The Impact of Diagnostic Uncertainty in Modern Psychiatry

OPINION

Abstract

Diagnosis remains a crucial aspect of treatment, prognosis, and recovery, and therefore indispensable for any progress in medicine. Psychiatry, the branch of medicine focused on mental health, has evolved significantly over the decades. However, more than any other branch of medicine, psychiatry is still in a stage of early evolution – defining diagnosis and treatment, and its delivery to patients. Despite research investment, funding of specialist institutions and development of a highly qualified workforce, the progress in alleviating the mental distress in the community remains disappointingly suboptimal. It is thought that the significant expansion of diagnoses in psychiatry, often without firm scientific evidence, is one of the reasons behind the apparent lack of progress in provision of adequate mental health services.

Diagnosing psychiatric conditions remains a complex and nuanced process. Unlike other medical specialties, psychiatry lacks definitive biological markers for most conditions, relying heavily on subjective assessments, patient self-reports, and behavioural observations. This introduces several diagnostic dilemmas that challenge even the most experienced clinicians.

As the advent of disease specific treatment protocol heightens the necessity of accurate diagnostic procedures, this article explores the familiar challenges in modern psychiatric diagnosis and highlights their implications for patients as well as healthcare providers. Despite promising research, no single biological marker has yet been unequivocally identified for mental disorder.

Keywords
Diagnosis, DSM, neuroscience, medicalisation

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Background

The timely and appropriate help available for mentally health is still suboptimal, despite investments in research, funding of institutions, and development of a highly skilled work force. Although commonly occurring mental disorders have remained stable in Australia between 2001-2014, the proportion of working age population receiving disability pension for psychiatric conditions has risen dramatically for the same period. [ref7] It is postulated that lack of progress in alleviating the mental distress in the community is not only due to a prevention gap and lack of quality services, but also due to an expansion of diagnoses in psychiatry, often without firm organic or scientific evidence.[1]

The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) topped the UK's best seller list for non-fiction books among the general population in 2022, posing a challenge the exclusive role of psychiatrists, for making a mental health diagnosis. It was a wakeup call for psychiatry as a branch of modern medicine. DSM makes some of life's misfortunes diagnosable as a disease, and implicitly offers psychiatry as the cure of unhappiness. Diagnosis is made rapidly and often inaccurately, based on a checklist of symptoms, instead of exploring the circumstances, and therefore resulting in the false promise (via pharmacotherapy) for most of life's problems, which Freud would have called '*normal human unhappiness*.'[2] It is common for a patient to get multiple diagnoses for the same problem.[3]

Psychiatry is at the beginning of a long quest for an organically robust diagnostic procedure and falling behind the other branches of medicine. Nevertheless, the contributions of fast-growing neuroscience in the advancement of psychiatry cannot be ignored, finally identifying the biological markers and objective appraisal of symptoms. As most mental disorders are dimensional, it is crucial to identify as at what stage normality changes into pathology.

There has been a marked increase in the diagnosis of depressive disorders with use of antidepressants. The second most common diagnosis is 'bipolar disorder' which can be self-diagnosed with increasing mental health literacy, and use of *artificial intelligence algorithms* to justify irrational behaviour. Bipolar two was inserted into DSM IV, characterised by hypomania. Bipolar 3 though not yet listed in DSM V, is wait listed.

Resistant depression is often interpreted as underlying bipolar disorder encouraging multiple trials of psychotropic drugs with a growing cluster of adverse effects. The diagnosis of post-traumatic-stress disorder can be a genuine pathological response to a trauma and a legitimate diagnosis, though appears to have expanded to epidemic, since the COVID-19 pandemic. It appears to have compromised the sense of responsibility for self-care and natural resilience, encouraging the culture of blame and victimhood.

Medicalisation of attention deficits both in adults and children, through the diagnosis of Attention Deficit Hyperkinetic syndrome has reached epidemic level. Although some children are helped in their disruptive behaviour with psychostimulants, it does not necessarily validate the diagnosis, which is a syndrome: not a disease. It seems like collection of disruptive behaviours and conduct disorder in all its forms. There are other forms of disorders, which have steadily gained the centre stage in twenty first century. Borderline personality disorder and self-harm, autism spectrum and multiple forms of anxiety disorders are, to name a few.

Psychiatric diagnoses is sometimes driven by patient's expectations, to

formalise their adversity beyond their control, into acceptable frame of diagnosis.[4] DSM has been criticised for its medicalisation of normal human experiences, compromising the integrity of those involved and even the conceptual basis of psychiatric diagnosis, and even the need for diagnosis at all. It is important to remember that diagnosis alone is insufficient in conceptualising psychopathology in any individual patient.

During the first half of the twentieth century psychoanalytical approach did not require a diagnosis. It was not till early 1950s that psychiatry started developing diagnostic entities based on medical model of symptoms signs, aetiology, and pathology. This led to the World Health Organisations publication of International Classification of Disease (ICD) followed by the American Psychiatry Association's DSM in 1952. As the aetiology was not known, most of the psychiatric abnormalities were called disorders or syndromes: merely symptoms making it ambiguous. The fragmentation of psychopathology into considerable number of disorders created conceptual confusion.

There is paucity of biological markers and gold standards in psychiatry. Nevertheless, decades of research on biological markers have shown some promising results, although no single biological marker has been unequivocally identified for mental disorders. In a seminal paper Goodwin and Guze asserted that '*diagnosis is prognosis'*. Validation in psychiatric diagnosis is an ongoing process though the patient requires immediate alleviation of their sufferings. The course and progression of illness, response to treatment and more evidence becoming available provides valuable information, to confirm or refute the diagnosis.

One of the challenges in psychiatry is that the patient may not be the person who complains. Structured interviews and rating scales may standardise the accurate diagnosis by covering all areas of psychopathology though most clinicians. seldom use them not only due to the time required to complete it, but it is cumbersome, complicated, requires training and experience and most of it, undermines developing rapport with the patient.

Rating scales requiring less time and reliable outcome are believed to be available, though cannot replace an astute assessment by an experienced psychiatrist. External validation, like various functional brain imaging techniques, hold promise for diagnosis and predicting treatment, though these cannot be immediately translated into clinical practice. However, computed tomography and magnetic resonance imaging are used to exclude stroke, multiple-sclerosis, and trauma etc. Likewise hormonal levels can exclude the organic causes of depression or anxiety as it is in thyroid dysfunction. Physical symptoms of psychiatric illness and vice versa may prolong the determination of final diagnosis, which uses many validity criteria. [5]

A robust psychiatric diagnosis provides understanding of psychosocial factors and the context of the illness in addition to presenting symptoms and signs. Diagnosis carries ethical implications including stigma and changes in self-concept. Therefore science, art and ethics need to be integrated to provide a complete assessment. Clinicians prefer a categorical approach embodied in current classification, while researchers are more likely to adopt continuum or dimensional view of the variation of symptomatology. Therefore, conceptual reconciliation may be the best way to harmonise the blurred boundaries of the clinical hybrids like schizoaffective, pseudo-neurotic schizophrenia, latent or attenuated psychiatric syndromes and schizotypal personality etc.[6.] Some environmental factors may contribute to several

different syndromes like shared genetic variation of common single nucleotide, to schizophrenia, major depression, bipolar disorders and seemingly unrelated disorders like ADHD, autistic spectrum, intellectual disability, and epilepsy.

An article in Psychiatric Research in July 2019 concluded that 'it is worthless as a tool to identify the discrete mental health disorders, as it tells little about the individual patient and the treatment they need. They mask the role of trauma and the adverse events, there is huge amount of symptom overlap between the diagnoses, and different decision-making rules are used for all the diagnoses. Identifying a characteristic clinical description of a psychiatric illness is a challenge as illnesses not always emerge fully formed to align with the criteria of the diagnostic manuals which also changes with each revised version based on consensus.

Epidemiology

Frequency of diagnosis in 1980s was influenced by availability of psychotropic medications, deinstitutionalisation, new providers of psychotherapy like counsellors and expansion of psychiatric services to community base, third party payers like private and public health insurances. Educational, occupational, and economic progression and de-stigmatisation of mental illnesses has also increased the frequency of diagnoses.[8] Increased population size, higher level of psychosocial stresses and mental health literacy with misuse of the words like anxiety and depression may have also increased the common mental health disorders. 1990s was declared as the '*Decade of the Brain'*, in order to enhance public awareness of the benefits, to be derived from brain research implying that the treatment must be sought from a medical doctor, changing the attitude about causes and treatment. The last four decades have witnessed an increase in the field of psychiatric epidemiology. Close to 20% of the population meet the criteria of common mental health disorders and 29% lifetime prevalence. Females have a high prevalence rate of anxiety and mood disorder and males had more substance abuse disorder.[9] Thus common mental disorders often showing comorbid patterns are highly prevalent.

Diagnostic Stability

Diagnostic changes over time may reflect evolution of an illness, emergence of latest information or unreliability of the measurements, although there is a tendency of maintaining same diagnosis over time.[10] In a survey of 2134 male psychiatric patients discharged from single treatment facility in 1954, 1964 and 1974 concluded that proportion of affective disorders increased 3 folds with significant increase in schizophrenia diagnosis, while neurosis went down from largest to lowest group. The reasons may be that similar symptoms interpreted differently at different historical times of increased clinical knowledge and improved treatment.[11]

In another study, eighty-five charts of patients, whose diagnosis changed at least once between 1977-1981 were compared with another randomly chosen charts, where diagnosis during the subsequent admissions remained stable. Seventy-six percent changes occurred from one to another diagnostic category and remained stable. 78% of manics, 73% schizophrenia, 45% of depressives and only 31% of neurotics retained their original diagnosis. More schizophrenics became manic, rather than reverse. Patients with unstable diagnosis were more often readmitted.[12] In one study half of the diagnosis changed over a period of four years. Diagnoses given during successive admissions of four major psychiatric illnesses, schizophrenia, depression, dementia, and alcoholism had stability around 70% and others below 50%.

Overall stability of psychiatric diagnosis was 58%. [13] Baca- Garcia et al concluded that their findings were an indictment of our current psychiatric diagnostic practice.[14] The study, which was followed up for twelve years, found, 29% consistency for specific personality disorders, 70% for schizophrenia and 50% for bipolar affective disorders. The main variable in diagnostic stability of most prevalent psychiatric illnesses was the clinical setting, in which the patient was assessed like outpatient, inpatient or emergency room. In a New Zealand study high stability of 86% was found in substance abuse disorder, 70% in anorexia nervosa, 67% both in schizophrenia and affective disorders, 36% personality disorder, 22% other psychosis and 20% for neurosis.[15] There are obvious issues with the diagnosis made in the case of adolescents and children for the first time which are frequently unstable and temporary and most stable diagnoses continued in adulthood.

Overlapping Symptoms

A significant challenge in psychiatry is the symptom overlap among various mental health disorders. For instance, symptoms like fatigue, sleep disturbances, and concentration difficulties are seen in depression, anxiety disorders, and PTSD. Similarly, irritability can be a feature of bipolar disorder, borderline personality disorder, or even generalized anxiety disorder. This overlap complicates the diagnostic process, often leading to misdiagnosis or delayed treatment. For example, a patient presenting with depressive symptoms might receive a diagnosis of major depressive disorder, only to later reveal manic or hypomanic episodes indicative of bipolar disorder. Misdiagnosis in such cases can result in inappropriate treatment, such as prescribing antidepressants without mood stabilizers, potentially worsening the patient's condition.

Comorbidity: Rule Rather Than Exception

It is common for patients to meet the diagnostic criteria for multiple disorders simultaneously. For example, major depressive disorder often coexists with generalized anxiety disorder, while substance use disorders frequently accompany conditions like PTSD or bipolar disorder. The presence of comorbidities complicates treatment planning, as each disorder may require a different therapeutic approach. Furthermore, symptoms of one disorder can exacerbate those of another, creating a vicious cycle. For instance, substance use might worsen anxiety symptoms, while anxiety might drive increased substance use, making it difficult to determine which disorder should be prioritised in treatment.

Cultural and Social Influences

Cultural and societal factors play a crucial role in the presentation and interpretation of psychiatric symptoms. Behaviours considered pathological in one culture may be seen as normal or even virtuous in another. For example, hyper-religiosity or spiritual experiences might be interpreted as delusional in one cultural context but as meaningful and normative in another. Moreover, stigma associated with mental illness varies across cultures and can influence how patients report their symptoms. In some societies, individuals may somatise psychological distress, presenting with physical symptoms such as headaches or gastrointestinal issues rather than emotional complaints. This can lead to underdiagnosis or misclassification of psychiatric disorders.

Influence of Diagnostic Criteria

The DSM and the ICD serve as the primary tools for psychiatric diagnosis. While these systems provide a standardized framework, they are not without limitations. One major criticism is their reliance on symptom checklists, which can oversimplify complex conditions. For instance, two individuals

with the same diagnosis may exhibit vastly different symptom profiles and levels of impairment. The categorical nature of the DSM also fails to account for the dimensional nature of many psychiatric symptoms, where severity exists on a spectrum rather than in discrete categories. Additionally, the periodic updates to these diagnostic systems sometimes introduce controversies. For example, the removal of the bereavement exclusion in major depressive disorder in the DSM-5 sparked debates about pathologizing normal grief. Similarly, the introduction of new diagnoses, such as disruptive mood dysregulation disorder (DMDD), has raised questions about over-diagnosis and medicalization of childhood behaviours.

Organic vs Psychiatric Causes

Many medical conditions and substances can mimic psychiatric disorders, adding another layer of complexity to diagnosis. Hypothyroidism, for instance, can present with depressive symptoms, while hyperthyroidism can mimic anxiety. Similarly, certain neurological conditions like temporal lobe epilepsy or multiple sclerosis can cause mood changes, psychosis, or cognitive deficits. Substance use, whether acute intoxication, withdrawal, or chronic use, can also produce symptoms resembling primary psychiatric disorders. For example, stimulant intoxication can mimic mania, while alcohol withdrawal can present with anxiety or even hallucinations. Without thorough medical and substance use history, these cases are prone to misdiagnosis.

Diagnosing Personality Disorders

Personality disorders are among the most debated and misunderstood conditions in psychiatry. These disorders involve enduring patterns of behaviour, cognition, and emotional regulation that deviate from societal norms. However, distinguishing between a personality disorder and other psychiatric conditions can be challenging, especially in the context of comorbid mood or anxiety disorders. For example, borderline personality disorder (BPD) often overlaps with mood disorders, leading to confusion in diagnosis. A patient with BPD may experience mood swings that superficially resemble bipolar disorder, but these mood changes are typically shorter in duration and linked to interpersonal stressors. Mislabelling BPD as bipolar disorder or vice versa can lead to inappropriate treatment strategies.

Paediatric and Adolescent Diagnoses

Diagnosing psychiatric conditions in children and adolescents presents unique challenges due to developmental variations. Symptoms that might signify a disorder in an adult could be part of normal development in a child. For instance, impulsivity and hyperactivity are hallmarks of attention-deficit/hyperactivity disorder (ADHD) but can also be typical behaviours in young children. Moreover, children may struggle to articulate their experiences, leading to reliance on parental or teacher reports, which can be biased or incomplete. The potential for over-diagnosis or under-diagnosis is particularly high in this population. For example, ADHD is sometimes over-diagnosed, especially in young boys, while conditions like anxiety or depression might be under-recognized.

Technology and Artificial Intelligence

Advancements in technology and artificial intelligence (AI) offer promising tools for psychiatric diagnosis but also introduce new dilemmas. AI-driven diagnostic tools rely on algorithms trained on existing data, which may carry inherent biases. For instance, if the training data over-represents certain demographics, the AI system might perform poorly for underrepresented.
groups. Additionally, while digital mental health apps and online assessments provide accessibility, they lack the nuanced understanding that comes from clinical training. Over-reliance on such

tools could lead to over-diagnosis, under-diagnosis, or misdiagnosis.

Stigma and Patient Reluctance

Stigma surrounding mental health remains a barrier to accurate diagnosis. Many patients minimise or conceal their symptoms due to fear of judgment or discrimination. This is particularly common in conditions like schizophrenia, bipolar disorder, or substance use disorders. Moreover, internalized stigma can affect how patients perceive and describe their experiences. For instance, a person with severe depression might attribute their symptoms to personal weakness rather than a treatable condition, complicating the diagnostic process.

Ethical Concerns in Psychiatric Labelling

Assigning a psychiatric diagnosis carries significant ethical implications. While a diagnosis can guide treatment and validate a patient's experiences, it can also lead to stigma, discrimination, and self-identification with the disorder. For example, a diagnosis of schizophrenia might limit a patient's opportunities for employment or housing due to societal misconceptions. Moreover, some clinicians hesitate to diagnose certain conditions, like personality disorders, due to their potential to influence how others perceive the patient, including within the healthcare system. Striking a balance between the benefits and risks of diagnostic labelling is an ongoing dilemma.

Conclusion

Diagnosing psychiatric disorders is a complex process influenced by biological, psychological, cultural, and social factors. The challenges outlined in this article underscore the importance of a patient-centred approach, where clinicians consider the individual's unique experiences and context rather than relying solely on diagnostic criteria. Continued research into the biological underpinnings of psychiatric disorders, along with advancements in diagnostic tools, holds promise for the future. However, until definitive biomarkers are discovered, the art and science of psychiatric diagnosis will remain a delicate balancing act, requiring empathy, clinical expertise, and an awareness of the limitations inherent in the field. By addressing these diagnostic dilemmas with thoughtful strategies and a commitment to individualized care, psychiatry can better serve patients and advance the understanding of mental health conditions.

There has been widespread criticism of psychiatric diagnosis around the world, for its precise base of the checklist of symptoms in conceptualising psychopathology; it is widespread inclusion of normal human unhappiness, and the diagnostic instability of changing and multiple diagnoses. Patients with unstable diagnoses are readmitted more often.

Despite promising research no single biological marker has been unequivocally identified for mental disorder, which remains the most significant factor in challenging the debate of psychiatry as science-based field of medicine.

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