different disorders. This research criteria thereafter served for diagnostic validation. Ultimately in DSM-5 Kenneth Kendler et al. (5) updated the view og Robins and Guze; added “neuroscinece” to diagnostic validation categories. For validation of the diagnosis some biological markers (neuroimaging, genetic, and findings from molecular biology) should be admitted. DSM 5 will yield us optimistic results following ideas of Robins and Guze leading today.

The opposing view also stemmed from a strong argument. Harvard professor Hyman (6) identified the fundemental problem in psychiatric diagnoses as the ‘reification problem’. Familial aggregation studies, genetic and neuroimaging research suggested in common that different DSM diagnoses had more similar characteristics than previously beleived and research studies that are carried out on subjects enrolled upon these diagnoses may not probably say more. In Hyman’s words the DSM system created an unintended epistemic prison that was palpably impeding scientific progress.

A few weeks before the publication of the DSM-5, director of the US National Institute of Mental Health, Thomas Insel published a blog post critical of the DSM methodology (7). He wrote that the goal of the DSM-V, as with all previous editions, is to provide a common language for describing psychopathology. While DSM has been described as a “Bible” for the field, it is, at best, a dictionary, creating a set of labels and defining each. The final product (DSM-V), according to Insel, involves mostly modest alterations of the previous edition, based on new insights emerging from research since 1990 when DSM-IV was published and Patients with mental disorders deserve better. DSM-V seems not to have embraced neuroscience and not to have achieved a scientific leap similar to the one from Newton’s to the quantum physics whitnessed in early 20th. century. Besides, the humanistic transformation in psychology may guide psychiatrists. That is minor deviations in theory may lead to major changes in human psyche and psychiatric wisdom must bring forward a humanistic approach focusing on individual needs of patients rather than a classification made upon diagnostic systems.
We think that most issues highlighted in this paper are solvable. The first step to take may be to prioritise dimensional approach especially in etiology oriented research. Research studies should not look at psychopathology only through the DSM lens. Target symptom approach, spectrum approach and dimensional approach are promising alternatives. It may be necessary to start everything all over. The research domain criteria project initiated by the US-NIMH is also a promising effort (8) and we definitely need similar endeavor in our country.

REFERENCES