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The stigma associated with mental health and wellbeing often acts as a barrier for individuals to seek help.

Mental health – a slow paradigm shift in stigma, diagnostics and treatment

"1 in 4 people are affected by a mental health condition at some point in their lives. By 2030 depression will be the leading cause of disease burden globally."[1]
World Health Organization

Individuals with mental health conditions may be at risk of not receiving adequate treatment due to factors ranging from access to mental healthcare, limited public and mental health resources and stigma. The stigma associated with mental health and wellbeing often acts as a barrier for individuals to seek help.

Current global trends are focusing on removing the stigma associated with mental health conditions, improving access to appropriate care and social support, research dedicated to alternative or advanced treatments and the role of genomics in mental health.

This article will provide an update on three mental health trends: stigma, new research focusing on diagnostics and the growing role of genomics in this space.

A mark of disgrace

The word stigma, originating from 16th century Latin, refers to a mark made on the skin by pricking or branding as punishment for a criminal, a mark of subjection or a mark of disgrace associated with a particular circumstance, quality, or person.[2] Over the years, many medical conditions have been subject to "a mark of disgrace" – HIV, mental health disorders, infertility, alcoholism, intellectual and learning difficulties to name a few.

The stigma faced by individuals with mental health conditions remains a global public health challenge.[3] Such individuals are at risk of not getting adequate treatment because the very subject remains taboo in some areas of society and is not spoken about honestly and openly. This naturally leads to missed opportunities for health education, promotion and intervention.

Admittedly, this situation is further confused by the complex multifactorial nature of mental ill health, given that it involves an interplay between neuroscience, genetics as well as environmental, psychological and social risk factors. All of this is complicated by societal lack of education and insight into mental health conditions, often leading to misconceptions about mental health and thereby

[1] https://www.who.int/mental_health/action_plan_2013/mhap_brochure.pdf?ua=1
[2] See https://www.oxfordreference.com/view/10.1093/oi/authority.20111007171501221

[3] See Egbe, C.O., et al. Psychiatric stigma and discrimination in South Africa: perspectives from key stakeholders. BMC Psychiatry 14, 191 (2014) doi:10.1186/1471-244X-14-191

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perpetuating negative impacts on quality of life for many people with mental health disorders and their families.

A South African study researching the prevalence/existence of psychiatric stigma found that individuals with mental health conditions were subjected to psychiatric stigma in the form of discrimination by healthcare providers, family members and members of their communities. The resultant deficiencies in the quality of healthcare provided to these individuals and their strained interpersonal familial and wider relationships led to neglect or abuse and dismissive misconceptions that mental health conditions are signs of weakness.

The effects of stigma on individuals with mental health conditions are numerous and pervasive. These can include difficulties in accessing the job market, societal marginalisation, poor social skills, unstable housing options, poor self-esteem, comorbid depression, anxiety[4], … – the list is long and often has compounding effects.

Call to action

In the last decade, there have been various awareness campaigns highlighting the ongoing challenges faced by people living with mental health conditions – particularly around stigma and access to healthcare. Prominent organisations like the WHO released their 2013-2020 mental health action plan that focuses on reducing stigma, improving access to healthcare, strengthening information systems, evidence and research into mental health and improving governance and leadership in mental health.[5]

Sporting associations like the National Basketball Association (NBA) are implementing mental health guidelines and access to mental health care professionals is mandatory for all the teams.[6] In the United Kingdom, the Football Association and the charity Heads Together launched a campaign aiming to encourage conversations about mental health and reduce the stigma associated with mental health conditions.[7] The social media platform Instagram[8] also started a campaign called #Hereforyou with the aim of reducing stigma associated with mental health. Reducing or challenging stigma, negative stereotypes and taboo labels through education, conversations, research and awareness is essential to improve the quality of lives of individuals with mental health conditions and those affected by them – a development that is gaining traction and most likely to accelerate over the next few years.

We can expect to see more disclosures at the underwriting stage as well as claims relating to mental health conditions as the stigma decreases and treatment is more readily sought. It is therefore important for underwriters, claims assessors and product developers to keep updated on developments in mental health so as to ensure that individuals with mental health conditions are subject to fair industry practices.

Diagnostic tools

Mental health and mental health conditions result from a complex interplay between genetics and biopsychosocial factors. A challenge noted in literature is the clinical and biological heterogeneity in diagnosis, along with high rates of additional psychiatric comorbidities. Classification of mental health conditions is therefore key to correctly diagnosing and selecting suitable and efficacious treatment. The Diagnostic and Statistical Manual of Mental Disorders (DSM) aims to characterise mental health conditions with reference to age of onset, clusters of symptoms, frequency of episodes, medical comorbidities and psychiatric comorbidities as well as other additional specifiers in order to correctly diagnose and develop a suitable treatment plan.

In order to understand the complex interplay between genetics and biopsychosocial factors, the Research Domain Criteria (RDoC) initiative attempts to link psychiatric phenotypes to underlying biological structures and genetic predispositions across the current DSM 5 taxonomy.[9] Apart from genetic research (discussed later), researchers are focusing on biomarkers (genetics, neuroimaging, neurochemistry, neuroendocrinology and inflammation) to help define a "neural signature" for depression, for example, or to assist in differentiating between depression and bipolar disorder.[10] As seen in other medical disciplines, usage of biomarkers greatly assists in diagnosis, measuring treatment

[4] See Egbe, C.O., et al. Psychiatric stigma and discrimination in South Africa: perspectives from key stakeholders. BMC Psychiatry 14, 191 (2014) doi:10.1186/1471-244X-14-191
[5] See https://www.who.int/mental_health/action_plan_2013/en/
[6] See https://www.medscape.com/viewarticle/923347
[7] See https://blog.globalwebindex.com/marketing/mental-health/

[8] See https://blog.globalwebindex.com/marketing/mental-health/
[9] See https://www.nimh.nih.gov/research/research-funded-by-nimh/rdoc/about-rdoc.shtml
[10] See Dunlop BW, Mayberg HS. Neuroimaging Advances for Depression. Cerebrum. 2017;2017:cer-16-17. Published 2017 Nov 1

outcomes and adding objectivity to the condition. Recently, a large-scale functional magnetic resonance imaging (fMRI) study of patients with major depression reported neurophysiological subtypes in depression, which may also predict response to transcranial magnetic stimulation therapy. [11] Apart from neuroimaging, blood-based biomarkers are also being researched. Increased levels of C-reactive protein (CRP) have been associated with major depression and an increased risk of psychological distress in cross-sectional samples of general populations. [12] Interleukin-6 (IL-6), and Tumour Necrosis Factor alpha (TNFα) have also been found in subsets of patients with major depression. Over the next few years, continued research aiming to improve diagnostic and prognostic criteria should serve to solve some of the challenges clinicians face with mental health diagnoses and treatment. Objective biomarkers may further assist in insurance risk assessment, developing objective claims criteria and reviewing outcomes in a claims management process.

Genomic role

With accelerated advances in genomics in the last 20 years, pharmacogenomics research has been conducted with the aim to improve therapeutic and patient outcomes. Research findings from genome-wide association studies (GWAS) are also gaining traction and providing insight into various risk factors. In relation to pharmacogenomics, four genes (CYP2D6, CYP2C19, HLA-B*15:02, and HLA-A*31:01) so far have clinical actionable status as per the Clinical Pharmacogenetics Implementation Consortium (CIPC), which offers clinical guidelines and recommendations for dosing and usage of certain psychiatric medications. [13] In general, clinical utility in pharmacogenomics promises to improve patient outcomes in reducing side effects and suboptimal responses, thus enhancing the efficacy of medication and the side-effect profile.

Based on additional emerging genomic research, it has become clear that psychiatric traits have polygenic structures with interesting overlaps with other psychiatric and medical traits. As an example, a recent GWAS study investigating genome-wide genetic factors underlying both body mass index (BMI) and major psychiatric disorders reported that extensive polygenic overlaps between increased BMI, schizophrenia, bipolar disorder, and major depression were found. 111 shared genetic loci were identified.[14] This is of course relevant as epidemiologically the bidirectional relationship between mental health conditions and cardio-metabolic risk exists. The results suggest varying genetic predisposition to weight gain across major psychiatric conditions such as bipolar disorder, major depression and schizophrenia. A systematic review and meta-analysis of 203 studies reported the median years of potential life lost for individuals with mental health conditions was 10 years, with causes of death ranging from heart disease, chronic conditions, infections, suicide and other causes. People with mental health disorders are also associated with high risk factors such as tobacco smoking, substance abuse, sedentary lifestyles and poor diet.[15] This underlines the importance of underwriting mental health disorders in general but also that of careful cardiovascular risk assessment.

There is no doubt that further genomic research will yield interesting insights into the pathophysiology and related risks associated with mental health conditions, which will allow better risk assessment of comorbidities associated with mental health conditions and improved strategies to reduce associated morbidity and mortality.

In summary, as progress continues in each of the above-mentioned areas, insights may emerge that allow for re-evaluation of risk assessment in the underwriting phase and in the management of mental health claims. Underwriters and claims assessors should aim to keep up to date with the evolving management of mental health conditions to ensure risk and claims assessments are dealt with accurately and fairly to prevent stigma perpetuation.

As research continues to focus on the objective biological nature of mental health conditions, it will hopefully facilitate and drive progress in treatment and patient outcomes as well as reduce or eradicate the associated stigma.

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[11] See Drysdale AT, et al. Resting-state connectivity biomarkers define neurophysiological subtypes of depression [published correction appears in Nat Med. 2017 Feb 7;23 (2):264]. Nat Med. 2017;23(1):28–38. doi:10.1038/nm.4246
[12] See Kraus, C., et al. Prognosis and improved outcomes in major depression: a review. Transl Psychiatry 9, 127 (2019) doi:10.1038/s41398-019-0460-3
[13] See https://www.psychiatrictimes.com/psychopharmacology/psychiatric-pharmacogenomic-testing-evidence-base

[14] See Bahrami S, et al. Shared Genetic Loci Between Body Mass Index and Major Psychiatric Disorders: A Genome-wide Association Study. *JAMA Psychiatry.* Published online January 08, 2020. doi:10.1001/jamapsychiatry.2019.4188
[15] See Walker ER, et al. Mortality in Mental Disorders and Global Disease Burden Implications: A Systematic Review and Meta-analysis . JAMA Psychiatry. 2015;72(4):334–341. doi:10.1001/jamapsychiatry.2014.2502

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