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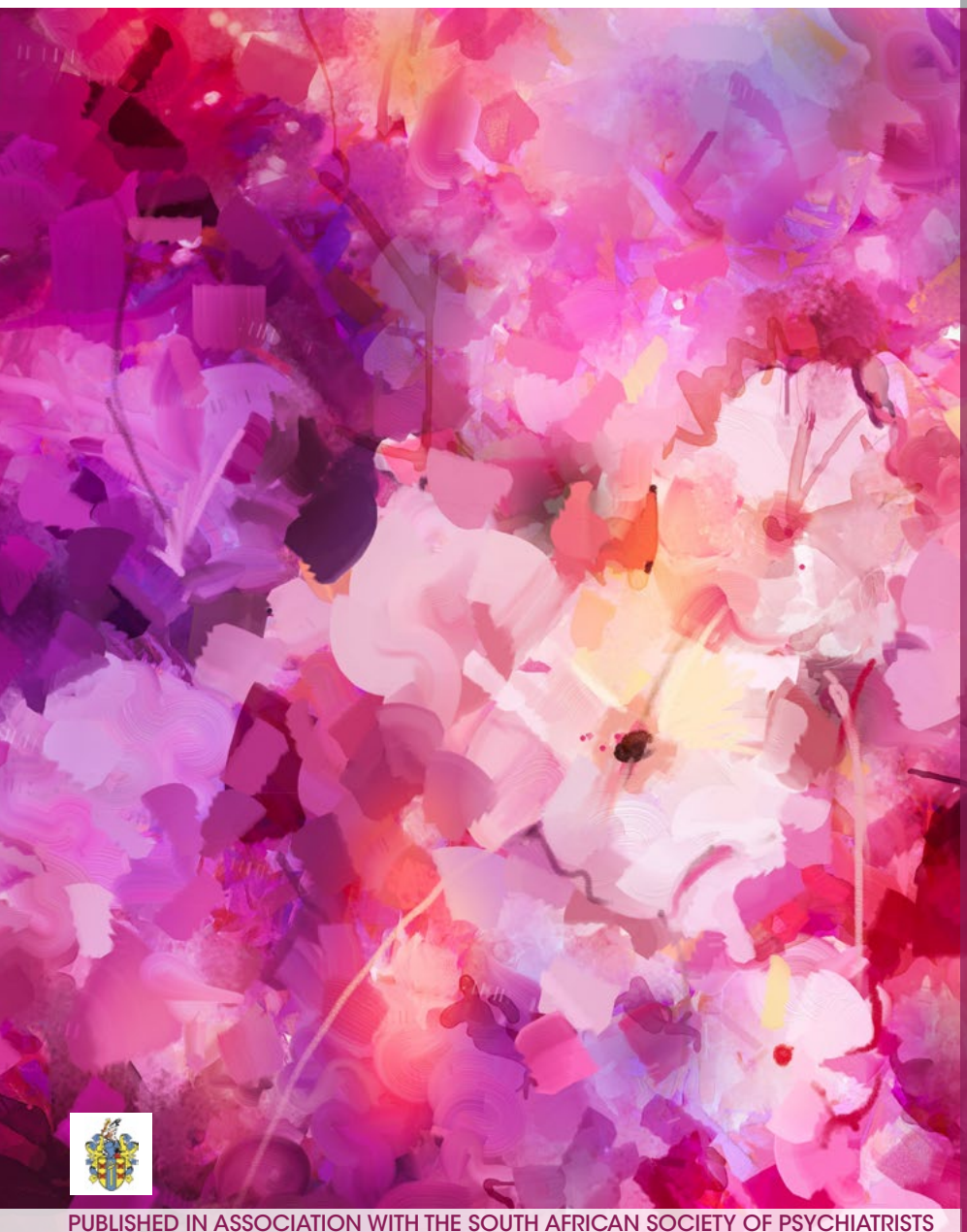
issue 36 • AUGUST 2023



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AUGUST 2023

*** PLEASE NOTE:** *Each item is available as full text electronically and as an individual pdf online.*

COVER IMAGE: Oil painting colorful spring flowers on canvas. By Fon Nongkran P.M.M

Design and layout: The Source • Printers: Raptor Print

Dear Readers, welcome to the August issue and who might have predicted snow in Johannesburg since the May issue? There wasn't much of it, but it happened, and watching it fall was magical. A few other things happened since then too:

- The authorization of prescribing of **MDMA** (*"3,4-Methylenedioxymethamphetamine (MDMA), commonly known as ecstasy [tablet form]; and molly or mandy [crystal form]"* https://en.wikipedia.org/wiki/MDMA#:~:text=3%2C4%2DMethyl%E2%80%8Benedioxy,primarily%20used%20for%20recreational%20purposes.) and **psilocybin** for psychiatric conditions in Australia (https://www.nature.com/articles/d41586-023-02093-8; https://www.bbc.co.uk/news/world-australia-66049989)

- The release of results of a survey conducted by the Medical Protection Society (MPS) reporting on the extent of suicidal thoughts amongst doctors facing a Health Professionals Council of South Africa (HPCSA) investigation (https://www.businesslive.co.za/bd/national/health/2023-07-06-one-in-10-sa-doctors-probed-by-hpcsa-consider-suicide-study-shows/).

Either of the aforementioned "happenings" warrants a more thorough review, suffice to say one might argue the former is premature and the latter deeply troubling. No doubt these situations will provoke much questioning – as they should.

The current issue provides multiple *Reports* which capture the essence of presentations at the 2022 Dr Reddy's Psychiatry Academic Weekend Meeting (reported on in the November 2022 issue of *South African Psychiatry* by Alicia McMaster p. 27). Such content ensures the widest dissemination of the event for those not in attendance, as well as acknowledging the efforts of presenters as well as the investment of industry in education locally – noting that presentations were based on sessions attended at the 2022 ECNP Congress. In addition, we have content related to a number of local book releases of relevance to the discipline and I commend the authors for their endeavours. All of this in addition to our regulars: Volker Hitzeroth *(Medico Legal)*, Claudia Campbell *(Perspective)*, Kim Laxton *(Film Review)* and David Swingler *(Wine Forum)*, not forgetting our intrepid bird photographer (Lennart Eriksson) – thank you !

Until next time, enjoy the issue and take care.

Erratum Please note that the email address of Dr Graham N de Bever published in relation to his *Feature* article in the May 2023 issue (pg. 15-17) should have read gndb.psych@gmail.com

Acknowledgement: *Thanks to Lisa Selwood for assistance with proof reading*

Advertising: The Source Public Relations, Pharmapreneurs

Design and Layout: Rigel Andreoli

Web: www.southafricanpsychiatry.co.za

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DR. REDDY'S PSYCHIATRY ACADEMIC MEETING - JUNE 2023

Alicia McMaster

Dr. Reddy's South Africa in collaboration with SASOP had the pleasure of hosting 230 psychiatrists at their annual Psychiatry Academic Meeting which was held from 9 – 11 June 2023. The meeting provided an opportunity for all psychiatrists in South Africa to participate either virtually or in-person. This meeting is hosted annually by Dr. Reddy's, and is a highlight in the calendar of the psychiatry fraternity. Dr. Reddy's South Africa as a company has become synonymous with high quality scientific engagements as well as partnerships with third party societies to disseminate scientific knowledge and improve patient care.

The theme for this year's meeting was, 'In Pursuit of Mental Freedom.' In South Africa, the Mental Health Act used to be hosted under the Criminal Procedure Act, which bears testimony to how patients with mental health conditions were generally regarded as 'criminals' and often stigmatized and deprived of their freedom. The new constitutional democracy has placed an emphasis on providing treatment, care, rehabilitation, and assistance to individuals with mental health conditions, rather than to punish them.

THIS YEAR'S THEME ALSO SOUGHT TO HIGHLIGHT THAT PATIENTS SUFFERING FROM MENTAL HEALTH DISORDERS OFTEN FEEL IMPRISONED BY THEIR CONDITIONS, EITHER DUE TO POOR QUALITY OF LIFE, SOCIAL STIGMATIZATION OR FINANCIAL IMPLICATIONS OF THE DISEASE.

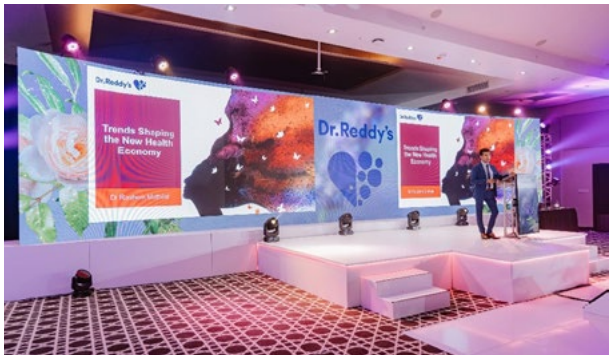
John Steward Mill states that freedom should not merely be regarded as the absence of external constraints. He asserts that in order to have freedom one must have autonomy, a variety of choices and possibilities, and access to opportunities for self-development and self-governance. He additionally highlights that oppressive social and political power further limits freedom. It is therefore clear that policies, regulations (such as the legacy Mental Health Care Act) and social stigmatization impacts a patient's ability to have mental freedom.

Alicia McMaster

The agenda for the meeting included a diversity of topics. Some of the topics included were: perspectives on schizophrenia from a person with lived experience; the impact of climate change on mental health; the importance of play in mental health; and an interdisciplinary talk presented by an endocrinologist on the mind and obesity.

The agenda also incorporated three break-away sessions which were designed for active participation and debates to explore real-world issues. Two of these break-away sessions were focused on: ethical considerations in the use of psychedelics; and impacts of structural racism, socioeconomic deprivation and stigmatization on mental health. The third break-away session was an activity that focused on art in mental health. For this session each delegate received a pair of white sneakers which they had to paint, with the ultimate intent to donate these shoes to underprivileged children.

Delegates complimented the company for striking the right balance between academic presentations, thought provoking discussions and activities with a sentiment of social awareness ■



Dr. Rashem Mothilal, General Manager of Dr. Reddy's, delivered the key- note address during the meeting where he shared his perspectives on the trends shaping the new health economy globally as well as in South Africa.

Speaker session

Artists at work

Prof. Christopher P. Szabo

Dr Shaquir Salduker

Dr Ian Westmore

Dr Sundeep Ruder

Break away session

Charlene Sunkel

Prof Ugash Subramaney

Prof Saeeda Paruk

Dr Anusha Lachman

Dr Kobus van der Walt

Dr Indhrin Chetty

SPOTLIGHT ON THE MANAGEMENT OF **TREATMENT-RESISTANT DEPRESSION:** FROM GLUTAMATE TO TREATMENT PATHWAYS

Henriette Smith

This article is a review of a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held In Umhlanga, KZN on 4 to 6 November 2022. The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd. The speaker acknowledges Dr David Webb for writing assistance **dawebb@mweb.co.za**. Further information is available from Dr Alicia McMaster, Head of Medical – South Africa, Dr Reddy's Laboratories **AliciaMcMaster@drreddys.com.**

Antidepressants were first introduced in the 1950s, and, until recently, have been medications that act primarily on the monoamines (e.g., serotonin, dopamine, noradrenaline and melatonin). More recently there has been interest in the role of glutamatergic neurotransmission in major depressive disorder (MDD) and treatment-resistant depression (TRD).

THE MONOAMINE HYPOTHESIS OF DEPRESSION

For more than 50 years, the monoamine hypothesis has been accepted as the primary theory to explain the pathogenesis of major depressive disorder (MDD). It proposes that MDD is caused by depleted monoamine levels in the synaptic cleft, and that increasing monoamine levels would have an antidepressant effect. In part, support for the hypothesis came from the observation that agents which increase monoamine concentrations in the synaptic cleft have an antidepressant effect. These include the monoamine oxidase inhibitors (MAOIs), tricyclic antidepressants (TCAs), selective serotonin reuptake inhibitors (SSRIs), and serotonin noradrenaline reuptake inhibitors (SNRIs), which remain the mainstay of treatment for MDD.

However, there is considerable evidence that is inconsistent with the serotonin hypothesis. Response and remission rates associated with the typical antidepressants are low, and when they are effective, despite rapidly increasing monoamine concentrations in the synaptic cleft, the onset of action is slow.

SEVERAL WEEKS OF TREATMENT IS USUALLY NECESSARY BEFORE SYMPTOMS IMPROVE.

Furthermore, lowering serotonin concentrations in the synaptic cleft does not induce depression in healthy individuals. A recent meta-analysis evaluating the evidence for the serotonin hypothesis concluded that there was no evidence for a genetic association between the serotonin transporter (SERT) and depression, or for a link between plasma levels of serotonin or the serotonin metabolite, 5-HIAA, and depression. Studies of the 5-HT1A receptor and SERT binding showed weak and inconsistent evidence of reduced binding in some areas, which would be consistent with increased synaptic availability of serotonin in people with depression, if this was the original, causal anomaly. Studies of the SERT gene and genetic associations provide no evidence of an association with depression, or of an interaction between genotype, stress and depression.

Henriette Smith

Overall, studies of serotonin research provide no consistent evidence of there being an association between serotonin and depression, and no support for the hypothesis that depression is caused by lowered serotonin activity or concentrations. On the contrary, there is some evidence consistent with the possibility that long-term antidepressant use might actually reduce serotonin concentration.

ROLE OF GLUTAMINERGIC NEUROTRANSMISSION IN DEPRESSION

Recently, studies of ketamine and esketamine have demonstrated that these agents can have a profound and rapid antidepressant effect, even in patients with treatment-resistant depression (TRD). At a routine antidepressant dose, ketamine demonstrates less than 10% occupancy of SERT, suggesting that SERT binding is unlikely to be a primary antidepressant mechanism. Since its primary action is glutaminergic, interest has turned to the potential role of glutamine and glutamine receptors in the treatment of depression.

Glutamate is the most abundant excitatory neurotransmitter in the brain. It binds to multiple receptors, including N-methyl-D-aspartate (NMDA) and alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptors, which are crucial for neural communication, information processing, memory formation, and learning.

GLUTAMATE PLAYS AN IMPORTANT ROLE IN NEURODEVELOPMENTAL AND NEUROTROPHIC PROCESSES (NERVE CELL GROWTH, DIFFERENTIATION, FUNCTION AND MAINTENANCE), MODULATION OF OTHER NEUROTRANSMITTER SYSTEMS (INCLUDING THE MONOAMINES) AND NEURODEGENERATION (NERVE CELL DAMAGE OR DEATH).

There is some evidence that glutaminergic neurotransmission is dysregulated in MDD, with reduced glutamate activity in areas of the brain that play crucial roles in the pathophysiology of depression including mood regulation, learning and memory, and a variety of social, cognitive and affective functions. These include the hippocampus, anterior cingulate cortex, venteromedial prefrontal cortex (PFC), and left lateral dorsolateral PFC. In contrast, there may be hyperfunction of NMDA receptor activity in subcortical regions.

KETAMINE

Ketamine is a potent NMDA receptor antagonist, but it also binds to opioid mu and sigma receptors and modulates the concentration of monoamines. There are a number of theories to explain its antidepressant effects. One hypothesis is that, by blocking the NMDA receptor, ketamine prevents activation of GABA interneurons and causes downstream disinhibition of glutamatergic neurons, resulting in a glutamate surge. Increased extracellular glutamate initiates activation of postsynaptic AMPA receptors, leading to potentiation of brain-derived neurotrophic factor (BDNF) and consequently, augmentation of synaptic plasticity, synaptic density and synaptic strength.

Administration of ketamine results in a rapid antidepressant effect, noticeable at 24 hours after infusion and which is sustained for days (or even weeks to months) after dosing. Because ketamine has a short plasma half-life, the delayed and sustained antidepressant effect provides further support that a neurogenic effect may (at least in part) account for the antidepressant effect. Studies have shown that an increase in glutamate in the PFC correlated with a decrease in functional connectivity between the dorsomedial PFC and the posterior cingulate cortex, a key component of the default mode network. Connectivity of these regions plays an important role in rumination, which is associated with worsening depression and relapse.

In addition to the neuroplastic effects, the immediate NMDA blockade during the ketamine infusion and associated dissociative state may dampen prominent symptoms (including suicidality), allow for plastic reinforcement of suppressed brain states, and augment and support psychotherapeutic interventions.

It is notable that, because SSRIs mainly act on SERT, they may indirectly regulate glutamate and neuroplasticity, and this might explain their slower and weaker antidepressant effect compared to direct effects on the NMDA and AMPA receptors.

TREATMENT RESISTANT DEPRESSION

In people with MDD, early optimised treatment is critical to achieve full symptomatic and functional recovery. However, in practice, this is difficult. Most available antidepressants have a delay of 4 to 12 weeks before full onset of efficacy is achieved, and insufficient follow-up and treatment inertia mean that antidepressant therapy is not timeously escalated. Combination and augmented therapies are underused, despite low remission rates. TRD is highly recurrent and, even with optimised treatment, the chance of achieving remission and time to relapse decrease with each depressive episode. Treatment failure leaves patients feeling frustrated, dissatisfied, hopeless and anxious, worsening depression and its associated comorbidities, including suicidality, and potentially reducing adherence to treatment. TRD interferes with family and social life and leads to impairment at work and increased risk of unemployment. It is associated with significant costs, both to the patient and society, and is responsible for the highest direct and indirect medical costs among those with MDD.

INDIVIDUALS WITH TRD ARE AT LEAST TWICE AS LIKELY AS RESPONDERS TO BE ADMITTED TO HOSPITAL. HOSPITALISATION IS ASSOCIATED WITH A SIX-FOLD INCREASE IN AVERAGE MEDICAL COSTS.

TRD is commonly defined as failure to respond (decrease in severity of depression by at least 50%) or enter remission (complete recovery as measured by a score on a depressive severity instrument below a threshold) following more than 2 treatment attempts of adequate dose and duration. Factors that may affect response to antidepressant therapy must be excluded before the diagnosis of TRD is confirmed (Table 1). Patients on treatment should be regularly re-assessed (e.g., every 2 weeks) to evaluate treatment efficacy and adjust the treatment regimen if necessary. Greater than 20-25% decrease from baseline depression symptom scores within the first 2 weeks of treatment has been shown to predict response and remission after 5-12 weeks of conventional therapy. Improvement in quality of life by week 4 is associated with subsequent symptomatic remissions.

A decision pathway for MDD is illustrated in figure 1.

Table 1. Factors that may interfere

- Misdiagnosis of MDD in patients with bipolar disorder
- Comorbid psychiatric diagnosis (e.g., borderline personality disorder)
- Concurrent medical illness (e.g., thyroid disease)
- Iatrogenic causes (e.g., corticosteroids)
- Inadequate antidepressant treatment, dose, duration; failure to escalate therapy
- Treatment noncompliance (e.g., side effects)
- Compromised absorption
- Pharmacokinetic or pharmacodynamic drug-drug interactions

Considerations when selecting initial antidepressant therapy include clinical history, phenotype and comorbidities (e.g., anxiety, anhedonia, and sleep impairment), demographic factors, overall functional impairment, individual patient needs, and illness severity. Dose increases may be considered when there is an inadequate response to an initial low dose. Where response is inadequate, when there are side effects, when there is a need need to avoid polypharmacy and where use of a single agent may improve compliance, switching to another antidepressant from the same or different class (with a different mechanism of action or broad pharmacological profile) may be helpful. Care must be taken when discontinuing TCAs, SSRIs and SNRIs to avoid rebound and withdrawal symptoms, where careful tapering of the dose is necessary. When response to monotherapy is inadequate, combining two antidepressants with different mechanisms of action may be considered to broaden the pharmacological profile and potentiate the antidepressant effect. Combination therapy with non-antidepressant medications, such as lithium or an atypical (second generation) antipsychotic (SGA) may be considered as an alternative second- or third-line strategy.

RAPID-ACTING ANTIDEPRESSANTS AS ADD-ON THERAPY FOR TRD

Intranasal esketamine (the S-enantiomer of ketamine) and AXS-05 (dextromethorphan plus bupropion, an oral NMDA receptor antagonist) have a rapid onset of antidepressant effect, within 24 hours and one week, respectively, and offer new alternatives as add-on strategies. Both medications have been approved in the USA for the treatment of adults with TRD, and are currently recommended for third-line use. A number of other fast-acting drugs are under development.

IN COMPARISON TO CONVENTIONAL ANTIDEPRESSANTS ALONE, ADDITION OF THESE RAPID-ACTING ANTIDEPRESSANTS SIGNIFICANTLY INCREASES BOTH RESPONSE AND REMISSION RATES IN ADULTS WITH TRD, WITH SUSTAINED REMISSION RATES IN CLINICAL STUDIES LASTING LONGER THAN ONE YEAR.

Furthermore, add-on esketamine nasal spray was shown to more effectively reduce Montgomery-Asberg Depression Rating Scale (MADRS) scores than add-on therapy with an SGA.

Unfortunately, there are a number of barriers that limit use of these rapidly acting antidepressants. They are expensive, and administration and storage requires specialised infrastructure and trained staff that are not widely available in psychiatric practices.

In South Africa, esketamine and off-label intravenous ketamine are available in specialised centres for treatment of adults with TRD.

References available on request

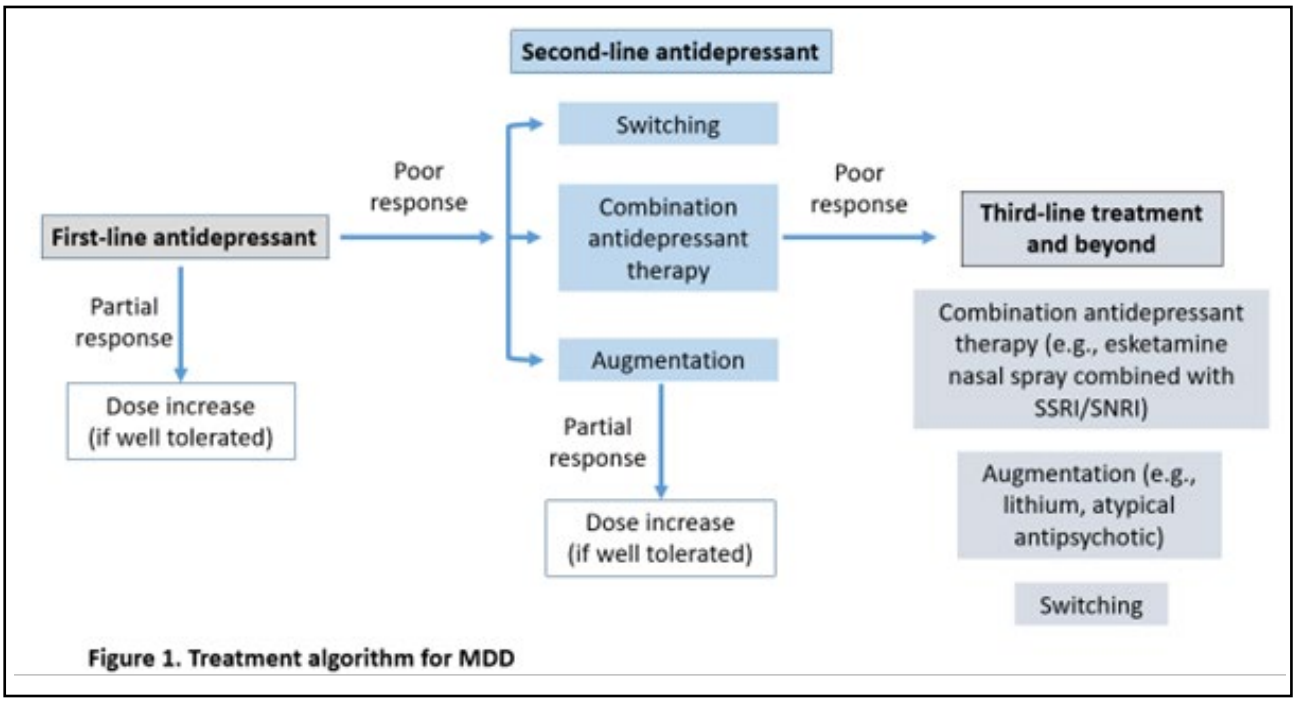


Figure 1. Treatment algorithm for MDD

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Reference: 1. Peterson, T. (2019, July 4). Declare Independence from Your Anxiety, Celebrate Freedom, Healthy Place. https://www.healthyplace.com/blogs/anxiety-schmanxiety/2019/7/declare-independence-from-your-anxiety-celebrate-freedom [Accessed February 2023] **2.** Yelate [Professional Information]. Sandton, South Africa: Dr. Reddy's Laboratories (Pty) Ltd; 2021. **3.** EFPIA Patient Think Tank. Working Together with Patient Organisations White Paper. June 2019.

S5 Yelate 30 (capsule), 60 (capsule). Registration numbers: Yelate 30: 44/1.2/0114. Yelate 60: 44/1.2/0115. Yelate 30. Each capsule contains duloxetine hydrochloride equivalent to duloxetine 30 mg. Contains sugar. Yelate 60. Each capsule contains duloxetine hydrochloride equivalent to duloxetine 60 mg. Contains sugar. **For full prescribing information refer to the professional information approved by the medicines regulatory authority.**
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CANNABIS USE AND YOUTH MENTAL HEALTH

Alma Kalaba

This article is a review of a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held In Umhlanga, KZN on 4 to 6 November 2022. The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd. The speaker acknowledges Dr David Webb for writing assistance **dawebb@mweb.co.za.** Further information is available from Dr Alicia McMaster, Head of Medical – South Africa, Dr Reddy's Laboratories **AliciaMcMaster@drreddys.com**

Cannabis is the most commonly used drug among South African youth. In nation-wide population surveys, between approximately 6% and 10% of adolescents aged 13 years and older self-reported cannabis use in the previous 3 months, with approximately half of those reporting daily use. The average age at initiating cannabis use is 11 years. Worldwide, and including South Africa, there is a trend to legalise cannabis. The relaxing of restrictions, wide availability, and low cost of cannabis means that it is easy to obtain.

DESPITE WIDESPREAD BELIEFS THAT CANNABIS IS 'NATURAL' AND THEREFORE SAFE, DURING ADOLESCENCE, A PERIOD WHEN THE BRAIN IS STILL MATURING AND UNDERGOING SYNAPTIC PROLIFERATION, PRUNING AND MYELINATION, CANNABIS USE IS ASSOCIATED WITH SIGNIFICANT (AND PERMANENT) DELETERIOUS EFFECTS ON BRAIN DEVELOPMENT, COGNITION, MENTAL HEALTH AND GENERAL FUNCTIONING.

Studies of brains of adolescent cannabis users have demonstrated structural, functional, and histological alterations in frontoparietal, frontolimbic, frontostriatal and cerebellar regions of the brain. The endocannibinoid system, which plays vital roles in emotional and cognitive functions, reward pathways and general wellbeing, is particularly vulnerable to harmful effects of cannabis. Compared with their non-drug-using counterparts, adolescents who use cannabis may demonstrate severe defects in both executive and cognitive function, and it is uncertain whether these effects are reversible. Therefore, compared with delaying cannabis use until adulthood, cannabis use during adolescence has a worse outcome and results in more sustained impairment. Several studies have demonstrated that cannabis use between the ages of 12 and 19 was associated with an average 2% decline in IQ compared with non-users. For adolescents with below average IQ, cannabis use may be associated with significant intellectual disability.

Alma Kalaba

IN ADDITION TO BRAIN DEVELOPMENT, ADOLESCENCE IS A PERIOD MARKED BY SIGNIFICANT SOCIAL, EMOTIONAL AND COGNITIVE DEVELOPMENT. IT IS A PERIOD WHEN MENTAL HEALTH DISORDERS TEND TO HAVE THEIR INITIAL ONSET.

Most severe psychiatric disorders begin in adolescence and the effects of cannabis on mental health can be devastating. In studies of youth aged 15 years and older, cannabis use was associated with a nine-fold increased risk of psychosis, and four-fold increased risk of schizophrenia or schizophreniform

disorder. Although not in itself proof of causality, this research provides evidence of cannabis being a component cause of schizophrenia. It is estimated that eliminating cannabis use in early life would halve the development of psychosis and reduce the incidence of schizophrenia by approximately 7%.

Cannabis use is associated with increased risks for depression and anxiety, and up to 80% of adolescent cannabis users have a comorbid mood disorder. It predisposes to anhedonia and an amotivational syndrome characterised by changes in personality, emotions and cognitive functions, including internalising, avolition, apathy, incoherence, blunted affect, inability to concentrate and memory disturbance. Cannabis use increases risk of suicidal ideation, and is associated with a three-fold increase in suicidal behaviour. Adolescents and young adults with mood disorders and cannabis use disorder (CUD) are at significantly increased risk for self-harm (3 times higher risk), all-cause mortality, accidents, aggression and violence, homicide, and death by unintentional overdose.

SOUTH AFRICAN DATA INDICATE THAT UP TO 10-11% OF ALL FATAL ROAD ACCIDENTS ARE ASSOCIATED WITH CANNABIS USE. IN GENERAL, COMPARED TO THEIR PEERS, PEOPLE WHO USE CANNABIS ATTAIN LOWER LEVELS OF EDUCATION AND ARE LESS LIKELY TO BE EMPLOYED IN WELL PAID JOBS.

Cannabis use that persists into adulthood is also associated with significant health risks. In 2003, 3.4% of pregnant women smoked cannabis. This figure had doubled to 7% by 2016. Cannabis use during pregnancy increases risk of premature labour, and infants born to cannabis-using mothers tend to have lower birth weight and are more likely to be admitted to a neonatal intensive care unit. Cannabis remains in breast milk for up to 6 weeks after cessation of use. Cannabis use during pregnancy adversely affects foetal brain development, predisposing the child to behavioural disorders characterised by impaired impulse control and defects in memory and attention. There is an increased risk for psychiatric disorders and problematic substance abuse, particularly as the child enters peak periods of vulnerability in late adolescence.

Parental substance abuse can have crippling effects on the family. A study of family dynamics in Texas showed that the majority of child abuse cases were associated with parents who were drug users.

Adolescents' reasons for starting cannabis use are diverse, but importantly, include peer pressure and wanting to 'fit in'. Some report using it to reduce anxiety, rates of which, among adolescents, increased during the recent outbreak of COVID-19. Addiction to cannabis is psychological more than physical, but discontinuation may be associated with withdrawal symptoms, which include sleep disturbances, irritability, short temper, and poor concentration, making it difficult to stop without support after regular use.

The belief that cannabis is natural and safe has been reinforced by social media and the proliferation of freely available products containing cannabidiol (CBD), a nonpsychoactive cannabinoid, with or without tetrahydrocannabinol (THC).

DESPITE THE MYRIAD OF CLAIMS ASSERTED ABOUT THE HEALTH BENEFITS OF CBD, THERE ARE FEW CLINICAL STUDIES TO SHOW THAT ANY OF THEM ARE JUSTIFIED.

Exceptions might include add-on therapy for severe, intractable epilepsy in children; pain; and treatment-related nausea and anorexia associated with weight loss in patients with AIDS. Although CBD does not have addiction potential, it carries risk of both sedation and hepatic impairment. Medicinal cannabis containing varying proportions of CBD and THC, the main psychoactive cannabinoid, may have utility in the treatment of pain, and studies have shown that it may reduce opioid use by approximately 60%. However, THC concentrations greater than 10% carry a risk of psychosis and the potential benefits must be carefully weighed against risks. Unfortunately, due to the unregulated nature of products containing CBD and THC, the actual CBD/THC ratios and what and how much other constituents they contain, is unknown. Consequently, there should be concern about the safety of these products.

DOCTORS FACE A DIFFICULT CHALLENGE WHEN PATIENTS ARE ADAMANT TO USE CANNABIS, EITHER FOR RECREATIONAL OR MEDICINAL PURPOSES, AND MISINFORMATION ON SOCIAL MEDIA AND THE INTERNET DO NOT MAKE THINGS EASIER.

Nevertheless, it is imperative that the public is educated about the health risks of cannabis use. This is especially true for children and adolescents who are particularly vulnerable to potentially life-changing and life-long consequences. Schools should be encouraged to provide random drug-testing, so that young cannabis users can be identified and compassionately supported in stopping and remaining abstinent.

References available on request

THE VALUE OF **EARLY INTERVENTION** AND CONTINUITY IN MENTAL CARE

Eugene Allers

This article is a review of a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held In Umhlanga, KZN on 4 to 6 November 2022. The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd. The speaker acknowledges Dr David Webb for writing assistance **dawebb@mweb.co.za**. Further information is available from Dr Alicia McMaster, Head of Medical – South Africa, Dr Reddy's Laboratories **AliciaMcMaster@drreddys.com**

Pre-emptive care, that is proactive identification and management of risk factors, is standard practice in many areas of medicine. For example, early identification and management of dyslipidaemia, hypertension and hyperglycaemia, and encouragement to maintain a healthy lifestyle, is standard of care to prevent cardiovascular events. However, psychiatry has lagged behind in this regard, and there are few recommendations for early intervention to prevent serious mental illness.

EARLY INTERVENTION IS THE PROCESS OF PROVIDING AN INTERVENTION AND SUPPORT TO A PERSON WHO IS EXPERIENCING OR DEMONSTRATING ANY OF THE EARLY SYMPTOMS OF MENTAL ILLNESS.

Unfortunately, while many risk factors for mental illness have been identified, they are often not recognised, and there may be uncertainty on what support can and should be provided to the person in this clinical high risk (CHR) state.

RISK FACTORS FOR SERIOUS MENTAL ILLNESS

Early childhood years are highly important to future mental health. The developing brain is sensitive and vulnerable to neglect, abuse and parental substance use, which may have long-lasting effects on academic, social, emotional, and behavioural achievements into adulthood. Most mental illness begins in adolescence and early adulthood (Table 1), so early detection is very important. Almost two thirds of adults with clinically relevant mental health problems become symptomatic before the age of 25, and half of those do so by the age of 14 years. One of the most problematic symptoms and a predictor of serious mental illness in adulthood is anxiety. Approximately 80% of anxiety disorders begin in adolescence, and 50% of children with attention-deficit hyperactivity disorder (ADHD) and anxiety will develop bipolar disorder.

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OBSESSIVE COMPULSIVE DISORDER AND SUBSTANCE USE DISORDER ARE ALSO PROMINENT EARLY INDICATORS OF LATER MENTAL ILLNESS.

Therefore, it is essential to diagnose anxiety and other mental health symptoms during adolescence and to begin treatment as soon as possible.

PSYCHOTIC DISORDERS AND SCHIZOPHRENIA

In the ABC Schizophrenia Study, a large-scale epidemiological and neurobiological study of the early course of schizophrenia, in approximately three quarters (73%) of the patients the disorder began with a prodromal phase, which lasted, on average, 5 years. The initial signs consisted mainly of negative and affective symptoms, which accumulated exponentially until the first episode, as did the later emerging positive symptoms. On average, social disability appeared 2-4 years before first admission.

Two broad sets of criteria have been used to diagnose the high risk state in people who may ultimately develop schizophrenia, namely Ultra-High Risk State (UHR) and Basic Symptoms (BS) criteria. Inclusion requires the presence of 1 or more of the following:

Table 1. Mean age at onset of mental health disorders					
	Age at onset				
	Peak (years)	≤ 14 years	≤ 18 years	≤ 25 years	Median (years)
Any mental disorder	14.5	34.6%	48.4%	62.5%	18
Neurodevelopmental disorders	5.5	61.5%	83.2%	95.8%	12
Schizophrenia-spectrum and primary psychotic disorders	20.5	3%	12.3%	47.8%	25
Mood disorders	20.5	2.5%	11.5%	34.5%	31
Anxiety and fear-related disorders	5.5	38.1%	51.8%	73.3%	17
Feeding or eating disorders	15.5	15.8%	48.1%	82.4%	18
Obsessive compulsive disorders	14.5	24.6%	45.1%	64.0%	19
Personality disorders	20.5	1.9%	9.6%	47.7%	25
Substance use disorder or addictive behaviour	19.5	2.9%	15.2%	48.8%	25
Posttraumatic stress disorder	15.5	16.9%	27.6%	43.1%	30

1. Attenuated psychotic symptoms (APS).

The attenuated psychosis syndrome is defined in the DSM-5 as psychosis-like symptoms (criterion A below) that are below the threshold for a full psychotic disorder. Compared with psychotic disorders, the symptoms are less severe, and more transient. Insight is relatively maintained.

At least one of the following symptoms is present in attenuated form, with relatively intact reality testing, and is of sufficient severity or frequency to warrant clinical attention: hallucinations, delusions, and/or disorganised speech.

Other symptoms may include suspiciousness or persecutory ideational content (guarded, distrustful attitude; may be hypervigilant or sense ill will in others), including persecutory ideas of reference; some difficulty in thinking or concentrating at a higher frequency than usual; a tendency to withdraw for short periods of time or a desire to isolate oneself; and anxiety.

Risk factors include a family history of psychosis, advanced parenteral age, maternal infection and malnutrition during pregnancy, onset in late winter/early spring, and early cannabis use.

FAMILIES PRESENTING WITH A SYMPTOMATIC CHILD SHOULD BE SCREENED FOR THE RISK FACTORS.

2. Brief limited intermittent psychotic episode (BLIP).

In the DSM-5, BLIP is defined by at least one (or more) of delusions, hallucinations, disorganised speech (e.g., frequent derailment or incoherence), and grossly disorganised or catatonic behaviour. Sudden and extreme mood changes may also be present. The duration of an episode is at least one day, but less than a month, with eventual full return to premorbid level of functioning.

Additional high risk states are trait vulnerability plus a marked decline in psychosocial functioning (genetic risk and deterioration syndrome [GRD]) and unspecified prodromal symptoms (UPS). UPS describes symptoms characteristic of a mental disorder that cause significant distress or impairment in social, occupational, or other important areas of functioning, but do not meet the full criteria for any specific mental disorder.

Patients with any of the above prodromal symptoms (presumed genetic vulnerability trait, or a recent history of APS or BLIP) are at ultra-high risk for schizophrenia and should be monitored and managed accordingly. Various screening tools have been developed for this purpose. The most common ages for patients to present with these ultra-high risk prodromal symptoms is between the ages of 15 and 35 years.

The mean risk of transition to schizophrenia, independent of the psychometric instruments used, is 18% at 6 months of follow-up, 22% at 1 year, 29% at 2 years, 32% at 3 years, and 36% after 3 years; so in total, about one third of patients will transition to schizophrenia.

SOMETIMES APS MAY TRANSITION TO A DEPRESSIVE OR BIPOLAR DISORDER WITH PSYCHOTIC SYMPTOMS, BUT DEVELOPMENT TO A SCHIZOPHRENIA SPECTRUM DISORDER IS MORE COMMON.

There are many other potential risk factors associated with development of psychotic disorders. Some of these are listed in table 2. The mean transition risk for patients in a clinical high risk state is approximately 25% over 2 years. Importantly, childhood neglect and childhood emotional abuse significantly increase the risk for mental health disorders. Where there is suspicion, it is important to screen families for child abuse and refer to social workers and/or law enforcement as necessary.

Table 2. Risk factors for developing psychosis	
Risk factor	Odds ratio
Maternal tobacco use	2.08

Table 2. Risk factors for developing psychosis	
Maternal alcohol use	2.08
Physical inactivity	3.55
Childhood trauma	5.94
Childhood emotional abuse	5.84
Childhood emotional neglect	7.22
Harm avoidance	11.13
Diabetes during pregnancy	10.12
Cannabis use	5.17
Ultra-high risk	9.32

BIPOLAR DISORDER

Risk factors for bipolar disorder include the following:

- First-degree relatives of patients with BD (59-87% have a first degree relative with BPD);
- Clinical manifestations: subsyndromal bipolar spectrum symptoms, anxiety, depressive symptoms, frequent comorbid disorders (anxiety, ADHD); change in sleep;
- Temperamental traits;
- Substance use: misuse and dependence;
- Antidepressant use (children who do not respond to an antidepressant may have bipolar disorder);
- Environmental factors: abuse and maltreatment (50% have a history of abuse), conflictual family;
- Mood disorder during childhood.

PRODROMAL SYMPTOMS IN PATIENTS WHO TRANSITION TO BIPOLAR DISORDER ARE HIGHLY VARIABLE AND AGE-DEPENDENT.

Some common clinical symptoms are listed in Table 3. Other less specific prodromal symptoms with a prevalence of 50% or more include too much energy, diminished ability to think, indecisiveness, pressured speech, talkativeness, elated mood, academic or work difficulties, insomnia, depressed mood, and over-productive or goal directed behaviour. The rate of transition to bipolar mood disorder among children aged 7 to 17 years who had an irritable mood and a decrease in functioning was 49% within 5 years.

Although staging models have been developed as an integrative approach to specify the individual level of risk based on clinical (e.g. prodromal symptoms and familial history of BD) and non-clinical (e.g. biomarkers and neuroimaging) data, the benefits of using these models to design preventive intervention programmes is uncertain and requires further study.

Table 3. Prodromal symptoms in young patients who develop bipolar disorder
• Children with ADHD and anxiety • Depression and severe fluctuations in mood • Social isolation • Psychomotor agitation • Changes in appetite • Impaired concentration • Irritability • Sleep disturbance • Racing thoughts • Suicidal ideation/attempts • Anxiety

TREATMENT OF PRODROMAL SYMPTOMS TO PREVENT TRANSITION TO PSYCHOSIS

Cognitive behavioural therapy and supplementation of omega-3 fatty acids (FA) have been shown to help in reducing severity of depressive symptoms in children and adolescents with a mood disorder, and meta-analyses have demonstrated favourable effects of omega-3 FA in subjects with bipolar depression, and manic episodes. Early administration of antipsychotic agents is associated with brain atrophy, and these medications should be avoided in the prodromal stage. Likewise, no benefit was observed with sodium valproate, lithium and olanzapine, and they are not recommended for prophylactic treatment.

Patients with prodromal symptoms should be offered CBT and omega-3 FA supplementation, and should be carefully monitored with reassessment at least every 6 months.

CONCLUSIONS

Although many prodromal symptoms have been identified in children and adolescents who later transition to mental disorders, they are variable and often nonspecific. Screening tools, mainly focussed on family risk, and staging models have been developed to identify risk of transition, but further research is necessary to evaluate their utility in everyday clinical practice. The only treatments that have demonstrated any benefit in reducing risk of transition to psychosis during the prodromal phase are non-specific neuroprotective strategies and psychosocial interventions. However, it is not clear if symptoms are only controlled or the disease process can be modified or aborted, and the mechanisms underlying conversion from the clinical high risk state to overt psychosis or mania are unknown.

References available on request

GENETIC AND ENVIRONMENTAL INFLUENCES ON HAPPINESS

Anersha Pillay

This article is a review of a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held In Umhlanga, KZN on 4 to 6 November 2022. The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd. The speaker acknowledges Dr David Webb for writing assistance **dawebb@mweb.co.za**. Further information is available from Dr Alicia McMaster, Head of Medical – South Africa, Dr Reddy's Laboratories **AliciaMcMaster@drreddys.com**

Happiness is a state of positive and pleasant emotion, which may range from contentment to intense joy. Other forms include life satisfaction, well-being, subjective well-being, and flourishing. On average, happy people are healthier, live longer, function better and have better social relationships, so it is worthwhile for countries to invest in the happiness of their citizens.

WHY ARE SOME COUNTRIES HAPPIER THAN OTHERS?

The World Happiness Report has been published annually since 2012. The 2023 report (available at http://worldhappiness.report/) ranks 137 countries in terms of happiness and well-being.

RESULTS ARE OBTAINED FROM THE GALLUP WORLD POLL, WHICH INCLUDES RESPONSES FROM MORE THAN 100 000 PEOPLE ACROSS THE WORLD.

Subjective well-being is measured by assessing two main well-being indicators:

1. Life satisfaction is measured by asking respondents how satisfied they are with their lives. This allows people to evaluate their own happiness without making any assumptions about what causes it.
2. Emotional well-being is measured by averaging yes or no answers about three positive emotions (laughter, enjoyment and interest) and three negative emotions (worry, sadness and anger).

Although life satisfaction and emotional well-being are connected, they are not the same. Life satisfaction refers to a long-term expectation from one's life, whereas emotional well-being refers to the frequency and intensity of daily positive and negative experiences. Life satisfaction represents one's circumstances of life as a whole, whereas emotions vary day by day depending on the events of the current and previous days. Therefore, life satisfaction differs more between countries than emotions.

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Finland has remained in the top position as the 'happiest country' for six years in a row, with a score that is significantly higher than all other countries. The countries in second, third, fourth and fifth positions are Denmark, Iceland, Israel and Netherlands, respectively. In contrast Afghanistan is ranked lowest (at 137), below Lebanon, Sierra Leone, Zimbabwe, and Democratic Republic of Congo in positions 136 to 133, respectively. South Africa is ranked 85 (95% confidence interval for rank 73 to 99).

Six societal factors have been identified that help explain the different levels of happiness between countries:

1. Social support. For people to feel secure, they need to feel that at least one person (friends and/or relatives) would care for them if they were in need.
2. Gross Domestic Product (GDP) per capita - how much each country produces divided by the number of people in the country. It is a measure of the size of the economy and how well the economy is performing.

3. Healthy life expectancy, including both physical and mental health. Mental health is a key component of subjective well-being and is also a risk factor for future physical health and longevity. Mental health influences and drives a number of individual choices, behaviours and outcomes.
4. Freedom to make life choices. Included in freedom are Human Rights, including (among others) the right to life and liberty, freedom from slavery and torture, freedom of opinion and expression, and the right to work and to education. Everyone is entitled to these rights without discrimination.
5. Character virtues, including generosity, pro-sociality (helping, sharing and caring for others), and trust. Human connection is a marker for a sense of positive community engagement.
6. Perception of corruption, and trust in both government and business.

Higher levels of these six factors combined correlate with higher levels of life satisfaction.

ANATOMY OF WELL-BEING

Studies using magnetic resonance imaging (MRI), resting-state functional MRI and functional near infrared spectroscopy have identified a wide range of brain regions that may potentially be involved in well-being. They include the insula, precuneus, anterior cingulate cortex (ACC), posterior cingulate cortex (PCC), the superior temporal gyrus, prefrontal cortex (PFC), orbitofrontal cortex, and some subcortical areas, including the putamen and thalamus.

The precuneus (posterior-medial aspect of the superior parietal lobule) has a number of functions relevant to well-being, including sense of self and agency, episodic memory retrieval, and integration of information about the environment, contributing to a sense of perception (gestalt).

IT IS ALSO IMPORTANT FOR MENTAL IMAGERY; CUE REACTIVITY, WHICH PLAYS AN IMPORTANT ROLE IN ADDICTIVE BEHAVIOURS; AND AFFECTIVE RESPONSES TO PAIN.

Some of these brain areas are components of the default mode network (DMN). The DMN is activated during the resting state and mind-wandering characterised by introspection, imagery of the future, self-referential thoughts and autobiographical memory retrieval. The DMN is deactivated during active cognitive tasks when the central executive network is activated.

WHY ARE SOME PEOPLE HAPPIER THAN OTHERS UNDER THE SAME CIRCUMSTANCES?

Happiness and genes

Both nature and nurture influence well-being. The first evidence that there may be a genetic basis to well-being came from twin studies showing that monozygotic twins raised apart were more similar in regard to well-being than dizygotic twins raised together. Even though the monozygotic twins raised apart had never met before the study, the correlation for identical twins reared apart was 0.48 in comparison to 0.23 for fraternal (dizygotic) twins reared together. Subsequent studies reported considerable variation in estimates of heritability, ranging from 0% to more than 60%. A meta-analysis of ten independent studies, including almost 56 000 subjects estimated the weighted average heritability of well-being at 36%, and for satisfaction with life at 32%.

MORE EVIDENCE FOR A GENETIC BASIS TO WELL-BEING HAS BEEN PROVIDED FROM STUDIES OF MOLECULAR GENETICS.

Genome-wide complex trait analysis (GCTA) evaluated the proportion of phenotype and phenotypic variance (well-being) explained by all genome-wide single nucleotide polymorphisms (SNPs) (DNA sequence variation of a single nucleotide) by comparing well-being and genetic similarity across a group of 11 500 unrelated individuals. Those with more similar DNA scored similarly for well-being, with an estimated 12% to 18% of variance due to the additive effects of SNPs.

Genome-wide association studies have looked for specific gene variants associated with well-being and identified 3 genetic variants (3 independent SNPs) associated with subjective well-being (life satisfaction and positive affect). However, the effect of these was very small, with estimated effects in the range 0.015 to 0.018 standard deviations per allele. The polygenic scores constructed from all measured SNPs explained approximately 0.9% of variance for subjective well-being. A more recent study increased the power to detect specific genes by widening the well-being spectrum to include well-being, neuroticism and depressive symptoms. A total of 148 and 191 associations were identified for life satisfaction and positive affect, respectively. Follow-up molecular genetic analyses examining the underlying biology found evidence for an association between the well-being spectrum and enrichment of genes differentially expressed in the hippocampus, and of GABAergic interneurons. There was no evidence for a role of genes related to serotonin or dopamine activity.

IT IS NOTABLE THAT ALL OF THE STUDIES LOOKING AT HAPPINESS HERITABILITY INCLUDE SUBJECTS OF EUROPEAN ANCESTRY, AND OTHER CULTURAL GROUPS HAVE NOT YET BEEN ASSESSED.

Happiness and environment

People respond differently to different environmental factors, resulting in emotions with positive or

negative valence. Variables that might influence individual responses include individual factors (e.g., personality, activity and effort), contextual factors (e.g., rural versus urban environment, and culture), and intervention-related factors (whether an intervention or program is delivered as intended) (Figure 1).

FOR EXAMPLE, THE AVAILABILITY OF SPORTING FACILITIES WOULD BE MORE IMPORTANT TO A PERSON WHO WANTS TO USE THOSE; EASY ACCESS TO CARE AND MEDICAL FACILITIES MIGHT RATE HIGHER FOR ELDERLY OR INFIRM INDIVIDUALS; AND MAINTENANCE OF ROADS AND INFRASTRUCTURE MIGHT BE MORE IMPORTANT TO PEOPLE WORKING IN A BUSINESS DISTRICT COMPARED TO THOSE IN RURAL AREAS.

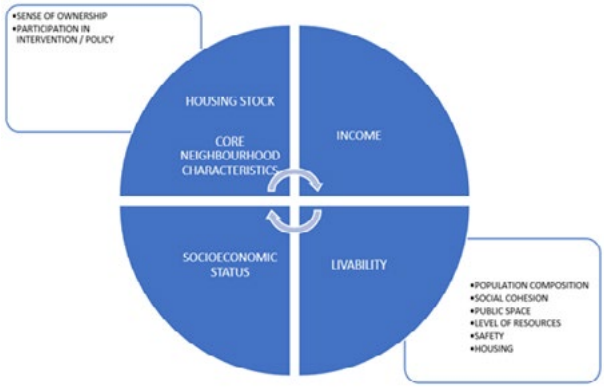

Figure 1. Environmental factors affecting well-being

A recent environment-wide association study examined 139 environmental factors (Table 1) of which 21 were significantly associated with well-being. These variables were included in five domains (i) housing stock; (ii) core neighbourhood characteristics (sense of ownership and participation in intervention/policy); (iii) Income; (iv) livability (the extent to which the living environment is in line with the conditions and needs of residents, based on population composition, social cohesion, public space, safety, level of resources, and housing); and (iv) socioeconomic status.

Nevertheless, the environmental effects on well-being were small. Individually, environmental predictors explained only 0.2% to 0.5% of variance, and the combined effect of the variables explained only approximately 1% of the variance in well-being.

IMPLICATIONS AND APPLICATIONS OF THE GENE-ENVIRONMENT INFLUENCE ON WELL-BEING

Although the effect of genes and environment on well-being are small, they do provide some guidance to help optimise well-being among different communities. They highlight that different interventions may be appropriate for different communities, demographic groups and people from different cultural backgrounds. They provide guidance for precision medicine, provision of interventions and support, and development of preventative programs to maintain optimal mental health, not only on the individual level, but also at the level of the community and population as a whole. The aim would be to create environments that prevent manifestations of genetic risk and enhance resilience.

"Once happiness is accepted as the goal of government, this has other profound effects on institutional practices. Health, especially mental health, assumes even more priority, as does the quality of work, family life, and community."

World Happiness Report, 2023

References available on request

Table 1. Potential environmental factors that may influence well-being

• Accessibility to people and jobs • Air pollution • Availability of cinemas and movie theatres • Number of care-related facilities (e.g., hospitals, care facilities) • Number of cultural facilities (e.g., cinemas, museums and theatres) • Number of schools and other educational facilities • Number of retail outlets • Facilities for sport • Housing stock (e.g., rental sector) and number of privately owned homes • Disposable income per person per household • Core neighbourhood characteristics (e.g., urbanisation and mean house value) • Proportion of land allocated for use (e.g., traffic, residential areas)	• Livability • Number of museums, music theatres and pop podia • Number of purchased and rented offices, retail and businesses • Number of primary schools and the number/ percentages of pupils at these schools • Number of schools with secondary education and the number/percentages of pupils at these schools • Number of schools with special education and the number/percentages of pupils at primary and secondary special schools • Sport associations (number of hockey, baseball, korfball, tennis, rugby, and football clubs) • Transactions and average house prices

CREATIVITY LEADERSHIP AND BIPOLAR DISORDER

Ugash Subramaney

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Creativity uses imagination and original thinking in the pursuit of creating something new. It is an expression of subjective experience and emotions. It advances novel insights, promotes new ways to think about things, and offers new solutions to old problems. There are two ways to conceptualise creativity: (i) creative potential: the ability to generate something novel and useful; and (ii) creative achievement: the realisation of this potential in terms of real life accomplishments, such as creating a piece of art, music or dance; writing; making a scientific discovery and advancing technology.

WHAT IS THE RELATIONSHIP BETWEEN CREATIVITY AND INTELLIGENCE?

Creative people are often highly intelligent. Nevertheless, while they can meet the problems of life as rationally as anyone else, their intellect does not rule at the expense of intuition or other seemingly non-rational influences. Some authors have proposed a 'threshold model' of intelligence and creativity, claiming that the relationship between creativity and intelligence varies depending on IQ, and although above-average intelligence is necessary for high-level creativity, there is a threshold IQ (e.g., 120) above which the relationship between creativity and intelligence falls away. In other words, people with low IQ are unlikely to be creative, whereas those with IQ above the threshold may potentially be more creative, but that is not related to their intelligence level. However, recent studies have found that this may not be true. One study that evaluated the relationship between intelligence and different indicators of creative potential and achievement showed that higher IQ may be associated with higher outputs of original ideas, but originality of thinking and ideational fluency, a purely quantitative measure of creative potential (i.e., number of ideas), do not require an above average IQ (thresholds of 100 and 85 IQ points, respectively).

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ONCE THE INTELLIGENCE THRESHOLD IS MET, PERSONALITY FACTORS BECOME MORE PREDICTIVE OF CREATIVITY. IN CONTRAST, THERE WAS NO THRESHOLD FOR CREATIVE ACHIEVEMENT, SUGGESTING THAT CREATIVE ACHIEVEMENT BENEFITS FROM HIGHER INTELLIGENCE EVEN AT FAIRLY HIGH LEVELS OF INTELLECTUAL ABILITY.

It is also notable that, in contrast to general crystallised intelligence (the extent of one's knowledge and ability to use that knowledge), general fluid intelligence (ability to independently reason and solve novel problems) is not dependent on acquired experience.

CHARACTERISTICS OF CREATIVE PEOPLE

Comparisons of creative people have identified common characteristics. They have high levels of autonomy and mastery in a particular domain (activity or knowledge), and a high degree of self-assurance, suggesting deep and flexible self-awareness. Attitudes of curiosity and problem seeking lead them to seek out novelty and pose unique questions. Ideational fluency, flexibility and originality enable them to rapidly formulate and apply new ideas. Independence is critical to the creative process; creative people must often be able to work alone and must also be willing to express ideas or develop products that others might perceive as radical.

MANY CREATIVE PEOPLE ARE INTROVERTED AND TEND TO BE REFLECTIVE AND INNER-DIRECTED; THEY LOOK TO THEIR OWN INTUITION RATHER THAN DEPENDING UPON INTERACTION WITH OTHERS TO INFORM THEIR ATTITUDES AND RESPONSES.

Psychological studies of highly creative people have shown that many have a strong interest in apparent disorder, contradiction, and imbalance - elements that are often perceived as difficulties by others. This interest, rather than aversion to challenges, produces intellectual leaders among whom are many who have greatly contributed to society. Creativity is a driving force that moves civilisation forward.

Although creative people may not have equally strong gifts across the spectrum of human ability, there are notable and often famous exceptions. One example is Leonardo da Vinci, who was a talented creative polymath with celebrated achievements across the visual arts, biological sciences, mechanics and engineering.

CREATIVITY AND MENTAL DISORDERS

In the 1970s, Nancy Andreasen examined the relationship between creativity and psychosis. She compared abstract thinking and conceptualisation among writers and manic and schizophrenic inpatients. The writing of the patients with schizophrenia was insubstantial, in contrast to that of the writers and patients with mania who demonstrated more creativity and content. However, while the writers displayed more richness, patients with mania exhibited more idiosyncratic thinking.

LATER STUDIES COMPARED RATES OF MENTAL ILLNESS AMONG WRITERS AND MATCHED CONTROLS AND THE FIRST-DEGREE RELATIVES IN BOTH GROUPS.

Compared with the control group, in whom less than 30% had a mood disorder, the rate of mood disorders among the writers was very high. In total, 80% had a mood disorder and 13% and 30% had bipolar mood disorder (BD) I and II, respectively. There was also a higher prevalence of affective disorder and creativity in the writers' first-degree relatives, suggesting that these traits run together in families and could be genetically mediated. Both writers and control subjects had above average IQs.

Bipolar mood disorder

BD is a mood disorder characterised by extreme mood swings between mania and depression. It is a lifelong illness for which lasting remissions are uncommon. The prevalence is estimated at around 1.2%, although the prevalence of bipolar spectrum is at least four times that, and consequently BD may be overdiagnosed by healthcare professionals. Although it might be expected that BD would restrict occupational and artistic achievement, the creativity and energy characteristic of people with mania may actually improve some aspects of their labour market outcomes.

Notwithstanding its association with significant impairment and increased mortality, BD has persisted in the population, with a high heritability and a stable prevalence.

CREATIVITY AND OTHER POSITIVE TRAITS HAVE REPEATEDLY BEEN ASSOCIATED WITH THE BIPOLAR SPECTRUM, PARTICULARLY AMONG UNAFFECTED FIRST-DEGREE RELATIVES AND THOSE WITH MILDER EXPRESSIONS OF BIPOLAR TRAITS.

This suggests that large doses of risk variants cause illness, whereas mild to moderate doses confer advantages, and this may serve to maintain bipolar disorder in the population. If this is so, then BD may be better conceptualised as a dimensional trait existing at the extreme of normal population variation in positive temperament, personality, and cognitive traits, with aspects of both vulnerability to mental illness and creativity.

Anecdotal reports and retrospective reviews drawn from biographical sources and case-control studies of people in creative professions have revealed numerous examples of famous individuals who suffered from mood disorders, substance use and suicide, and in particular BD. Likewise, in the current day, many popular and successful artists, writers, poets, musicians and actors have disclosed their own diagnosis of BD, which has helped to reduce the stigma associated with mental illness (Table 1).

MORE RECENT EVIDENCE

Early research studies that evaluated the relationship between creativity and mental disorders had high levels of selection and information bias as well as low statistical power. Hurlow and MacCabe

Table 1. Examples of well-known people with mental disorders		
Edgar Allen Poe	Hans Christian Andersen	Catherine Zeta Jones
Florence Nightingale	William Faulkner	Sting
Vincent van Gogh	F. Scott Fitzgerald	Robert Downey Junior
Ernest Hemmingway	Joseph Conrad	Robin Williams
Pyotr Ilyich Tchaikovsky	Charles Dickens	Selena Gomez
Robert Schumann	Herman Melville	Mariah Carey
Sylvia Plath	Mary Shelley	Carrie Fisher
Winston Churchill	Robert Louis Stevenson	Russell Brand
Theodore Rooseveldt	Leo Tolstoy	Kurt Cobain
Jackson Pollock	Tennessee Williams	Jimi Hendrix
Frank Sinatra	Henry James	Ted Turner

reviewed the literature in 2011 and concluded that there was no convincing evidence of an association of mental disorders with enhanced creativity, intelligence or artistic talent. They suggested that large scale, population-based studies were required. Subsequently, several population-based studies have been published.

A study using a national sample of 907 011 Swedish individuals showed that excellent school performance at age 16 was associated with an increased risk of later BD, but was protective against schizophrenia and other psychoses. Using data from the large population-based Epidemiologic Catchment Area Study, which surveyed more than 20 500 community-dwelling adults in 3 towns in the USA,

CAROL TREMBLAY AND COLLEAGUES SHOWED THAT INDIVIDUALS WITH BD APPEAR TO BE DISPROPORTIONATELY CONCENTRATED IN THE MOST CREATIVE OCCUPATIONAL CATEGORIES.

Similarly, a Swedish population-based study, including data from more than 300 000 people with schizophrenia, BD and unipolar depression demonstrated that people with BD and their healthy siblings were over-represented in creative artistic and scientific occupations.

To test for an association between studying a creative subject at high school or university and later mental disorder, MacCabe and colleagues performed a case-control study using linked population-based registries in Sweden (N = 4 454 763), to test for associations between tertiary education in an artistic field and hospital admission with schizophrenia (n = 20 333), BD (n = 28 293) or unipolar depression (n = 148 365). They showed that, after adjustment for IQ and other potential confounders, compared with the general population, individuals with an artistic education were at significantly greater risk of developing schizophrenia, BD and unipolar depression.

Recently, Power and colleagues showed that higher polygenic risk scores for schizophrenia and BD were associated with artistic society membership or creative profession, indicating that creativity and psychosis share genetic roots.

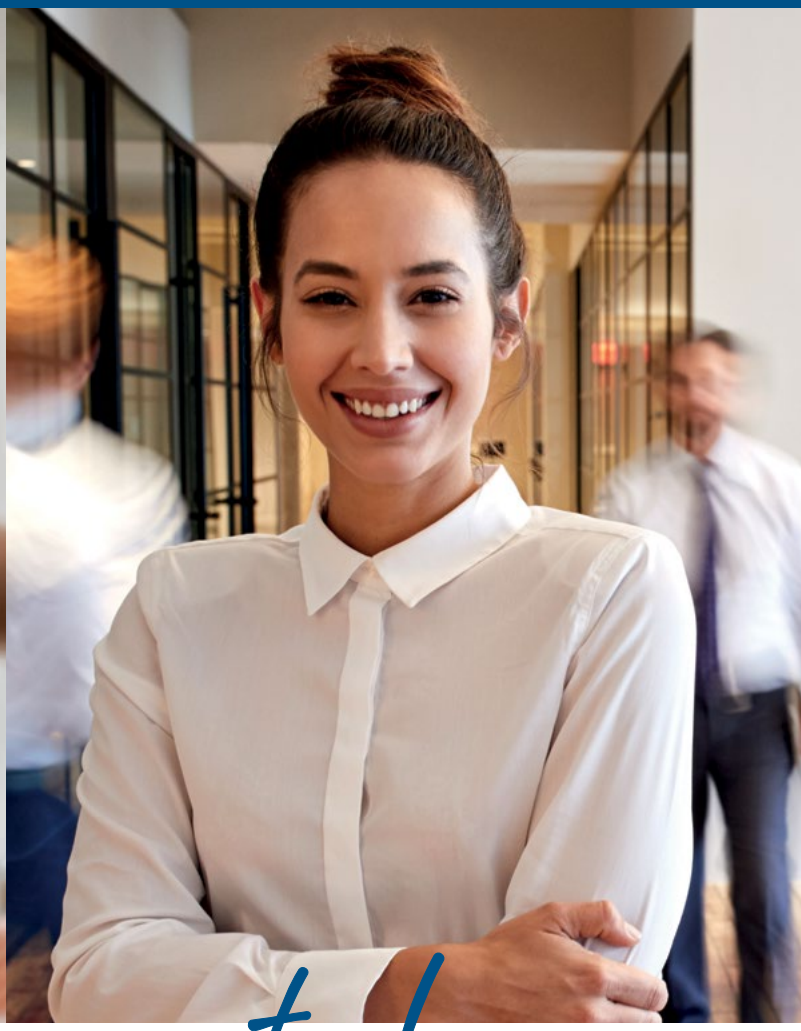
In a small pilot study, people at risk of bipolar disorder exhibited higher measures of creativity, but not creative achievement. To examine whether some aspects of the bipolar spectrum may confer advantages for creativity and to define the shared vulnerability between creativity and BD, Tiffany Greenwood and colleagues compared individuals with BD to two groups of healthy controls, a creative group and a non-creative group.

THEY SHOWED THAT BOTH THE CREATIVE AND BIPOLAR GROUPS DEMONSTRATED SUPERIOR CREATIVE ABILITY, BUT ONLY THE CREATIVE GROUP DEMONSTRATED ENHANCED COGNITIVE PERFORMANCE. A COMBINATION OF OPENNESS, HYPOMANIC PERSONALITY, DIVERGENT THINKING, AND REASONING ABILITY EMERGED AS THE STRONGEST PREDICTORS OF CREATIVITY, COLLECTIVELY EXPLAINING 34% OF THE VARIANCE IN CREATIVE ACHIEVEMENT AND CORRECTLY CLASSIFYING 85% OF INDIVIDUALS WITH HIGH ACHIEVEMENT IRRESPECTIVE OF DIAGNOSIS.

CONCLUSIONS

Interesting relationships exist between intelligence, creativity and BD, and studies suggest that creativity and psychosis may share genetic roots. While high levels of intelligence may not necessarily be required for creativity, people with higher IQ may be more able to express that creativity to realise real-life accomplishments. Likewise, while people with severe mental illness are less likely demonstrate their creativity in terms of real-life achievements, some aspects of the bipolar spectrum, while increasing vulnerability to mental illness, also increase potential for creative expression.

References available on request



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- Idiopathic generalised epilepsy in adolescents (from 16 years of age)

References: 1. Redilev [Professional Information]. Sandton, South Africa: Dr. Reddy's Laboratories (Pty) Ltd; November 2016. **2.**https://www.mayoclinic.org/drugs-supplements/levetiracetam-oral-route/side-effects/drg-20068010?p=1 **3.** EFPIA Patient Think Tank. Working Together with Patient Organisations White Paper. June 2019.

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TOWARDS PERSONALISED PSYCHEDELIC APPLICATIONS: UNDERSTANDING SUCCESSFUL TREATMENT WITH PSYCHEDELICS

Johannes Fourie

This article is a review of a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held In Umhlanga, KZN on 4 to 6 November 2022. The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd. The speaker acknowledges Dr David Webb for writing assistance **dawebb@mweb.co.za.** Further information is available from Dr Alicia McMaster, Head of Medical – South Africa, Dr Reddy's Laboratories **AliciaMcMaster@drreddys.com**

Psychedelics are a class of psychoactive substances that produce changes in perception, mood and cognitive processes. Psychedelics affect all the senses, altering a person's thinking, sense of time and emotions.

The current wave of interest in psychedelics is not a new one. Ancient cultures lived happily with psychedelics and for more than 10 000 years they have been used in spiritual and healing rituals. Then, in 1950, the lysergic acid diethylamide (LSD) molecule was discovered and entered western medicine. Within a few months there were more than 130 funded studies in the US alone. This wave of interest kept its upward trend well into the 1960s, and at the time LSD was seen as a revolution in brain science. Artists, like the writer Aldous Huxley, started to promote psychedelics in their works as agents of self-discovery and enlightenment. Mr Huxley even went as far as instructing his wife to administer a dose of LSD on his death bed. He died from cancer in 1963 and wife described his death trip as serene and beautiful (https://www.youtube.com/watch?v=wdHZyetkQGA). Unfortunately in the 1960s, psychedelics became linked to the Vietnam anti-war movement and the USA government banned all use. The UN followed suit in 1971.

HOWEVER, THE PAST 5 YEARS HAS SEEN A DRAMATIC RESURGENCE IN PSYCHEDELIC RESEARCH.

WHY THIS DRAMATIC RESURGENCE IN RESEARCH?

The world finds itself in a dramatic mental health crisis. Analysists predict that future generations will identify this period as one in which anxiety gripped mankind. Current treatments present no golden bullet; there are problems with side effects, discontinuation syndromes and blunting. On the other hand there is growing evidence that psychedelics are safe. They are better tolerated, more effective and bring long lasting relief from a wide range of psychiatric symptoms.

Johannes Fourie

The FDA granted 3,4-methylenedioxymethamphetamine (MDMA; Ecstasy) breakthrough designation for treatment-resistant posttraumatic stress syndrome (PTSD) and the same was granted for psilocybin for management of treatment resistant major depressive episodes.

CLASSIFICATION

Psychedelics are classified as follows:

Group 1. Classic psychedelics. This group includes psilocybin, LSD, ayahuasca, ibogaine and dimethyltryptamine (DMT). All of these agents act on the 5-HT2A serotonin receptor.

Group 2. Dissociative anaesthetics. These agents, including ketamine and esketamine, act on the N-methyl-D-aspartate (NMDA) glutamate receptor and also have some monoamine oxidase inhibitory effects.

Group 3. Empathogens-enactogens, including MDMA. These show no direct effects on the 5-HT2A receptor, but rather directly cause monoamine

release (predominantly noradrenaline and serotonin rather than dopamine).

In 2010, Prof David Nutt analysed safety data for 12 illicit substances, alcohol and tobacco (Figure 1). He found that psilocybin (mushrooms) was associated with the lowest harm to both users and the community. It is generally accepted that the psychedelics are safe, even at high doses.

STUDIES

RECENT STUDIES OF PSYCHEDELIC AGENTS AND RELATED CHEMICAL COMPOUNDS HAVE USED INNOVATIVE COMPUTER-BASED TECHNIQUES AND BRAIN IMAGING TO EVALUATE THEIR MECHANISMS OF ACTION AND EFFICACY IN TREATMENT OF PSYCHIATRIC DISORDERS, AND TO IDENTIFY NOVEL CHEMICAL ENTITIES THAT MIGHT BE USEFUL IN PATIENTS WITH MENTAL ILLNESS.

In 2022 Anat Kaplan and colleagues published a study in *Nature* in which they describe using an ultralarge virtual library to identify novel tetrahydropyridines (THPs), a class of six-membered nitrogen heterocycles that are present in several natural-product-derived drugs that include LSD. The cationic nature of these molecules at physiological pH makes them suitable as ligands for aminergic G protein-coupled receptors, including the 5-HT2A receptor. The 5-HT2A receptor is a target of interest because of its role in treating psychiatric disorders such as schizophrenia, depression and anxiety. Using computer modelling, they simulated the docking of 75 million THP molecules on the 5-HT2A receptor. The initial screening led to 17 molecules that were further refined down to two molecules that were potent 5-HT2A antagonists and which had antidepressant effects (in mice), but no acute psychoactive activity (head-twitch response or change in movement).

THESE MOLECULES ARE POTENTIAL LEADS FOR THE DEVELOPMENT OF THERAPEUTICS AGAINST DISORDERS THAT HAVE WITHSTOOD LONG-TERM TREATMENT, INCLUDING DEPRESSION, ANXIETY AND POST-TRAUMATIC STRESS DISORDER.

It is known that the effect of psilocybin at the 5-HT2A receptor is to alter distributed neural processes that manifest as increased entropy, reduced functional connectivity (FC) within discrete brain networks (i.e., reduced integrity), and increased FC between networks (i.e., reduced segregation). In a recently published study, Drummond McCulloch and colleagues administered a large dose of psilocybin (0.2-0.3 mg/kg) to 10 volunteers who had never previously been exposed to psychedelics. To examine changes in within-network, between-network and region-to-region resting-state FC (RSFC), participants underwent resting-state functional magnetic resonance imaging (fMRI) scans at baseline, 1 week and 3 months post-administration and [11C]Cimbi-36 PET scans at baseline and 1 week. At baseline participants filled out questionnaires including the NEO Personality Inventory-Revised (PI-R) (a concise measure of the five major domains of personality, as well as the six traits or facets that define each domain),

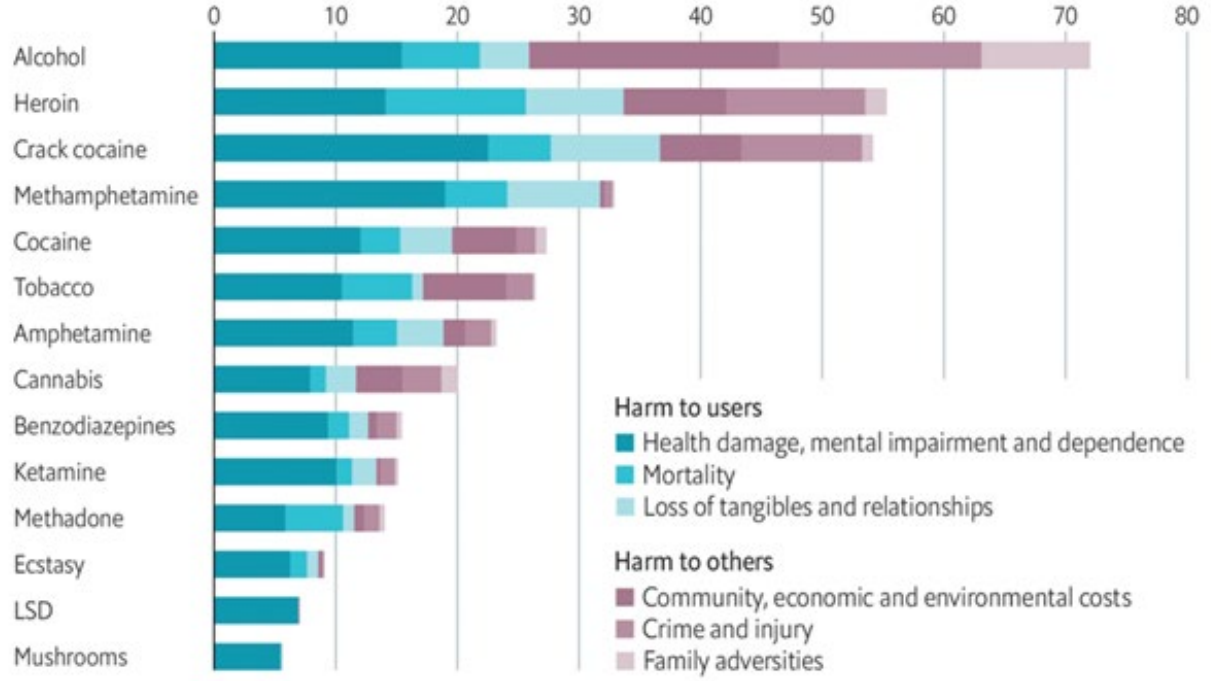

Figure 1. Drugs ordered by their overall harm scores, showing the separate contributions to the overall scores of harms to users and harms to others.
From Nutt D, et al. Drug harms in the UK: A multicriteria decision analysis. Lancet 2010; 376(9752): 1558-1565.

which provides a systematic assessment of emotional, interpersonal, experiential, attitudinal, and motivational styles; and the Mindful Attention Awareness Scale (MAAS), a 15-item scale designed to assess a core characteristic of mindfulness (a receptive state of mind in which attention, informed by a sensitive awareness of what is occurring in the present, simply observes what is taking place). At 3 months post-administration, the NEO PI-R and MAAS were repeated and participants also completed the persisting effects questionnaire (PEQ), which measures psychological changes (both positive and negative) that are subjectively perceived to be due to the psilocybin experience.

THE INVESTIGATIONS SHOWED THAT OCCUPANCY OF THE 5-HT2A RECEPTOR CORRELATED WITH EFFECTS AND PLASMA CONCENTRATIONS OF PSILOCYBIN. THE SCAN ONE WEEK AFTER DOSING DEMONSTRATED THAT THERE WERE NO PERMANENT CHANGES AT THE RECEPTOR LEVEL.

Psilocybin was well tolerated and produced persistent positive changes in well-being (PEQ) at 3 months. At 1 week only, executive control network (ECN) RSFC was significantly decreased, but there were no other significant changes in RSFC at 1 week or 3 months, nor changes in region-to-region RSFC. Exploratory analyses indicated that decreased ECN RSFC at 1 week predicted increased mindfulness at 3 months, such that the greater the decrease in ECN connectivity at 1 week, the greater the increase in MAAS score at 3 months. A smaller ECN connectivity change from baseline to 3 months was associated with a greater increase in MAAS score. Change in neocortex 5-HT2A receptor binding measured with [11C]Cimbi-36 non-displaceable binding potential at 1 week was not correlated with change in ECN connectivity at 1 week, but change in neocortex 5-HT2A receptors at 1 week correlated more strongly with the ECN RSFC change at 3 months. In other words, greater disintegration of the ECN correlated with more neocortex 5-HT2A receptors. The correlations between ECN RSFC changes and changes in MAAS, neocortex 5-HT2A receptor at 1 week and positive aspects of the PEQ implicate alterations in ECN connectivity as a potential mechanism underlying the clinical and behavioural effects of psilocybin.

Martin Madsen and colleagues investigated the effects of a 0.2-0.3 mg/kg dose of psilocybin on plasma psilocin level (PPL), subjective drug intensity (SDI) and their association in fifteen healthy individuals, and evaluated associations between these measures and resting-state FC, measured with functional magnetic resonance imaging, acquired over the course of five hours after psilocybin administration. They showed that PPL and SDI correlated negatively with measures of network integrity (including the default mode network) and segregation, both spatially constrained and unconstrained, and that the executive control network and dorsal attention network desegregated, increasing connectivity with other networks and throughout the brain as a function of PPL and SDI.

Larger studies have shown the mystical experience is important for personality changes associated with psilocybin use. Two to five 8-hour drug sessions separated by at least 3 weeks were associated with significant increases in trait Openness in subjects who reported a mystical experience (measured using the States of Consciousness Questionnaire [SOCQ] and Mysticism Scale), but not in those who did not. Five of the six subdomains of trait Openness were significantly correlated with changes on the SOCQ and Mysticism Scale: Fantasy (e.g., "I have a very active imagination"), Aesthetics (e.g., "I am intrigued by patterns I find in art and nature"), Feelings (e.g., "I experience a wide range of emotions and feelings"), Ideas (e.g., "I often enjoy playing with theories or abstract ideas"), and Values (e.g., "I consider myself broad-minded and tolerant of other people's lifestyles"), whereas the Actions subdomain (e.g., "I think it's interesting to learn and develop new hobbies") was not. Increases in Openness were persistent for more than one year after the psilocybin sessions. There were no significant changes from screening to post-test in trait Neuroticism, Extroversion, Agreeableness, or Conscientiousness.

Long-term effects of psychedelics are believed to be due to promotion of both structural and functional plasticity in the prefrontal cortex (PFC), mediated by TrkB (high affinity receptor for brain-derived neurotrophic factor [BDNF]), mTOR and 5-HT2A signalling. Psychedelic compounds, such as LSD, DMT, 2,5-Dimethoxy-4-iodoamphetamine (DOI) and ketamine promote dendritic spine growth, and stimulate synapse formation. Since atrophy of neurons in the PFC plays a key role in the pathophysiology of depression and related disorders, these effects would explain the rapid and long-lasting antidepressant and anxiolytic effects in patients with treatment-resistant major depression and related disorders.

IN GENERAL, IN SUBJECTS WITH MAJOR DEPRESSIVE DISORDER, PSILOCYBIN IS ASSOCIATED WITH RESPONSE RATES OF APPROXIMATELY 70% AND IT INDUCES REMISSION IN APPROXIMATELY 50%. ITS CLINICALLY MEANINGFUL EFFECTS ARE SIGNIFICANTLY SUPERIOR TO THOSE OF AN SSRI.

In a study of 91 patients with treatment-resistant PTSD (mean duration 14.8 years), after three doses of MDMA in combination with psychotherapy 67% no longer met the diagnostic criteria for PTSD, compared with 32% of those receiving placebo.

Treatment-emergent adverse events that were more prevalent in the MDMA study arm were typically transient and mild to moderate in severity.

In a study of 95 patients with active alcohol dependence who were randomised to either psilocybin or diphenhydramine, the percentage of heavy drinking days during the 32-week double-blind period was significantly lower for psilocybin compared to diphenhydramine (mean difference 13.9 days). The percentage of patients who remained completely abstinent during the full 32 weeks was 23% and 9%, and during weeks 33 to 36 were 48% and 24%, in the psilocybin and diphenhydramine groups, respectively.

Additional studies have demonstrated the efficacy of psychedelics in various other psychiatric conditions, including obsessive compulsive disorder, eating disorders, body dysmorphic disorder, pathological gambling, anxiety disorders (including social phobia), and bipolar disorder.

IMPLICATIONS FOR PRACTICE

The setting for therapy sessions with psychedelics is important. Each session may last from 1 to 6 hours or longer, depending on the psychedelic agent used. The environment should be relaxed and comfortable and the patient should not be left alone during their psychedelic experience.

PSYCHOTHERAPY SESSIONS AFTER EXPOSURE ARE ESSENTIAL TO ASSIST PATIENTS TO INTEGRATE THE MYSTICAL EXPERIENCE AND AVOID OVER-INTERPRETATION OF THE PSYCHEDELIC EPISODE.

High doses of psychedelics (e.g., 5 g of dried mushrooms or 25 mg of pure psilocybin) are required to generate a mystical experience, alter functional connectivity within and between brain networks, and promote neuroplasticity. As mentioned before, at least for psilocybin, having an experience perceived as meaningful and of spiritual value during intoxication correlates with better results in all of the studies. There is little evidence to support the use of micro-dosing.

References available on request

Crowned Crane. Photo courtesy of Lennart Eriksson, Psychiatrist – Pennington, KZN, lennarte@iafrica.com

HOW TO MAKE A DIFFERENCE FOR PATIENTS WITH MILD COGNITIVE IMPAIRMENT, BUT NOT YET DEMENTIA

Pravesh C Kassen

This article is a review of a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held In Umhlanga, KZN on 4 to 6 November 2022. The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd. The speaker acknowledges Dr David Webb for writing assistance **dawebb@mweb.co.za.** Further information is available from Dr Alicia McMaster, Head of Medical – South Africa, Dr Reddy's Laboratories **AliciaMcMaster@drreddys.com**

Mild cognitive impairment (MCI) refers to a clinical transitional state between the cognitive changes of aging and the earliest features of dementia. Originally it referred to a memory impairment in the setting of preserved non-memory cognitive performance and functional abilities, but more recently the term has been expanded to include other cognitive domains besides memory. Cognitive changes that occur normally with extremes of aging can include a gradual decline in conceptual reasoning, memory, and processing speed, and there is considerable variation among older adults in the rate of decline. These must be distinguished from the abnormal pathological cognitive decline associated with MCI, which is likely to be a prodromal stage of dementia. The prevalence of MCI is estimated at between 3% and 26%, whereas the prevalence of dementia doubles every 5 years after the age of 65, and is estimated at 5% to 10% among individuals older than 65.

DIAGNOSIS AND CLASSIFICATION OF MCI

The original criteria for diagnosis of MCI included a memory complaint, preferably qualified by an informant (e.g., family member), preserved general cognitive function, and memory impairment that is more severe than expected for age (e.g., using a standardised memory test such as the Wechsler Memory Scale-Revised with score 1.5 standard deviations or more below the mean for education and age-adjusted scores), with intact activities of daily living (ADL) and absence of dementia. However, because not all patients with MCI evolve to Alzheimer's dementia, the criteria needed to be expanded to include many types of intermediate cognitive impairments that may be precursors to a variety of dementing disorders. In general, if the clinician believes the patient to be neither normal nor demented, and, according to the history, there appears to have been a decline in cognitive function with preservation of most daily activities, then the patient can be designated as having MCI (Table 1). Assessment for evidence of impairment in ADL is important, because ADL is preserved in MCI, whereas evidence of functional impairment limiting independence in ADL is a requirement for all dementia diagnoses.

Pravesh C Kassen

ESPECIALLY HIGH FUNCTIONING INDIVIDUALS WILL BE ABLE TO SELF-REPORT THAT THEY FEEL THERE IS SOMETHING WRONG WITH THEM IN TERMS OF WORSENING OR MORE FREQUENT CONFUSION OR MEMORY LOSS. HOWEVER, FOR AN ACCURATE ASSESSMENT OF CHANGES OVER TIME, IT IS ESSENTIAL TO OBTAIN A COLLATERAL HISTORY FROM A KNOWLEDGEABLE INFORMANT WHO HAS BEEN THE PATIENT FOR SOME TIME AND HAS REGULAR CONTACT WITH THEM.

Many older people are treated with polypharmacy. Some of these medications may be necessary to treat genuine health concerns, whereas others may not be essential. Medications that may be associated with risk of MCI include anticholinergics, opiates, benzodiazepines, digoxin, antihistamines, tricyclic antidepressants (in particular amitriptyline for pain and other indications), skeletal muscle relaxants, and postmenopausal hormone therapy. Antihypertensives and antiglycaemic medications may be associated with hypotension and hypoglycaemia, which are risk factors for MCI and dementia. If possible, medications and doses should be reviewed, adjusted where necessary and, if possible, discontinued when they are unnecessary.

Table 1. Assessment for diagnosis of MCI

- Perform history focused on cognitive function (onset, trajectory)
- Changes in functional status (activities of daily living)
- Current prescriptions and over-the counter medications
- Neurological symptoms (vision, hearing, speech, sleep and disordered breathing during sleep, gait, numbness and tingling)
- Psychiatric disorders (depression, anxiety, behavioural or personality disorders)
- Physical and neurological examination
- Additional tests where indicated (neurological testing and laboratory tests)
- Cognitive testing (Montreal Cognitive Assessment [MoCA] or Mini-Cog®)
- Sleep patterns
- Medication/drugs/alcohol
- Subjective cognitive deficits

Once a diagnosis of MCI has been made, then it is important to evaluate memory and cognitive domains to classify the MCI into one of four subtypes: (1) deficits only in memory functions; (2) memory deficits plus deficits in another cognitive domain; (3) deficits in a single non-memory domain; and (4) deficits in more than one non-memory domain (Figure 1). The aetiology of symptoms should be carefully considered, because this will help to determine an appropriate management strategy:

1. Degenerative (gradual onset, insidious progression);
2. Vascular (abrupt onset, vascular risk factors, history of stroke or transient ischaemic attack);
3. Psychiatric (history of depression and/or anxiety);
4. Secondary to concomitant medical disorders (e.g., diabetes, cancer, etc).

TESTS AND INVESTIGATIONS

PREDICTORS OF PROGRESSION OF COGNITIVE DECLINE INCLUDE CLINICAL SEVERITY, HIPPOCAMPAL VOLUMES ON MRI, AND APOE4 CARRIER STATUS.

Others include fluorodeoxyglucose-PET scan, cerebrospinal fluid (CSF) biomarkers (CSF tau and

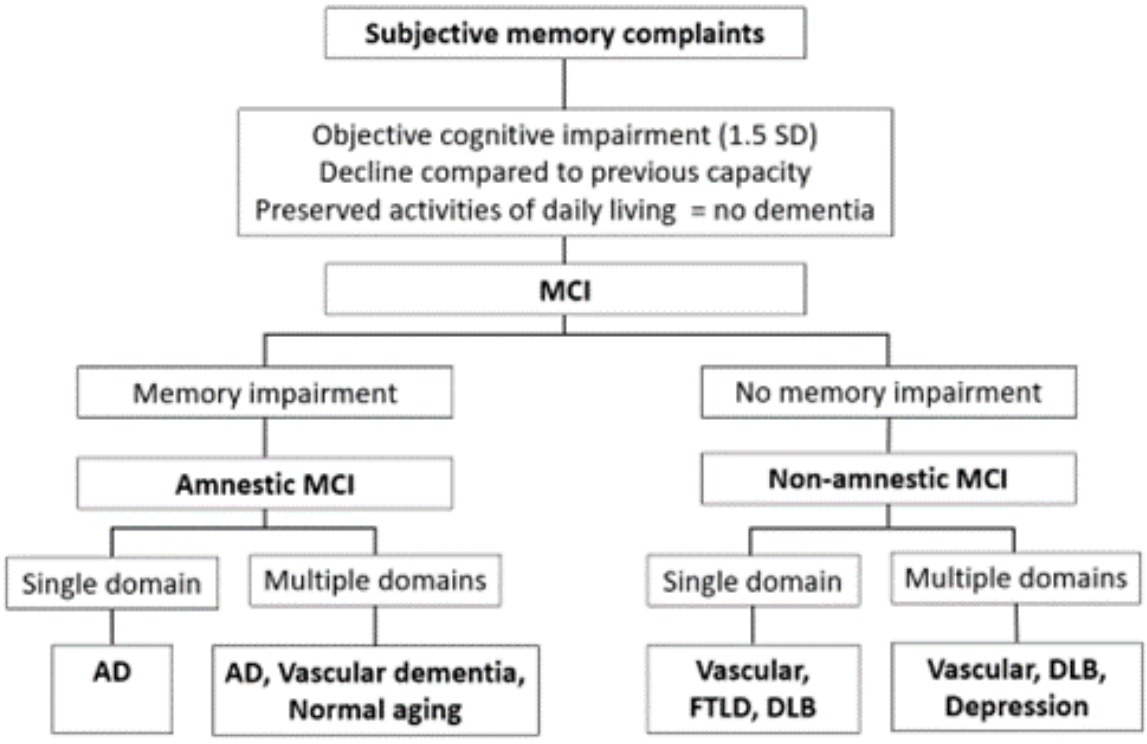

Figure 1. Diagnosis and classification of mild cognitive impairment (MCI)
AD: Alzheimer's disease; DLB: dementia with Lewy bodies; FTLD: frontotemporal lobar degeneration

beta-amyloid), and imaging amyloid deposition in the brain using Pittsburgh Compound B.

THE RELATIONSHIP BETWEEN COGNITIVE AND FUNCTIONAL DECLINE AND THE TRAJECTORY OF BIOMARKERS IS SHOWN IN FIGURE 2. TO PREVENT OR SLOW DOWN PROGRESSION OF COGNITIVE IMPAIRMENT, INTERVENTIONS SHOULD BE INITIATED IN THE EARLY MCI STAGE.

OBJECTIVE TESTS

The general consensus is that the Montreal Cognitive Assessment (MoCA) is the ideal test to evaluate an older person for MCI. It is a rapid screening instrument (10-12 minutes to complete) covering the following domains: short term memory, visuospatial abilities, executive functions, language, orientation to time and place, and attention, concentration and working memory. It is available in 35 languages, including Afrikaans and Zulu, has a low risk of bias and is sensitive to subtle changes.

Alternative tests include the Clock Drawing Test, Mini Cog®, and the mini mental state exam (MMSE).

PROGNOSIS

The amnestic form of MCI with a presumed degenerative aetiology (pre-AD MCI) progresses to dementia (usually AD) at a rate of 10% to 15% per year. A small fraction will improve and some will remain stable for many years.

ACCORDING TO MAYO CLINIC, THE VAST MAJORITY OF AMNESTIC MCI WILL PROGRESS TO AD, BUT 20% MAY HAVE AN ATYPICAL PRESENTATION OF OTHER DEMENTING DISORDERS SUCH AS LEWY BODY DEMENTIA, FRONTOTEMPORAL LOBAR DEGENERATION, PROGRESSIVE SUPRANUCLEAR PALSY, AND VASCULAR DEMENTIA.

TREATMENT OF MCI

Although many studies have been done, there is no approved therapy that has been shown to modify neurodegenerative disorders. Available medicines have been for symptomatic treatment only.

GIVEN THAT MCI, ESPECIALLY THE AMNESIC FORM, IS OFTEN A PRECURSOR TO AD, IT IS NOT SURPRISING THAT 70% OF PHYSICIANS PRESCRIBE ACETYLCHOLINE INHIBITORS OFF LABEL, AND 39% PRESCRIBE N-METHYL D-ASPARTATE (NMDA) ANTAGONISTS, SUCH AS MEMANTINE.

Treatment options include the following:

- Acetylcholine inhibitors: The goal of therapy is

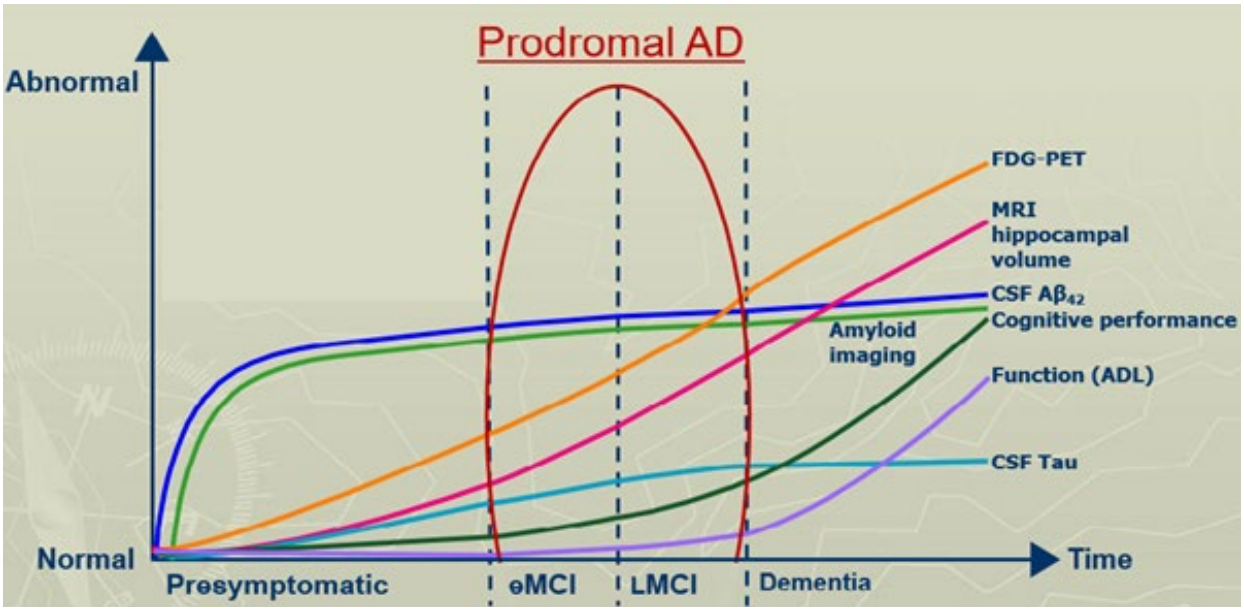

Figure 2. Trajectories of biomarkers during the progression of AD.
AD: Alzheimer's disease; ADL: activities of daily living; eMCI: early mild cognitive impairment; LMCI: late mild cognitive impairment.

Adapted from: Aisen PS, et al. Clinical core of the Alzheimer's Disease Neuroimaging Initiative: progress and plans. Alzheimer's Dement 2010; 6(3): 239-246.

MILD COGNITIVE IMPAIRMENT, BUT NOT YET DEMENTIA

to improve or stabilise memory and attention by preventing the breakdown of acetylcholine in the forebrain area, which is known to be affected by AD.

- NMDA receptor antagonist: Memantine is thought to work by blocking the effects of excessive glutamate secretion, and upregulating NMDA receptor expression. Memantine has also been shown to confer modest improvement in thinking, everyday functioning, behaviour and mood.
- Ginkgo biloba extract EGb 761 has been approved throughout Europe for MCI and mild to moderate dementia. Studies reported that in patients with MCI, treatment with EGb 761 was associated with significant improvements in cognitive function, neuropsychiatric symptoms, overall geriatric assessments, and global ratings of change. Consistent positive effects were found for more specified neuropsychological tests in several cognitive domains including memory, attention, processing speed and executive functioning, and in neuropsychiatric symptoms including depression. Several positive neuroprotective actions may account for the beneficial clinical effects of EGb 761, including improved blood rheology and tissue metabolism, antioxidant and free radical-scavenging activities; reversal of age-related losses in brain alpha 1-adrenergic, 5-HT1A and muscarinic receptors; protection against ischaemic neuronal death; preservation of hippocampal function; and enhanced neuronal plasticity.
- There is no evidence to support the use of vitamin E, nicotine patches, omega-3 fatty acids, vitamin B12, folic acid or beta-carotene.

Patients should be carefully assessed for treatable risk factors for MCI, including hypothyroidism, hypertension, diabetes mellitus, smoking and medications.

ENVIRONMENTAL, PSYCHOSOCIAL AND BEHAVIOURAL INTERVENTIONS

RESEARCH HAS IDENTIFIED SEVERAL EARLY LIFE AND MIDLIFE FACTORS, SUCH AS EDUCATION AND OCCUPATIONAL ATTAINMENT, THAT INCREASE RESERVE AND ALLOW INDIVIDUALS TO TOLERATE HIGHER LEVELS OF NEUROPATHOLOGY, YET MAINTAIN COGNITIVE FUNCTION.

For example, people with 12 years of formal education build up a bigger reserve than people with only 8 years of formal education. Reserve can be neural, for example by fostering richer neural connection, or cognitive, by allowing individuals to approach tasks in a new way. Group psychosocial activities and psychoeducation (e.g. practical everyday memory strategies and somatic processing to help improve encoding) are helpful. It is important to educate both the patient and their family about preventative measures and anticipated prognosis.

Participation in physical exercise (at least 45 minutes of moderate intensity aerobic workouts on 3-4 days a week), and mind-body exercises, such as yoga and Tai Chi, can improve cardiorespiratory function, attention, executive functioning and ADL.

SOCIAL ENGAGEMENT IS ESSENTIAL TO REDUCE DETRIMENTAL EFFECTS OF LONELINESS AND REDUCE RISK OF MCI.

Healthy nutrition has also been shown to reduce risk of MCI and is probably synergistic with physical exercise.

Patients should be re-assessed at least annually, unless there is evidence of amnestic MCI, in which case 6 monthly assessments are appropriate.

CONCLUSION

A lot of research has been done to define the criteria for MCI, but consensus still needs to be achieved concerning the clinical criteria for MCI and how to use them. MoCA is recommended as a cognitive screening tool for MCI.

THERE ARE LIMITED RESULTS FOR USE OF CHOLINESTERASE INHIBITORS AND NMDA RECEPTOR ANTAGONISTS. HOWEVER, LIFESTYLE INTERVENTIONS, INCLUDING REGULAR EXERCISE AND COGNITIVE TRAINING SHOULD BE PROMOTED THROUGH STRONG HEALTH POLICIES IN ORDER TO PROMOTE HEALTHY AGING.

Lastly, EGb 761 should be considered for the treatment of MCI when it becomes available in South Africa.

References available on request

NOVEL TAARGETS FOR TREATMENT OF SCHIZOPHRENIA

Kobus Roux

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For many years, psychopharmacology has been a science of monoamine circuits in the brain. For example, development of treatments for depression was based on the premise that it is caused by a dysregulation of serotonin, noradrenalin and dopamine activity, and treatments for psychosis and substance use disorder based on dysregulation of dopamine. Most of the medications used for treating these disorders are aimed at the monoamine receptors in the brain.

NEVERTHELESS, CLINICAL OUTCOMES ASSOCIATED WITH THESE DRUGS ARE NOT OPTIMAL AND RECENT RESEARCH HAS FOCUSSED ON TARGETING ALTERNATIVE MOLECULES AND RECEPTORS TO IMPROVE EFFICACY AND REDUCE POTENTIAL FOR ADVERSE EFFECTS.

Of particular interest, and already in clinical use, are treatments that target the glutamate N-methyl-D-aspartate (NMDA) receptor, and which have been shown to rapidly relieve symptoms in patients with treatment-resistant depression. These include electroconvulsive therapy (ECT), ketamine, dextromethadone, and a combination of dextromethorphan (a non-competitive NMDA receptor antagonist) and buproprion (a norepinephrine-dopamine reuptake inhibitor and nicotinic acetylcholine receptor negative allosteric modulator). Dextromethorphan is widely used as an antitussive agent, but clinical utility of dextromethorphan as a modulator of glutamate neurotransmission is limited by extensive CYP2D6 metabolism. Buproprion is a CYP2D6 inhibitor that blocks metabolism of dextromethorphan, thereby increasing its potential to modulate glutaminergic neurotransmission.

Kobus Roux

TRADITIONAL THEORY OF ALTERED BRAIN CIRCUITRY IN SCHIZOPHRENIA

Traditionally, schizophrenia has been regarded as a dysregulation of dopamine pathways in the brain, and traditional antipsychotics are dopamine antagonists. However, these agents are nonspecific, causing dopamine blockade in other pathways and activity at multiple receptor types, resulting in undesirable adverse effects (Table 1). This is true for both first- and second-generation antipsychotics, although they differ in which adverse effects are most prominent. First-generation antipsychotics are more associated with tardive dyskinesia, whereas metabolic side effects and coronary heart disease are the predominant concerns with the second-generation agents.

Table 1. Dopamine pathways in the brain	
Pathway	*Related symptoms in schizophrenia*
Mesolimbic	Negative symptoms
Mesocortical	Negative and cognitive symptoms, and depression
Mesostriatal	Positive symptoms
	Adverse effects of antipsychotic medication
Tuberofundibular-hypothalamic	Elevation of prolactin, amenorrhea, galactorrhoea, sexual dysfunction
Nigrostriatal	Extrapyramidal symptoms, including dystonia, akinesia, rigidity, tremor and dyskinesia
Non-specific effects on dopamine, serotonin and GABA receptors	Metabolic adverse effects; e.g., glucose dysregulation, diabetes, dyslipidaemia, weight gain

TAAR RECEPTOR AGONISTS

The trace amines are endogenous intracellular chemical messengers that are structurally similar to the monoamine neurotransmitters, dopamine, serotonin and noradrenaline, but they are expressed at several hundred-fold lower concentrations. They selectively activate a family of intracellular G protein-coupled receptors called trace amine-associated receptors (TAARs), which modulate monoaminergic neurotransmission. Six functional human TAARs have been discovered, but only TAAR1 has been studied in detail. Animal studies (and the same is presumed to be true for humans) have shown that TAAR1 is the most predominant TAAR in the brain, and is primarily associated with the major monoaminergic (in particular, although not exclusively, dopaminergic) nuclei and projection areas. It is present in both pre- and postsynaptic neurons. Endogenous ligands include 2-phenylethylamine (PEA), p-tyramine (TYR) and tryptamine.

STUDIES SHOW THAT THROUGH A SERIES OF COMPLEX INTERACTIONS, TAAR1 MODULATES SEROTONERGIC, DOPAMINERGIC AND GLUTAMATERGIC ACTIVITY IN THE BRAIN.

TAAR1 activation can reduce dopamine neuron firing, inhibit serotonergic neuronal firing in dorsal raphe nucleus, and modulate glutamatergic activity in the prefrontal cortex. TAAR1's ability to regulate neurotransmitter signalling in brain systems involved in mood, psychosis, reward-processing and cognition suggests it may have therapeutic potential as a target for several neuropsychiatric disorders, including psychosis and addiction. However, because TAAR1 modulates dopamine tone, decreasing dopamine in hyper-dopaminergic areas in the brain (e.g., ventral tegmental area and nucleus accumbens), modulates noradrenaline, prevents hyper-glutamate states (thereby increasing activity in the prefrontal cortex), and also maintains a balance in serotonin activity, it is not associated with extrapyramidal effects.

Outside of the central nervous system, TAAR1 is widely present in other tissues and cells, including pancreatic beta-cells, where it potentiates glucose-stimulated insulin release, and in the stomach, intestines and white blood cells (including peripheral mononuclear cells, B and T lymphocytes, monocytes and polymorphonuclear leukocytes).

There is considerable interest in the potential of TAAR1 agonists as an alternative option to currently available antipsychotic medications for treatment of schizophrenia.

POTENTIALLY, THEY ARE UNLIKELY TO INDUCE MOVEMENT DISORDERS OR METABOLIC SYNDROME, OR CAUSE DOPAMINE HYPERSENSITIVITY PSYCHOSIS.

Furthermore, they may reduce cravings, and therefore be helpful in patients with comorbid substance use disorder.

Two TAAR1 agonists, ralmiteront and ulotaront, are in clinical development. Although one phase 2 study of the effect of ralmiteront on positive and negative symptoms in patients with an acute exacerbation of schizophrenia or schizoaffective disorder was prematurely terminated because preliminary analysis showed the primary endpoint to be negative, a phase 2 study in participants with schizophrenia or schizoaffective disorder and negative symptoms is ongoing. Following on positive results in a phase 2 program, the FDA granted Breakthrough Therapy Designation to ulotaront for treatment of schizophrenia, and it is currently in phase 3 clinical development.

References available on request

S5 Dopaquel
QUETIAPINE FUMARATE
Restoring balance & calm[1,2]

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Help your patient **put the pieces back together again.**

Dopaquel is indicated for the treatment of **adult patients with schizophrenia** or for the treatment of **manic episodes associated with bipolar disorder.**[3]

Quetiapine is recommended as a **first-line treatment** in the management of **acute mania** associated with bipolar disorder[4]

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For full prescribing information refer to the professional information approved by the medicines regulatory authority.

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THE BRAIN-IMMUNE INTERACTION

Franco Colin

This article is a review of a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held In Umhlanga, KZN on 4 to 6 November 2022. The presentation was a feedback session on the attendance of Dr Colin at a PLENARY LECTURE at the ECNP conference in Vienna on Monday the 17th of October 2022 by Dr. Jonathan Kipnis titled: Novel insights into immune-brain interactions. The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd. The speaker acknowledges Dr David Webb for writing assistance **dawebb@mweb.co.za**. Further information is available from Dr Alicia McMaster, Head of Medical – South Africa, Dr Reddy's Laboratories **AliciaMcMaster@drreddys.com**

Studies done in the early and mid-20th century indicated the blood-brain barrier (BBB) prevents entry of immune cells into the parenchyma of the healthy brain, and absence of obvious lymphatic vessels within the brain suggested that it has no physical connection with lymph nodes or the peripheral immune system. In early studies in which tumours and foetal tissue were transplanted into animal brain parenchyma, these tissues did not provoke an immune response and successfully developed into heterologous tumours or embryonic tissues within the brain.

IN ONE INNOVATIVE STUDY, ADULT RABBIT SKIN TRANSPLANTED INTO A RABBIT BRAIN WAS NOT REJECTED IN THE SAME WAY AS SKIN TRANSPLANTED ON THE CHEST, SUGGESTING THAT THE BRAIN IS UNABLE TO INDUCE OR SUPPORT AN IMMUNE RESPONSE.

However, when the skin from the same donor was first transplanted peripherally and then into the brain, the transplant in the brain was rejected as quickly as the peripherally transplanted tissue. This observation indicated that the immune system can enter the brain and cause transplant rejection if it is activated peripherally first. The absence of immune responses to allogenic grafts in the brain gave rise to the concept that the brain is an immune-privileged organ. Nevertheless, an immune response could be induced in the brain by activating the immune system peripherally first. So how does this occur?

Franco Colin

THE GLYMPHATIC SYSTEM

With the exception of microglia, the brain's native immune cells, immune cells are not found in healthy brain tissue. Considering that an immune response could be mounted in the brain, the apparent absence of lymphatic vessels in brain parenchyma was puzzling, because it was uncertain how circulating immune cells could then mount an immune response to foreign tissue in the brain. However, a few years ago, Nedergaard and colleagues made a surprising discovery that confirmed that the brain does indeed contain a lymphatic-like system.

The brain is surrounded by cerebrospinal fluid (CSF), which circulates in the subarachnoid space, between the arachnoid mater and pia mater, lining the outside of the brain. The subarachnoid space also contains arteries that penetrate into the brain parenchyma. These arteries are surrounded by a perivascular space continuous with the subarachnoid space. The perivascular space is bounded on the inner side by vascular endothelial cells, and on the outer

(brain parenchyma) side by extensions (endfeet) branching out from astrocytes. The astrocyte endfeet completely surround the perivascular space around the arteries, capillaries and veins in the brain and spinal cord, and contain water channels constructed by a protein called aquaporin-4. Arterial pulses drive the CSF through the perivascular space, into the astrocyte water channels, from where it flows into and through the interstitial space fluid (ISF) in the brain tissue, and from there into the perivascular space surrounding small veins draining the brain. In this way, there is a continuous interchange between the CSF and ISF.

THE BRAIN IS VERY METABOLICALLY ACTIVE AND WASTE PRODUCTS MUST BE EFFICIENTLY REMOVED. METABOLITES IN THE PARENCHYMAL ISF ARE FLUSHED OUT THROUGH THE PERIVASCULAR SPACES SURROUNDING SMALL VEINS, WHICH MERGE INTO LARGER LYMPHATIC VESSELS, EVENTUALLY DRAINING INTO THE LYMPHATIC CIRCULATION IN THE NECK (DEEP CERVICAL LYMPH NODES), FROM WHERE WASTE PRODUCTS FLOW INTO THE GENERAL CIRCULATION.

Because of the important role of the astrocyte (a type of glial cell) in the interchange between CSF and parenchymal ISF flowing through the brain, and because this interchange resembled the lymphatic system in peripheral tissue, Nedergaard called this system the 'glymphatic system'.

THE BRAIN-IMMUNE CONNECTION

The dural sinuses are rich with immune cells, including T cells, macrophages and antigen-presenting dendritic cells. Antigens in the glymphatic fluid (from the ISF in the central nervous system) accumulate around the dural sinuses where they are captured by the local antigen-presenting cells and presented to patrolling T cells. In this way, CNS-derived antigens stimulate an immune response. The glymphatic system also carries cytokines produced by the immune cells in the meninges into the brain parenchyma where they promote an immune response and change the activity of neurones, initiating 'sickness behaviour' (sleeping, eating less, withdrawal from social contact).

IT IS NOTABLE THEN, THAT IMMUNE SURVEILLANCE DOES NOT HAPPEN IN THE BRAIN, BUT RATHER IN THE BORDERING TISSUES.

Recent studies in human subjects have shown that CSF-mediated exchange of molecules between brain tissue and dural lymphatic vessels occurs via the parasagittal dura along the superior sagittal sinus at areas nearby entry of cortical cerebral veins.

Microglia comprise approximately 10% of immune surveillance in the brain; the remainder is attributable to leptomeningeal and perivascular macrophages. Furthermore, recent studies have shown that if perivascular macrophages are removed, glymphatic drainage is markedly attenuated. So these cells are not only important for immune surveillance, they also facilitate the movement of CSF through the brain. The mechanism by which they do this is unknown.

WHERE DO THE IMMUNE CELLS COME FROM?

There is a rapid turnover of immune cells in the meninges, and studies using cellular markers demonstrated that these cells do not come from the peripheral lymphatic system. Studies to determine the source reveal that they originate predominantly from the rich marrow in the spongy bone of the skull, which connects to the meninges (and, in turn, to the brain parenchyma) via microscopic vascular channels.

ANTIGEN PRESENTATION IN THE CSF AND DURAL SINUSES CAUSES A RESPONSE OF PROGENITOR CELLS IN THE CRANIAL BONE MARROW, WITH DEVELOPMENT OF IMMUNE CELLS THAT CAN RESPOND TO ANTIGENS IN THE CNS. MARROW IN THE VERTEBRAE MAY ALSO RESPOND IN THE SAME WAY.

This observation helps, at least partly, to explain why some brain tumours are able to evade succumbing to an immune response. They produce cytokines that supress the local immune response in the marrow of the cranial bones and prevent development of tumour cell-specific immunity.

References available on request

SUICIDE PREVENTION FROM A GLOBAL PERSPECTIVE: PROGRESS AND CHALLENGES

Frans A Korb

This article is a review of a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held In Umhlanga, KZN on 4 to 6 November 2022. The meeting and speakers were sponsored by Dr. Reddy's Laboratories Pty. Ltd. Further information is available from Dr Alicia McMaster, Head of Medical – South Africa, Dr Reddy's Laboratories **AliciaMcMaster@drreddys.com**

The 35th European College of Neuropsychopharmacology (ECNP) congress took place from 15 – 18 October 2022 in Vienna, Austria. A campfire discussion session was held with the topic *Media and Suicide: from Werther to Papageno Effects*. The discussion was led by Benedikt Till from the Medical University of Vienna (Centre for Public Health, Department of Social and Preventive Medicine, Unit Suicide Research & Mental Health Promotion). The aim of the session was to explore the influence of the portrayal of suicide in the mass media on suicidal behaviour. The ultimate outcome of the discussion was that media plays and should play an important role in preventing suicide.

THIS ARTICLE WILL GIVE AN OVERVIEW OF THE DISCUSSION HELD WITH ADDED SOUTH AFRICAN DATA TO MAKE IT MORE RELEVANT. THE DISCUSSIONS CENTRED AROUND WORLDWIDE SUICIDE STATISTICS AND EXPLORING THE WERTHER AND PAPAGENO EFFECTS.

During June 2021, the WHO published the most recent available data on worldwide suicide statistics.[1] In this paper they report that more than 700 000 people die due to suicide every year. It is also known that for every suicide there are many more people who attempt suicide. Analysis has indicated that a prior suicide attempt is the single most important risk factor for suicide in the general population. A major concern is that suicide is the fourth leading cause of death among 15-29-year-olds. Furthermore 77% of global suicides occur in low- and middle-income countries with ingestion of pesticide, hanging and firearms being among the most common methods of suicide globally.

Frans A Korb

In published data from the USA Centres for Disease Control and Prevention (CDC) they reported that nearly 46,000 people died by suicide in the USA in 2020 equating to 1 death every 11 minutes. Many more adults think about or attempt suicide. It is estimated that in the USA 12.2 million seriously thought about suicide, 3.2 million made a plan for suicide and 1.2 million attempted suicide. The most concerning statistic was that teen suicide increased by 29% since 2012/2014 to 2018/2020 (deaths per 100,000 adolescents ages 15-19 years).[2]

THE WHO RANKS SOUTH AFRICA AS NUMBER 10 ON THE LIST OF COUNTRIES WITH THE MOST SUICIDES IN 2019 WITH 23,5 PER 100 000 POPULATION.[1]

Of the 13774 suicides reported in South Africa, 10861 were men whilst 2913 were women, translating to a rate of 37,6 per 100 000 for men and 9,8 per 100 000 for women. This statistic indicated that men in South Africa are five times more likely to die by suicide than woman. It is interesting to note that the highest suicide rate in the world was Lesotho with 72.4 per 100 000 people and third on the list was Eswatini (Swaziland) with 29.4 per 100 000 people. These worldwide statistics unfortunately indicates that three of the top ten countries with the highest suicide rates are in Southern Africa.

SADAG (The South African Depression and Anxiety Group) operated throughout the COVID-19 pandemic. Before COVID-19 the SADAG helpline call-centre received 600 calls per day on average. Within two months after South Africa went into total lock-down on 27 March 2020 the call volumes doubled to 1000 to 1400 calls per day.

From January 2022 to September 2022 the SADAG call-centre received 562 176 calls now averaging over 3000 calls per day. Analysis of the statistics further indicated that 1 in 4 calls were suicide related with the majority calls coming from youth in line with the USA statistics. This statistic has also increased from 2021 when 1 in 5 calls were suicide related.

The seminal article on the Werther Effect was published by David Phillips in 1974.[3] The name was taken from Goethe's novel Die Leiden des Jungen Werthers (The Sorrows of Young Werther), published 1774. In the novel, Werther shoots himself with a pistol after being rejected by the woman he loves. Shortly after its publication, there were reports of young men using the same method to kill themselves (shooting) in acts of hopelessness. Phillips noted that suicides increase immediately after a suicide story has been published in the newspapers in Britain and the USA, 1947 to 1968. The more publicity devoted to a suicide story, the larger the rise in suicides thereafter.

THE WERTHER EFFECT IS THUS DEFINED AS AN INCREASE IN SUICIDE RATES THAT FOLLOW MEDIA COVERAGE OF SUICIDES OR A SUICIDE THAT IS INSPIRED BY READING ABOUT OTHERS SUICIDE THAT ARE LINKED TO A FRIEND OR FAMILY MEMBER WHO COMMITTED SUICIDE. THE WERTHER EFFECT IS A SYNONYM FOR MEDIA-INDUCED IMITATION EFFECTS OF SUICIDAL BEHAVIOUR.

This effect is also based on social learning theory. This is a theory of learning process and social behaviour which proposes that new behaviours can be acquired by observing and imitating others. Two case studies were discussed. The first was imitative suicide on the Viennese subway. It was noted that the number of subway suicides in Vienna increased dramatically between 1984 and mid-1987. A working group of the Austrian Association for Suicide Prevention developed media guidelines and initiated discussions with the media which culminated with an agreement to abstain from reporting on cases of suicide. The study indicated that in the second half of 1987 there was a decrease in suicides of 75% which was sustained for the next 5 years.

The second case study was that of the suicide of Robin Williams, well-known comedian and actor who died by suicide (suffocation through hanging) on 12 August 2014.[5] This study examined the monthly suicide count before and after his suicide and found a 10% increase in suicides in the two months following his death. A significant increase in the number of suicides by hanging/suffocation in men was also observed.

In 2010 the Papageno effect was described in the British Journal of Psychiatry.[6] The Papageno effect (protective effect) is in honour of the character in Mozart's opera The Magic Flute (1791). In the opera Papageno fears that he has lost his love and he prepares to kill himself. Three boys save him at the last minute by reminding him of other alternatives to dying.

IN THEIR ARTICLE THE AUTHORS CONCLUDE THAT THE IMPACT OF SUICIDE REPORTING MAY NOT BE RESTRICTED TO HARMFUL EFFECTS; RATHER, COVERAGE OF POSITIVE COPING IN ADVERSE CIRCUMSTANCES, AS COVERED IN MEDIA ITEMS ABOUT SUICIDAL IDEATION, MAY HAVE PROTECTIVE EFFECTS.

Several countries throughout the world have now published media guidelines on suicide reporting. The World Health Organization on their website published guidelines on 'Preventing suicide: A resource for media professionals'. Their rrecommendations for proper reporting are :

Do not:

1. Give precise details on the suicide method
2. Give personal information about the person who has committed suicide
3. Use some expressions such as "self-inflicted death."
4. Place stories about suicide prominently and don't unduly repeat such stories
5. use language which sensationalizes or normalizes suicide, or presents it as a constructive solution to problems
6. Explicitly describe the method used
7. Provide details about the site/location
8. Use sensational headlines
9. Use photographs, video footage or social media links.

Do:

1. Provide accurate information about where to seek help
2. Educate the public about the facts of suicide and suicide prevention, without spreading myths
3. Report stories of how to cope with life stressors or suicidal thoughts, and how to get help
4. Apply particular caution when reporting celebrity suicides
5. Apply caution when interviewing bereaved family or friends
6. Recognize that media professionals themselves may be affected by stories about suicide.

In conclusion, more awareness needs to be created about the Werther and Papageno Effects.

NUMEROUS STUDIES WORLDWIDE HAVE FOUND THAT THE RISK OF CONTAGION IS REAL, AND THAT RESPONSIBLE REPORTING CAN REDUCE THE RISK OF ADDITIONAL SUICIDES.

Media coverage of suicide can change perceptions, dispel common myths, and educate the public on the complexities of suicide. Although such media guidelines do not exist in South Africa every effort should be made to educate and continue to inform journalists about the effects of suicide reporting.

Finally it is hoped that this paper would continue to stimulate discussion around the topic of suicide. Suicide helplines should continue to be promoted and supported nationally and regionally.

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OPTIMISING LAT FOR SCHIZOPHRENIA

Viresh Chiman

This article is a review of a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held In Umhlanga, KZN on 4 to 6 November 2022. The meeting and speakers were sponsored by Dr. Reddy's Laboratories Pty. Ltd. Further information is available from Dr Alicia McMaster, Head of Medical – South Africa, Dr Reddy's Laboratories **AliciaMcMaster@drreddys.com**

Schizophrenia is a serious mental illness that requires continuous and effective long-term treatment to reduce symptoms, improve quality of life and prevent relapse. Oral medications have proven efficacy for many patients taking these medications, however a considerable number of patients continue to experience ongoing symptoms and relapse, often due to lack of adherence.

Long acting injectable (LAI) Anti-psychotics (AP) are among the most effective treatments in psychiatry, yet they remain underutilised in clinical practice. They are typically used to maintain treatment adherence in patients with chronic schizophrenia.

RECENT RESEARCH HAS SUGGESTED THAT THEY MAY ALSO PROVIDE AN EFFECTIVE TREATMENT STRATEGY FOR PATIENTS WITH EARLY PHASE OR FIRST EPISODE DISORDER.

Rehospitalisation rates among patients receiving LAIs were 20-30% lower than for patients receiving equivalent oral formulations. Despite data to support LAI efficacy and safety, and improved adherence over oral formulations, there are several misconceptions about and barriers to LAI implementation within a standard of care for patiens with schizophrenia. These include doubts regarding their benefits, questions regarding prescribing to a broader population of patients, when to initiate LAIs and, the most effective way to educate healthcare providers, patients, and caregivers.

These controversies perpetuate the negative perception of LAIs that is unsupported by current data and that can be countered with education and training efforts.

Viresh Chiman

FACTORS IN NON-ADHERENCE

Factors in non-adherence may be related to patient problems, specific treatments [e.g. side effects and lack of efficacy] or the patient's overall condition.

THE ILLNESS IS OFTEN COMPLICATED BY POOR INSIGHT AND COGNITIVE DYSFUNCTION, POOR SYMPTOM CONTROL WHICH CAN LEAD TO NON-ADHERENCE, ADVERSE EFFECTS WHICH MAY BE INTOLERABLE, A POOR SOCIAL SUPPORT SYSTEM AND SUBSTANCE USE DISORDER IS COMMON.

With each relapse the onset of therapeutic effect of medication may be slower, treatment may be less effective and patients can experience greater hardships and illness burden.

BENEFITS OF LAIs

1. Improved Adherence

Approximately 40-50% of patients with schizophrenia may be non-adherent with their antipsychotic medication by either not filling the script or taking the medication.

RISK OF RELAPSE AND HOSPITALISATION OCCUR AFTER INTERVALS OF MISSED MEDICATION FOR A PERIOD AS SHORT AS 10 DAYS OR LESS. LONG ACTING INJECTABLE APs SHOW AN INCREASED ADHERENCE OVER ORAL ANTIPSYCHOTICS.

Patients can demonstrate non-adherence with LAIs and the benefits of LAIs can be mitigated or even negated by non or partial adherence, skipped doses are known sooner because of a need for a professionally administered injection versus self-administration of pills and relapses are delayed because of the longer half-lives of LAIs.

Sustained adherence was reported after first episode schizophrenia with administration of an LAI versus the oral formulation of risperidone, where 95% of patients in the LAI group versus 33% in oral AP group were rated as having "excellent "adherence" during the 1-year study, with an 85% relative risk reduction for relapse in the LAI group. LAIs were consistently associated with significantly lower risk of hospitalisation and/or relapse

2. Greater tolerability

While increased treatment adherence is a well discussed benefit of LAIs there is concern regarding the safety and feasibility of using the medication and how it may impact on recovery.

A negative perception of LAI versus oral AP safety has emerged, partially from experiences with short acting intramuscular injections often used in emergency and or inpatient settings and First-Generation Antipsychotics (FGAs) - LAIs - associated with injection related adverse events, higher reports of EPS and tardive dyskinesia.

SECOND GENERATION ANTIPSYCHOTIC (SGA)LAIs HAVE A DIFFERENT AQUEOUS FORMULATION THAN FGA - LAIs AND THIS HAS HELPED REDUCE OCCURRENCE OF INJECTION SITE RELATED EVENTS.

A recent meta-analysis indicated akinesia, low density lipoprotein cholesterol changes and increased anxiety were observed at higher rates with SGA- LAIs than with the same AP medication given orally. Increased serum prolactin levels were less pronounced with SGA-LAIs.

3. Relapse prevention and fewer hospitalisations

Recovery and relapse prevention are the ultimate goal of treatment for both patient and clinician. Relapse has a negative impact on the patient with the number of relapses significantly correlating with greater deterioration of the patient over time. Patients with first episode psychosis do not respond well to antipsychotic medication after relapse as they did during their initial treatment.

ORAL AND LAI FORMULATIONS DO NOT DIFFER IN THEIR EFFICACY IF PATIENTS ARE CONSISTENTLY TAKING MAINTENANCE TREATMENT. SURVEYS SHOW THAT PATIENTS TAKING ORAL APs WERE MORE ACCEPTING OF POTENTIAL LAI TREATMENT BECAUSE OF GREATER EXPECTATIONS OF RELAPSE PREVENTION.

Adherence is significantly associated with both fewer relapses and psychotic symptoms exacerbation in the LAI versus oral risperidone study.

4. Reduced treatment discontinuation

Increase in stable treatment duration due to fewer discontinuations and relapses may lead to improved outcomes for patients. A study comparing LAI and oral risperidone found that the frequency of discontinuations because of adverse effects was twice as high for oral versus LAI formulations [21 vs 10%] and fewer discontinuations because of lack of efficacy in LAI group. The comparable or lower discontinuation rates because of intolerance with LAIs versus oral APs in addition to the significantly lower mortality rates support the overall benefits of LAIs.

PRESCRIBING LAIS

Prescribing patterns for LAIs vary across the globe. Minimal use can be attributed to a lack of knowledge and familiarity by both healthcare providers and patients as well family and caregivers. Prescribers who have experience with LAIs may lead to their use in only a small number of patients with a medical history of or risk factors for non-adherence with oral APs versus broadening LAI consideration

to a wider range of patients. Awareness of specific drivers for non-adherence to schizophrenia treatments including whether it's intentional (e.g. side effect avoidance, lack of illness insight) or unintentional (e.g. substance use, cognitive / mental impairments, lack of support) should be approached appropriately. A survey conducted by clinicians with LAI experience reported a strong consensus to prescribing LAIs to those with certain histories i.e. multiple admissions/relapses, violence, suicide attempts, substance use, poor illness insight, cognitive impairment and patients between 18-25 years of age. Therefore, early introduction of LAIs can provide increased competitive employment, independent living and decreased disability / hospital admissions compared with oral AP treatments, thereby supporting LAI use in a broader range of patients.

HEALTHCARE PROFESSIONALS HESITANCE IN PRESCRIBING LAIS

Healthcare professionals refrain from prescribing LAIs and this is due to the following reasons, amongst others:

1. Negative perceptions

Clinicians may assume patients will face discomfort using needles or presenting the option with ambivalence therefore refraining from prescribing an LAI to patients and not educate the patients appropriately on LAI use and benefits. They may refrain from introducing an LAI due to caution of damaging the patient – doctor relationship. Clinicians should instead consider the benefits of using LAIs in patients. These benefits should outweigh all negative perceptions.

2. Lack of guidelines

Clear guidelines for recommending LAI use are needed to help align and guide clinicians.

THE APA GUIDELINE FOR THE TREATMENT OF SCHIZOPHRENIA WERE RECENTLY UPDATED, HOWEVER THERE ARE NO RECOMMENDATIONS REGARDING EARLY IMPLEMENTATION OF LAIS AND THIS CAN CONTRIBUTE TO LESS FREQUENT USE BY PRESCRIBERS.

3. Clinician and health care professional education

Clinicians may be hesitant to use LAIs for reasons including limited knowledge about drug pharmacokinetics and appropriate dose selection, an overestimation of patient adherence to oral APs, lack of awareness of benefits of SGA vs FGA - LAIs or oral APs. Training on how to correctly introduce and educate patients on LAIs and their benefits is required for clinicians. This will aid in alleviating the patients concerns of being on LAI.

4. Service Barriers

Clinics and other facilities may face a problem with being understaffed. This contributes to the formation of a service barrier as there is a lack of community nurses to administer injections or failure to partner with a pharmacist or general practitioner to assist in administering the depot. Financial barriers from funders and government may also cause the services barriers.

IN CONCLUSION, LAIS PROVIDE SEVERAL THERAPEUTIC ADVANTAGES OVER ORAL APS AND ACCESS SHOULD BE PROVIDED TO ALL PATIENTS WHO MAY BENEFIT FROM THEIR USE.

This includes the traditionally considered patient groups and clinical scenarios - such as non-adherence, multiple relapses, self-harm/intent to harm others substance use- but also proactive and preventative utilisation of LAIs in patients with first episode schizophrenia and early phase schizophrenia.

TREATMENT OF SCHIZOPHRENIA IS A LONG-TERM COMMITMENT AND PATIENTS SHOULD BE PROVIDED THE BEST CHANCE OF SUCCESS EARLY ON, WHICH INCLUDES MEDICATION THAT WILL RESULT IN THE HIGHEST ADHERENCE, GREATEST EFFICACY AND FEWEST DISCONTINUATIONS BECAUSE OF PATIENT DISCOMFORT.

a] physician education

b] patient education

c] treatment selection

With the implementation of the system, patients are more involved in their care and have a greater chance of gaining autonomy over their illness and making impactful steps towards improved outcomes and quality of life.

References available on request

SCHIZOPHRENIA IN WOMEN

Sebolele Seape

This article is a review of a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held In Umhlanga, KZN on 4 to 6 November 2022. The meeting and speakers were sponsored by Dr. Reddy's Laboratories Pty. Ltd. Further information is available from Dr Alicia McMaster, Head of Medical – South Africa, Dr Reddy's Laboratories **AliciaMcMaster@drreddys.com**

Schizophrenia is a serious illness with no disparity in prevalence between men and women. The age of onset differs however based on gender. Schizophrenia is often associated with younger men who display onset in their early 20s or even earlier, whereas women often display onset in their late 20s or early 30s. It is described as a benign illness in women. Women have better premorbid functioning and lower levels of disability when compared to men. Women are also more socially active and better integrated in society compared to men. Mortality in schizophrenic patients compared to the general public has not yet been proven to differ. Men have higher rates of suicide compared to females. In females, suicide is often associated with delusions.

The diagnostic criteria for schizophrenia are the same for women and men. Certain clinical features may however differ between men and women. Women have higher levels of anxiety and depression, which may lead to suicide. Women are also less likely to display flat affect, blunt emotional response, speech reduction and social withdrawal. They tend to be more hostile, physically active and dominating, have more sexual delusions, less negative symptoms but more positive symptoms (including hallucinations, paranoid and persecutory delusions).

IN WOMEN IT IS THEREFORE SEEN TO BE A LESS DEBILITATING CONDITION AS COMPARED TO MEN. WOMEN EXPERIENCE THE FOLLOWING POSITIVE SYMPTOMS MORE SEVERELY COMPARED TO MEN: AUDITORY HALLUCINATIONS AND PERSECUTORY OR PARANOID DELUSIONS. FEMALES MAY ALSO HAVE HIGH LEVELS OF ANXIETY AND DEPRESSION.

It has been postulated that estrogen has a disease modulatory effect, especially in pre-menopausal women. As women get older the symptoms may get worse. This has not yet been proven conclusively though.

Sebolele Seape

Other differences between male and female schizophrenia patients are a reduced duration of hospitalization in females and reduced rate of substance abuse, such as smoking and alcohol consumption, compared to males. Older women are more likely to experience tardive dyskinesia (TD) and they have an increased incidence of migraine and thyroid disease. The reason for the higher incidence of migraine and thyroid disease is not clear as yet.

Schizophrenia impacts most areas of a patient's life. The disease also has an impact on the ability to form and maintain relationships. It is reported that men are less likely to get married as they experience the onset of the disease much earlier, which may subsequently impact their social activities and engagements. If a man gets married, they do tend to have lower rates of divorce compared to females. Women with schizophrenia are more likely to get married compared to men, however, they struggle to remain married due to difficulty in maintaining social skills. This is seen especially in cultures where arranged marriages are common. The impaired ability to engage socially therefore does not impact how many women get married. There is however an increase in the rate of separation and divorce, especially when severe symptoms and psychotic symptoms are displayed.

Women with schizophrenia are more likely to have unplanned pregnancies with a low risk of congenital abnormalities. The congenital outcomes that are more likely to occur include: low birth weight, higher

incidence of intrauterine growth retardation, higher rates of preterm births as well as premature deaths. Schizophrenia is associated with a number of psychosocial challenges. The number of females with schizophrenia who are homeless is on the rise. We often see that the homeless female patients have more severe symptoms. Stigmatization is a major issue for patients diagnosed with schizophrenia. It appears that men are more stigmatized than women are.

Treating schizophrenia requires requires gender-sensitive mental health services as women require a softer approach due to the presence of lesser negative symptoms. Not all patients presenting with psychosis have schizophrenia. Bipolar mood disorder and schizoaffective disorder are often misdiagnosed as schizophrenia and this is seen often in females. Part of the treatment plan is to start with psychoeducation. The patient also needs to be educated on the importance of maintaining good physical health. Women with schizophrenia usually neglect their physical health and this may be due to lack of self-awareness which may be brought about by the overwhelming psychiatric symptoms. The treatment plan should also consider whether the patient has children and what their needs might be. This is essential as antipsychotics can have a negative effect on the ability to breastfeed as well as depleting energy sources which may affect the parent's ability to look after their children. The risk of suicide should also be taken into consideration, with a suicide assessment plan in place, to ensure safety.

The pharmacokinetics of antipsychotic medicine is different between males and females. Females tend to have higher body fat percentages. For medicines which are lipophilic the volume of distribution is higher in females. The medicine reaches the target organs much quicker. Females also have 10% - 15% more blood flow to the brain, which allows for the drugs to reach the target receptors quicker. Females tend to experience more metabolic side effects from the antipsychotics and they are more likely to have QTc prolongation. Men often require higher doses of antipsychotics for the medicine to be effective in managing the symptoms. Studies have different conclusions regarding the difference in response to treatment when comparing women to men. It was, however alluded to that women face harsher psychosis although respond well to treatment when compliant, as compared to men. There is less utilization of second-generation antipsychotics in men compared to women.

The side effect profile of the antipsychotics on the neuroendocrine system include metabolic dysfunction, hyperprolactinemia and extrapyramidal side effects. These side effects occur mostly with first generation antipsychotics and two second generation antipsychotics, namely risperidone and ziprasidone. Clozapine, olanzapine and quetiapine spare prolactin, although they cause weight gain. Mildly increased prolactin levels result in a short luteal phase, a decrease in libido and infertility. Moderate levels of hyperprolactinaemia result in oligomenorrhea. Symptoms due to severely abnormal or elevated prolactin include hypogonadism, galactorrhea and amenorrhea. Constipation and vaginal infections are also a result of hyperprolactinaemia. Further, hyperprolactinaemia may also cause a decrease in bone mineral density which leads to osteoporosis, which may result in low impact fractures, the amenorrhea which leads to sexual dysfunction and infertility as already described. There may also be an increased risk of breast cancer in females due to the hyperprolactinaemia. Metabolic dysfunction due to antipsychotics causes weight gain, abdominal obesity, hypertriglyceridemia and hypertension. Metabolic dysfunction may ultimately lead to cardiovascular disease, metabolic syndrome and/or diabetes mellitus.

THE EXTRAPYRAMIDAL SIDE EFFECTS INCLUDE PARKINSON'S LIKE MOVEMENT DISORDERS, TARDIVE DYSKINESIA AND AKATHISIA.

Breast cancer is more common in women treated for schizophrenia compared to the general public. 1 in 25 women treated for schizophrenia will develop breast cancer. This is most likely due to the hyperprolactinaemia caused by certain antipsychotics. The risk also seems to increase with the duration of treatment. Females who have been treated for more than 4 years seem to have a higher risk of developing breast cancer compared to those who have received treatment for less than 4 years. Quetiapine, olanzapine and aripiprazole do not cause elevated prolactin levels and the risk of breast cancer should therefore be reduced in females being treated on these antipsychotics.

There is a 20% chance of developing gestational diabetes especially when treated with olanzapine, quetiapine, risperidone and clozapine. The metabolism of antipsychotic medicine is increased during pregnancy and therefore dosage adjustments may be necessary. The breastmilk of schizophrenia patients treated with antipsychotics does contain only traces of the medicine. Therefore, the potential benefit of using antipsychotics during pregnancy and lactation outweighs the potential risk of discontinuation.

In conclusion, although the illness is considered to be similar in men and women, subtle differences should be considered especially when deciding on a treatment plan. The risks associated with hyperprolactinaemia should be considered when selecting an antipsychotic treatment. Consideration should also be given to the family circumstances, including pregnancy and having parental responsibilities.

References available on request

WHAT CAN MOBILE DIGITAL TECHNOLOGIES OFFER IN UNDERSTANDING, **MONITORING AND TREATING MENTAL HEALTH DISORDERS?**

Sanjna Keerath

This article is a review of a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held In Umhlanga, KZN on 4 to 6 November 2022. The meeting and speakers were sponsored by Dr. Reddy's Laboratories Pty. Ltd. Further information is available from Dr Alicia McMaster, Head of Medical – South Africa, Dr Reddy's Laboratories **AliciaMcMaster@drreddys.com**

When looking at the future of healthcare, a critical aspect of it is the customer experience. Healthcare is changing and customer expectations are also changing. They expect a seamless, connected experience that allows them to participate and be heard. Customers also expect personalized and tailored services and want to be empowered to self-manage.

DIGITAL THERAPEUTICS DELIVERS MEDICAL INTERVENTIONS DIRECTLY TO PATIENTS USING EVIDENCE-BASED, CLINICALLY EVALUATED SOFTWARE TO TREAT, MANAGE AND PREVENT A BROAD-SPECTRUM OF DISEASES AND DISORDERS.

Digital offerings range from:

1. Education: This includes a detailed knowledge hub, patient education, resources, tools and mechanisms for medication research.
2. Community engagement: This drives social and community engagement towards treatment adherence
3. Fitness: Assist in building and monitoring sustainable health behaviours amongst users.
4. Telehealth and telemedicine: Direct to-patient remote and virtual services delivery.
5. Digital medicine: Evidence-based software technologies developed for human health medication.
6. Digital therapeutics: The most advanced and complex element on the continuum of digital health.

Digital therapeutics products and solutions adhere to the same standards of evidence and regulatory approval procedures as traditional medical treatments. The processes involved include

Sanjna Keerath

- Treatment which aims to manage or treat medical diseases or disorders.
- Software driven medical interventions.
- Patient involvement through engagement of end users in product development and usability processes.
- Data collection through integrated privacy and security protection mechanisms.
- Clinically tried with evidence of published trial results including clinical evidence and outcomes in health/peer journals.
- Best practices allowing room for product development, management, and maintenance of best technique.
- Regulatory approvals that have been reviewed, cleared and approved by regulatory bodies to support product claims of risk, efficacy and intended use.
- Product claims need to be aligned to clinical evaluation and regulatory status
- Data collection for analysis and model real well data as evidence to improve the performance and functionality.

The World Health Organization (WHO) released guidelines on digital health interventions in 2019. Some of the extracts from the policy documents include the following:

- "Harnessing the power of digital technologies is essential for achieving universal health coverage."
- "If digital technologies are to be sustained and integrated into health systems, they must be

able to demonstrate long-term improvements over the traditional ways of delivering health services."

One of the tools that are important in digital therapeutics is smart phones. The use of smart phones in South Africa has been predicted to have tripled from 2014 to 2023 from 9.7 million users to 26, 3 million users.

WITH THE COVID-19 PANDEMIC, THE ADOPTION OF DIGITAL TOOLS AND PLATFORMS WERE FAST TRACKED AND THE ROLE OF DIGITAL THERAPEUTICS IN THE MENTAL HEALTH SPACE HAS ALSO INCREASED. NUMEROUS MOBILE APPS BECAME AVAILABLE TO ASSIST WITH PSYCH EDUCATION AND PEER SUPPORT. ONE OF THE DIGITAL TOOLS USED DURING THE COVID-19 PANDEMIC WAS GEO MAPPING.

Geo mapping was a tool used in Covid-19 to track possible transmission of the virus from one person to the next. It required a Covid-19 positive patient to contact the authorities via the app confirming the positive test results and listing their history of gatherings they had recently attended. In turn, the app used the data to verify with other data received to confirm if there was a match. Once a match was confirmed, the app notifies the user of the possibility of contracting Coivd-19 due to them being in the same environment as someone who has tested positive. This was accompanied by instructions on how to get tested or self-quarantine.

Devices used in digital mental health interventions fall under three categories:

1. Mobile devices which includes wearables as well as smart phones.
2. Hybrid which includes tablets and telehealth.
3. Home which includes a virtual reality, video games and smart home devices

Digital mental health is a broader term that encapsulates 'e-Mental Health' while including other technologies that help improve customers mental health and overall wellness. The WHO defines e-Mental Health as the *'use of information and communication technologies for the provision of mental health services.'*

Disruptive digital mental health refers to innovative technology solutions that significantly change the way we identify, diagnose, treat and support mental health and wellness - this includes digital phenotyping. Digital mental health interventions can be self-guided (e.g. the user goes through the intervention independently), guided (e.g. delivered with the support of a coach or therapist), hybrid (e.g. blended with face-to-face treatment).

The potential of technology to drive mental health innovation is fuelled by the increased prevalence of smart phones and recent advances in mobile technology. Sensors on phones are now capable of collecting, storing and processing vast amounts of health data, with new tools constantly emerging to help track, monitor and augment clinical interventions. These innovations grant the opportunity for real time assessment of behaviour and cognition. This is achieved through Active data which includes symptom reports through surveys or Passive data which consists of data from sensors and smart phones (for example GPS, screen time etc.).

Passive data through the use of smart phones lend the unique opportunity to collect a variety of passive data streams from a user which can then be used to construct certain features (e.g. knowing when someone's phone was not active for an extended period in complete darkness gives insight into a participant's sleep pattern). Some examples of passive data include location, accelerometer, social information, and screen time.

Location and Accelerometer

Location data is most commonly collected through a mobile device's global positioning system (GPS). A smart phone's accelerometer records the movement of the phone and can be used to understand activity levels of a participant. Reduced levels of activity can be indicators of stress, depression or anxiety. Accelerometer data can also be used in conjunction with other features to calculate individual sleep habits (i.e. the phone was stationary). One limitation of accelerometer data from smart phones is that not everyone carries the phone with them constantly so the phone may not capture the true level of the activity of a participant.

Social information and Screen time

Given that changes in social behaviour are often both symptoms and signs of many mental illnesses, interest in using smart phones to gain insight into these domains has been high. Correlations have been drawn between screen time and different mental health problems.

MORE COMMONLY, SCREEN TIME WAS USED TO CONSTRUCT SLEEP ESTIMATES AS THE SCREEN WAS LIKELY TO BE OFF FOR THE DURATION OF THE SLEEP PERIOD.

Various studies have reported the physical and mental health benefits from exposure to "green" neighbourhoods, such as proximity to neighbourhoods with trees and vegetation. One study investigated the association between the "greenness" of the area surrounding a Massachusetts public elementary school and the academic achievement of the school's student body based on standardized tests with an ecological setting. Results supported a relationship between the "greenness" of the school area

and the school-wide academic performance. Another study explored the relationship of green space derived from geolocation with self-reported symptomatology from individuals with schizophrenia as well as healthy controls. Individuals with schizophrenia living in high green space areas reported lower levels of anxiety, depression and psychosis.

SMART PHONE BASED DIGITAL PHENOTYPING OR THE USE OF INTEGRATED SENSES TO IDENTIFY PATTERNS IN BEHAVIOUR AND SYMPTOMATOLOGY HAS SHOWN POTENTIAL IN DETECTING SUBTLE MOMENT TO MOMENT CHANGES. THESE CHANGES, OFTEN REFERRED TO AS 'ANOMALIES', REPRESENT SIGNIFICANT DEVIATIONS FROM AN INDIVIDUAL'S BASELINE AND MAY BE USEFUL IN INFORMING THE RISK OF RELAPSE IN SERIOUS MENTAL ILLNESS.

Many companies are developing apps. Digital companies are partnering with big pharmaceutical companies like Sanofi, Novartis and Boehringer Ingelheim with most of the selected digital offerings being in the mental health space such as in Schizophrenia, ADHD, Major Depressive Disorder and Substance Use disorder.

There are a number of applications being developed although the question is if there is any robust evidence for digital therapeutics.

Two meta-analyses for patients with depression and anxiety supported the conclusion of smart based interventions for having benefits for patients in greater than 80% of the studies.

The APA released guidance on app evaluation. The guidelines comprise of:

- **Access and background.**

The first step of the model is to help ensure that there is as much background information about the app before you evaluate it. These are some questions that will help to decide whether to proceed with the app evaluation.

1. Does the app identify ownership?
2. Does the app identify funding sources and conflicts of interest?
3. Does the app come from a trusted source? Does the app claim to be medical?

- **Privacy and security**

While nearly any measurement or intervention contains some risk (e.g. physical, psychological, legal, social and economic) apps present some unique risks that may be overlooked. Risks include data costs associated with the app use, social profiling and loss of insurance benefits. These questions help you consider many aspects of app security and privacy.

1. Is there a transparent privacy policy that is clear and accessible before use?
2. Does the app declare data use and purpose?
3. Can you opt out of data collection or delete data?
4. What third-party does the app share data with?

- **Clinical foundation**

Application developers often make many claims on the application's clinical effectiveness or background though there's often little data to support the claim. These questions help you make an informed decision about the app's evidence base.

1. Does the app appear to do what it claims to do?
2. Is there evidence of effectiveness /efficacy?
3. Is the app content correct, well written, and relevant?

- **Usability**

Usability is a more subjective category, as an application is only as useful as determined by you and your patients. These questions are designed to help you think about the app's interface and overall functionality.

1. What are the main engagement styles of the app?
2. Do the app and its features align with your needs and priorities?
3. Does the app clearly define functional scope?

- **Data integration towards a therapeutic goal**

This goal is important because applications should not fragment care and the patient and the psychiatrist should be able to share and discuss data or retrieve data from the application as appropriate. These questions help you evaluate data integration.

1. Do you own your data?
2. Is the app for individual use or to be used in collaboration with a provider?
3. Does the app lead to any positive behaviour change or skill acquisition?

The future of healthcare, especially mental health care, will include digital therapeutics as part of its treatment armamentarium.

THE HIGH PREVALENCE OF SMART PHONES IN SOUTH AFRICA IS AN ENABLER AND THE COVID-19 PANDEMIC HAS FAST TRACKED THE ADOPTION OF DIGITAL THERAPEUTICS. DIGITAL PHENOTYPING, IN PARTICULAR, BY LEVERAGING BOTH ACTIVE AND PASSIVE DATA OFFERS THE ABILITY TO SIGNIFICANTLY INCREASE THE UTILITY AND IMPACT OF DIGITAL THERAPEUTIC OFFERINGS.

References available on request

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WENDY CUPIDO:
A STORY OF BEGINNINGS AND ENDINGS

Lisa Selwood

After two decades at Lundbeck South Africa, Wendy Cupido has made the decision to resign. Her career has spanned several positions, starting off 21 years ago 'carrying the bag' as a sales representative. She went on to becoming a Marketing Manager and, for the past four years has been the captain at the helm of ship as the Country Manager.

ALL WILL AGREE THAT WENDY IS SYNONYMOUS WITH LUNDBECK, AND WITH PSYCHIATRY. SHE IS THE EPITOME OF LIVING, BREATHING, AND SLEEPING THE LUNDBECK VALUES.

'Tirelessly dedicated to Brain Health so Every Person Can be their Best' is a phrase she repeated to the company on virtually a daily basis. She continuously reminded us of our 'why' and pushed us towards continuing to transform this 'why' into a reality. She worked tirelessly to ensure access to the Lundbeck product portfolio, highlighted the importance of doctor and patient education and was a leader second to none. Her big personality, infectious laugh, and the memories she created will be remembered by the psychiatry fraternity for many years to come.

In 2021, under Wendy's leadership, Lundbeck won the prestigious title of being named as a 'Best Place to Work' and this is a testament to the culture she created at Lundbeck. She advocated for the growth and development of her team and is now taking the opportunity to explore a new opportunity for personal and professional growth and development for herself. The company has fully supported and encouraged her in this endeavour, which is a further example of why Lundbeck is indeed the best place to work.

Lisa Selwood

Wendy would like to thank everyone within psychiatry for their continued encouragement and support during her tenure at Lundbeck and hopes the partnerships with Lundbeck continue to growth from strength to strength, as it is these partnerships that make a difference in the lives of people with brain disease. She will always be a Lundbeckian at heart and will continue to watch Lundbeck grow from strength to strength whilst the company makes great strides in the development of new treatments in Psychiatry and Neurology…albeit from a distance.

We wish her all the best and thank her for the difference she has made to each and every one of us within Lundbeck South Africa.

Lisa Selwood is the Medical Affairs Manager at Lundbeck, South Africa. **Correspondence: LIEW@lundbeck.com**

NATIONAL HEALTH INSURANCE

FINDING A HEALTHCARE SOLUTION THAT SERVES ALL SOUTH AFRICANS

Jacqui Nel

The Passing of the National Health Insurance Bill on 12 June 2023 by parliament has many stakeholders in the healthcare industry concerned as to what the implications are. The reality is that there is a long and challenging process ahead, and the NHI Bill has many years to go before all of its provisions could be implemented.

Putting all the challenges and debate aside, Jacqui Nel, Business Unit Head of Healthcare at Aon South Africa, highlights the salient points that are at the heart of the matter. "First and foremost, I would like to affirm that the private healthcare sector needs to focus all its efforts on objectively collaborating with all parties concerned to achieve a stronger and affordable healthcare solution for all South Africans. The concept and ideals of providing universal health coverage should not be in dispute."

"THE OVERARCHING PRINCIPLE OF THE NHI BILL IS TO PROVIDE UNIVERSAL HEALTH COVERAGE AND SOCIAL SOLIDARITY, PROVIDING ALL CITIZENS WITH ACCESS TO THE SAME ESSENTIAL HEALTH CARE BENEFITS, REGARDLESS OF THEIR FINANCIAL MEANS," SHE ADDS.

However, the road to successfully implementing NHI is a long and costly one, with many experts saying it can take up to 15 years to achieve, if not more. Purely from a legislative point of view, there are no less than 11 pieces of legislation that will need to be amended to align with NHI objectives, and this is an onerous process.

Jacqui Nel

This includes:

- National Health Act
- Mental Health Care Act
- Occupational Diseases in Mines and Works Act
- Health Professions Act
- Traditional Health Practitioners Act
- Allied Health Professions Act
- Dental Technicians Act
- Medical Schemes Act
- Medicines and Related Substances Act
- Nursing Act
- And various Provincial Health Acts.

The first of many court cases are already making headlines. "On the constitutional front, one of the 11 pieces of legislation requiring amendment is the National Health Act, which governs the 'Certificate-of-Need' (CoN), a piece of legislation that would dictate to private sector doctors where they are permitted to practice and what services they may

provide. This 'CoN' is essential to government to control doctors under the NHI plans and is being challenged by trade union solidarity and six other parties," says Nel.

ABOUT THE NHI BILL

The NHI Bill lays out the duties and functions of the NHI Fund, which are primarily to strategically purchase health care services based on the principles of social solidarity.

ALL PERMANENT RESIDENTS AND CITIZENS WILL BE ELIGIBLE AS BENEFICIARIES OF THE "FUND" AS IT IS REFERRED TO; AND TEMPORARY RESIDENTS AND FOREIGNERS WILL HAVE ACCESS TO EMERGENCY MEDICAL TREATMENT AND ACCESS TO OTHER HEALTH SERVICES AS DETERMINED THROUGH A MANDATORY TRAVEL INSURANCE.

"The Bill states that eligible beneficiaries will be able to access health services through registering as a user of the "Fund". Each member will have a number that is unique to them and their dependents. The Fund will then reimburse health care providers directly for services rendered, provided they have met the accreditation requirements. It is envisaged that comprehensive health services benefits must be made available and these services will be determined by the Benefits Advisory Committee," explains Nel.

THE BILL ALSO REFERS TO THE ESTABLISHMENT OF THE 'BOARD OF THE FUND', AND THE REMUNERATION AND REIMBURSEMENT OF THE MEMBERS OF THE BOARD WHICH WILL BE DETERMINED BY THE MINISTER OF HEALTH IN CONSULTATION WITH THE MINISTER OF FINANCE.

"There are various other functions of the fund for which further administrative departments will need to be set up to address planning, benefits design, price determination, accreditation, purchasing and contracting, payments, procurements, performance monitoring and a risk and fraud prevention unit," says Nel.

However, there are major points of concern that remain and will need to be addressed to facilitate any implementation of the NHI into South African society, which include:

- Ministerial powers, good governance and accountability.
- Role of the different spheres of government.
- Role of medical schemes.
- Tax implications for taxpayers, both from an employee and employer perspective.
- NHI funding models – increased taxes?
- Health financing expertise.
- Training of healthcare providers – consequence management.
- Service delivery at state facilities and healthcare facilities.
- Infringement on the right of choice.
- Lack of detail around major parts of the NHI Bill.

In summary, this Bill is the roadmap to NHI, but many other pieces of legislation will have to be amended, and a crucial element is currently still missing which is the cost of NHI and what the basket of services will include. "To enable the NHI will require an appropriation bill from National Treasury to detail how the NHI is going to be funded. However, detail on this has been slim, while government's finances are heavily constrained and look likely to worsen in the future with various global and local factors coming into play," says Nel.

"WE FULLY EXPECT THAT THERE ARE GOING TO BE SIGNIFICANT CHALLENGES TO THE MANY TECHNICAL AND RESTRICTIVE PROVISIONS CONTAINED WITHIN THE NHI BILL, AND THESE CHALLENGES MAY WELL ALTER ITS ENTIRE SUBSTANCE, AND THERE IS ALSO THE PROSPECT OF POLITICAL SHIFTS THAT COULD HAVE A MATERIAL IMPACT ON HEALTH POLICY GOING FORWARD. WE SIMPLY DO NOT SEE ANY MATERIAL SHIFTS TO THE PRIVATE HEALTHCARE SECTOR ANYTIME SOON," NEL EXPLAINS.

What is certain is that the Bill in its current shape and format is unlikely to remain as it is today. "While the NHI Bill raises serious concerns, there is no disputing the need for structural change. There will be much debate and negotiation in the years ahead in unpacking the strengths and weaknesses of current public and private healthcare systems, and we look forward to a rational and workable solution to the achievement of better healthcare and to assist in a workable solution for all South Africans," Nel concludes.

Jacqui Nel is the Business Unit Head of the Aon Healthcare Division and has worked with Aon for 16 years, with a total of 38 years in the Medical scheme industry. Before joining Aon, Jacqui had her own Brokerage for 16 years. Aon acquired the healthcare division of this brokerage in July of 2006. Prior to starting her own business Jacqui was part of the Management team of Medscheme. Jacqui has her NQF 5 Diploma in Financial Planning, NQF 5 Diploma in Wealth Management and Project Planning Management Diploma from Wits. **Correspondence: Jacqui.Nel@aon.co.za**

THE NATIONAL HEALTH INSURANCE BILL

*Martin Versfeld, *Prelisha Singh, *Glenn Penfold & *Robert Appelbaum,

*Partners at Webber Wentzel

With the National Health Insurance Bill having recently been approved by the National Assembly, many questions and concerns about the practical implementation of the scheme remain unresolved.

The National Health Insurance Bill (*the Bill*) was recently adopted by the Parliamentary Portfolio Committee on Health and was approved by National Assembly on 14 June 2023. It will now be tabled before the National Council of Provinces.

The Bill provides for the establishment of the National Health Insurance Fund (*the Fund*) aimed at promoting the laudable purpose of universal access to quality health care. It is envisaged that the Fund will purchase health care services and products from accredited health care service providers and health establishments (including hospitals) (which we refer to, collectively, as "*service providers*"), including private service providers that choose to contract with the Fund.

Many stakeholders and experts have raised concerns that the National Health Insurance (*NHI*) scheme envisaged in the Bill is simply unaffordable, particularly as it would require an extensive administrative apparatus. A related concern is the extent to which the NHI will rely on the public health care system to deliver services, and the capacity of that system to provide an acceptable quality of services. Given the dire state of public health care in our country, it is surprising that the Government persists with plans to spend vast resources on implementing the NHI. Those resources would greatly improve the delivery of quality health care – and universal access to that care – if they were deployed directly in the public health sector.

IN VIEW OF THE QUESTIONS ABOUT THE AFFORDABILITY OF THE NHI, THE PROVISIONS OF THE BILL PROVIDING FOR THE INCOME OF THE FUND ARE OF PARTICULAR INTEREST. CLAUSE 49 STATES THAT THE FUND'S CHIEF SOURCE OF INCOME WILL BE MONEY APPROPRIATED ANNUALLY BY PARLIAMENT. THIS MUST BE APPROPRIATED FROM COLLECTIONS OF, AMONG OTHERS, GENERAL TAX REVENUE, A PAYROLL TAX AND A SURCHARGE ON PERSONAL INCOME TAX.

This taxation regime is, however, difficult to reconcile with clause 2, which states that the Fund will be funded through "*mandatory prepayment*" (a term that is defined as "*compulsory payment for health*

services before they are needed in accordance with income levels"), and clause 55(1)(t), which empowers the Minister to make regulations on "*all fees payable … to the Fund*".

One of the challenges in interrogating the NHI scheme envisaged in the Bill is that it leaves many of the key issues to be determined later. For example, the extent of the benefits to be covered by the Fund and the rate of reimbursement – both of which are crucial to assessing both the affordability of the NHI and its impact on the provision of quality health care – are not yet known (e.g. see clause 10(1)(g)).

THE BILL ALSO LEAVES A BROAD RANGE OF MATTERS FOR THE MINISTER OF HEALTH (THE MINISTER) TO PRESCRIBE THROUGH REGULATIONS.

These matters include the rules on portability, which will allow patients to be treated by service providers other than those with whom they are registered (clause 7(2)(b)); the referral pathways between service providers (clause 7(2)(d)(ii)); the coding systems to be employed (clause 39(5)(b)); the relationship between the Fund and medical schemes (clause 55(1)(n)); and "*the scope and nature of prescribed health care services and programmes and the manner in, and the extent to which, they must be funded*" (section 55(1)(w)).

The Bill's preamble states that its purposes include to "*create a single framework … for the public funding and public purchasing of health care services, medicines, health goods and health related products*" and to "*eliminate the fragmentation of health care funding*". A key question that arises is what role medical schemes will continue to play and, indeed, whether they will be able to continue to exist. Clause 33 of the Bill stipulates that, once the Minister has determined that the NHI has been fully implemented, medical schemes "*may only offer complementary cover to services not reimbursable by the Fund*". Similarly, clause 6(o) states that users of health care services are entitled to "*purchase health care services that are not covered by the Fund through a complementary voluntary medical insurance scheme*".

In other words, medical schemes may not cover health care services that are covered by the Fund. Since the Fund is intended ultimately to cover a comprehensive range of benefits, the Bill envisages that the businesses of medical schemes will shrink dramatically which may, of course, threaten their continued existence.

This regime is likely to face constitutional challenge, including on the basis that it infringes: (a) the right to access health care services, by forcing many people who currently access private medical care via medical scheme funding to rely on what is currently a woefully inadequate public health care system; (b) the property rights of medical schemes and their administrators; and (c) the right to freedom of trade, occupation and profession.

ANOTHER CRUCIAL ISSUE IS HOW THE BILL WILL REGULATE ACCREDITED SERVICE PROVIDERS. CLAUSE 39(2) IMPOSES ONEROUS REQUIREMENTS FOR ACCREDITATION, INCLUDING THE SUBMISSION OF A "*BUDGET IMPACT ANALYSIS*". ONE AREA OF CONCERN, AS MENTIONED ABOVE, IS THAT THE BILL DOES NOT CLARIFY HOW REIMBURSEMENT RATES WILL BE DETERMINED.

Clause 10(1)(g) simply states that the Fund must set payment rates annually "*in the prescribed manner and in accordance with the provisions of this Act*". Given its importance to sustainable access to health care, one would at least have expected the Bill to make clear that the payment rates must be set at a level that allows providers to cover their efficient costs and make a reasonable return.

Another cause for concern is that clause 38(6) envisages that an accredited service provider must procure health-related products (including medicines and medical devices) according to the Fund's formulary, and that suppliers listed in the formulary must deliver directly to the service provider or establishment. To the extent that this clause requires private service providers to procure from suppliers chosen by the Fund, this blurs the line between public and private procurement, reduces competition, and unduly restricts private service providers in the conduct of their business.

The role that the Bill contemplates for the Minister is also potentially problematic. For example:

- Clauses 4(1) and 7(1) provide that the Fund must purchase health care services "*in consultation with the Minister*" (which our courts have held means that the Minister's concurrence is required). It is wholly impractical to require the Minister to concur in the purchase of health care services.
- It is unclear to us why the Minister must agree on detailed issues that require the application of clinical judgement, such as the benefits to be determined by the Fund's Benefits Advisory Committee and the formulary to be employed by the Fund (clauses 25(5)(c) and 38(5)).

While seeking to secure universal access to quality health care is generally supported and rightly so, the Bill represents an over-hasty effort to fundamentally restructure the country's public health service with potentially devastating consequences for healthcare providers and consumers alike.

Issued by NADINE VAN TONDER TS COMMUNICATIONS
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SOCIAL MEDIA USE IN MEDICAL PRACTICE

Volker Hitzeroth

Many people use social media apps and platforms to connect to one another, maintain friendships and search for potential romantic partners. For healthcare practitioners, (HCPs) unfortunately, such non-medical use often spills into the healthcare setting with a subsequent blurring of professional boundaries. It is important that HCPs manage their social media profiles, cyber presence, and digital posts cautiously to minimise their medicolegal risk. This is the third article in a series exploring the use of social media in the healthcare setting.

Social media is an important aspect of most people's daily life with its use rapidly increasing as more people familiarise themselves with its functionality. HCPs are regulated by various ethical rules and must abide by these when conducting themselves in a clinical context but also after hours and when off duty. There is therefore a chance that their private and personal social media profile clashes with their professional and public persona – resulting in blurred boundaries and significant medicolegal risk.

Furthermore, adding to such risk is the online disinhibition effect identified by John Suler in 2004. He noted that individuals say and do things online that they would not ordinarily do when conversing with someone face-to-face.

SOME PEOPLE OVERSHARE OR ACT OUT MORE FREQUENTLY OR INTENSELY WHEN ONLINE THAN THEY WOULD IN PERSON. HE EXPLAINED THAT PEOPLE TEND TO BE MORE DISINHIBITED, IMPULSIVE AND LESS RESTRAINED WHEN INTERACTING IN THE CYBER WORLD.

Suler specifically identified six factors that interact and contribute to online disinhibition:

- **Dissociative anonymity:** digital users believe that they remain hidden behind usernames, passwords and emails. All interactions occur quasi-anonymously and their online persona is distinct and separate from their real-life person.
- **Invisibility:** because people cannot see each other and remain physically invisible they can be more forthright and less cautious.

Volker Hitzeroth

- **Asynchronicity:** social media contact does not have to occur in real time and is characterised by delayed responses and longer pauses which means that there is no natural or immediate verbal or non-verbal feedback affording an opportunity to temper one's comments and posts.
- **Solipsistic introjection:** when using social media, one rarely has a clear representation of the other users' reality, personality, looks or character. This means that it is easy to assimilate the other users into one's own worldview and psyche according to one's own wants, needs and desires with a subsequent alteration of the self-boundaries.
- **Dissociative imagination:** social media users may easily slip into a make-belief world which is separate from life's demands and realities where one's online presence is thought to be exempt from the societal rules, norms and values directing our daily interactions.

- **Minimising of authority:** in the online world there is an absence of the usual social cues and there remains a perception that everyone is your equal. Individuals with specific knowledge, expertise or authority may not be immediately obvious or identifiable and everyone seems to be part of a happy peer group.

Another area of risk is when a HCP receives a request from a patient for non-medical/social contact. Such approaches can occur through formal social media channels as a digital "friend" request, or as an informal in-person request to exchange contact details. These situations are fraught with risk and ethical dilemmas and require sensitivity and caution. HCPs may be flattered by the kindness and gratitude expressed by their patients. Patients on the other hand may be pleased and proud to have a HCP as a member of their friendship circle. On occasion both parties may secretly wish for a closer relationship.

YOU SHOULD BE CAREFUL NOT TO ATTRACT UNNECESSARY ATTENTION TO YOURSELF OR YOUR PRACTICE. BE CAREFUL ABOUT HOW YOU ENGAGE OR CONNECT TO PATIENTS ONLINE AND WHAT PERSONAL INFORMATION YOU DIVULGE TO YOUR PATIENTS.

Finally, if you receive a request to exchange personal contact details or befriend a patient you should always politely explain that it is your practice policy not to engage with patients on a personal or private basis. You should also direct the patient to your professional or practice profile where they can contact you.

It is common practice for patients to google their HCPs. Your private posts on various social media platforms may inadvertently be accessible to the public - and your patients may stumble upon one of your posts that was not intended for public viewing. Occasionally, if your posts are interpreted as offensive, rude or insensitive, such a scenario could lead to a more formal complaint before the HPCSA, a disciplinary hearing at your work, or even a social media backlash with disastrous consequences for you and your career. Therefore, it is important to regularly check your privacy settings, be thoughtful in what you post and sensitive to other views.

Also remember that nothing in cyberspace is ever completely private and may not remain confidential.

Do not underestimate the power of "likes" or forwarding or sharing a post. What you "like" and what you share - and how you respond to someone else's post - will be seen as a reflection of you, your character, and your values. Some people may find your sense of humour offensive, your decisions to be misjudged, or your taste crass. Occasionally, some individuals may believe that you and your posts bring the profession into disrepute. Without the usual interpersonal face-to-face contact many of the subtle, but critical, conversational cues are lost (e.g., body language, facial expression, broader conversation, context) and the linguistic nuances of humour, sarcasm and irony can easily be misinterpreted.

Finally, be cautious about advertising your practice or your service. The HPCSA expects you to be professional and truthful, and not be deceptive or misleading, or cause consumers unwarranted anxiety that they may be suffering from a health condition. You may not canvass or tout for patients. **Canvassing** is defined as *"conduct which draws attention, either verbally or by means of printed or electronic media, to one's personal qualities, superior knowledge, quality of service, professional guarantees or best practice"*. **Touting** is defined as *"conduct which draws attention, either verbally or by means of printed or electronic media, to one's offers, guarantees or material benefits that do not fall in the categories of professional services or items, but are linked to the rendering of a professional service or designed to entice the public to the professional practice".*

You need to be particularly cautious when deciding on a marketing strategy regarding the services that you offer and that any discounts or special offers you wish to publicize should not breach HPCSA guidance. Similarly, you must be truthful when clarifying whether you are a specialist or a generalist with an interest or experience in a specialist area.

LASTLY, YOU MAY NOT USE THE WORD *HOSPITAL* OR *CLINIC* OR *INSTITUTE* UNLESS YOUR PRACTICE IS TRULY REGISTERED AS SUCH AN ENTITY.

At Medical Protection we have seen several instances where a HCP posted a seemingly innocuous opinion or response to a digital complaint which gained traction with the public and subsequently went viral, escalating into a major social media pile-on with a significant impact on the practitioner's reputation, practice and income.

If you are in any doubt about the risks you face either from your social media or interactions with patients on social media, contact Medical Protection or your medical defence organisation for advice.

REFERENCES AND FURTHER READING:

- Suler, John: The Online Disinhibition Effect. *Cyberpsychology & Behaviour.* Vol 7, No 3. 2004.
- HPCSA: *Ethical Guidelines on Social Media (Booklet 16).*
- HPCSA: *The General Ethical and Professional Rules of Conduct (Booklet 2)*

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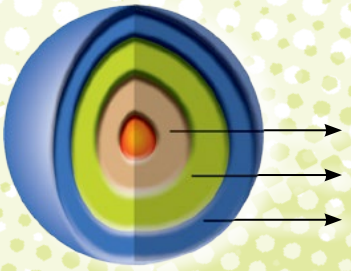

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References: 1. Chen Kuang, Yinghua Sun, Bing Li, Rui Fan, Jing Zhang, Yumin Yao, Zhonggui He. Preparation and evaluation of duloxetine hydrochloride enteric-coated pellets with different enteric polymers, Asian Journal of Pharmaceutical Sciences, Volume 12, Issue 3, 2017, Pages 216-226. 2. Jawahar, N. & Anilbhai, P.H.. (2012). Multi unit particulates systems (MUPS): A novel pellets for oral dosage forms. Journal of Pharmaceutical Sciences and Research. 4. 1915-1923.

*For full prescribing and dosage information, please refer to registered package insert. S5 DULEVE 30 mg Capsules. Each capsule contains 30 mg Duloxetine (as Hydrochloride). Reg No.: A49/1.2/1198. S5 DULEVE 60 mg Capsules. Each capsule contains 60 mg Duloxetine (as Hydrochloride). Reg No.: A49/1.2/1199. Zydus Heathcare SA (Pty) Ltd, Block B, Southdowns Office Park, 22 Karee Street, Centurion, 0157. Tel. No.: +27 (0)12 748 6400. 04/DUL/09/21/AD.

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The conference will focus on registrar training, specifically the management of the psychiatric disorders in women of childbearing age and the intricacies of the vulnerable population of women in the peripartum. The conference will be hosted in collaboration with SASOP (South African Society of Psychiatrists) – Women's mental health -subgroup

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THE INAUGURAL SOUTH AFRICAN MENTAL HEALTH CONFERENCE

JOIN THE MOVEMENT

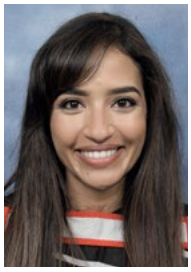
Tejil Morar

On the 24th and 25th of April 2023, the inaugural South African Mental Health Conference (SAMHC) took place at Emperors Palace, Johannesburg, South Africa (SA). The conference was hosted by the National Department of Health, in line with the 2030 National Development Plan, and the Foundation for Professional Development. *Join the Movement* was an apt theme, as it implied an intention of cohesion while advancing the field of mental health in SA. Attendees included the Deputy President Paul Mashatile, Dr Joe Phaahla (Minister of Health), the Director General Dr Sandile Buthelezi, multiple Members of the Executive Council (MECs), Heads of Department of Health and Professor Solomon Rataemane from the Ministerial Advisory Committee on Mental Health in SA.

The conference began with an opening address by Professor Olive Shisana, the conference chair. The address emphasised a "whole of society" approach, imploring various sectors to collaborate in relieving the country's burden of mental illness. Challenges such as infrastructure difficulties, stigma, poorly integrated health systems, inconsistent standards of mental health care, inaccessible care and a limited range of treatment options were highlighted.

Opportunities for change presented included increased funding for mental health, an increase in human resources for mental health, primary prevention, reduced stigma, coordinated responses, community engagement and information systems to assess effectiveness of services and implemented policies.

The opening session also included powerful renditions of lived experiences of mental illness. Christine Nxumalo (a bereaved Life Esidimeni family committee member) lamented the lack of change in the SA healthcare system following the Life Esidimeni tragedy. She spoke of how mental health services in SA are still largely inaccessible for the majority of the population and that SA's mental health policies are not the problem, rather the lack of implementation thereof.



Tejil Morar

CHARLENE SUNKEL FROM THE GLOBAL MENTAL HEALTH PEER NETWORK STRESSED THAT POLICIES SHOULD RESPOND TO THE NEEDS OF PEOPLE AND PROTECT HUMAN RIGHTS, MAKING IT ESSENTIAL TO CONSULT SERVICE USERS.

Professor Rita Thom spoke of optimising the health work force to improved mental healthcare, based on the Provider core competencies for improved Mental health care of the nation report (an ASSAf Consensus Study). SA has 1.07/100 000 psychiatrists/capita in the private sector and 0.33/100 000 in the state sector. With these shortages, solutions such as task-sharing; integration of mental health into primary health care; mental health competency in generalist health care workers and specialists shifting to more of an advisory role were proposed.

Dr Joe Phaahla concluded the opening session by presenting some sobering statistics on the number of public sector psychiatrists in the country: 50 in the Western Cape, 72 in Gauteng, 3 in the Eastern Cape and 4 in Mpumalanga.

HE ACKNOWLEDGED THAT SA PROVIDES FERTILE GROUND FOR THE CAUSATION AND EXACERBATION OF MENTAL ILLNESS AND REVEALED THAT AN INTERDEPARTMENTAL COMMITTEE (INCLUDING THE DEPARTMENT OF JUSTICE, DEPARTMENT OF SOCIAL DEVELOPMENT, DEPARTMENT OF HEALTH ETC.) HAS BEEN ESTABLISHED TO FIGHT MENTAL ILLNESS.

The remainder of the day's programme included parallel presentations in various tracks:

Track 1: Clinical, psychology and behavioural sciences

Track 2: Technology and innovation

Track 3: Policy and public health

Track 4: Best practices and programmes

Track 5: Communications and community engagement

The second and final day of the conference began with a plenary session chaired by Bharti Patel (SA Federation for Mental Health). The session included talks by Katy Katopodis, Professor Lesley Robertson, Dr Devora Kestel and Dr Antoinette Miric.

Katy Katopodis brought to our attention to the "news cyclone" in SA affecting the mental health of journalists and how it was the media's responsibility to provide fair and accurate news reflecting society.

THE POWER OF THE MEDIA IN THE FIGHT AGAINST MENTAL ILLNESS LIES IN OVERCOMING STIGMA, SHARING LIVED EXPERIENCES, EDUCATING THE PUBLIC AND CHALLENGING STEREOTYPES.

Professor Lesley Robertson spoke of mental health in context: globally (transnational crime, climate change), in community (safety and security, green spaces, school, work, health and social services), within families (home, nutrition, parenting and social support) and in the individual (healthy lifestyles etc.). Her talk featured striking media images of inhumane mental health services in SA, including poor infrastructure and lengthy queues.

A pre-recorded presentation by Dr Devora Kestel (WHO director of mental health and substance use) was a valuable addition to the programme. It centered around the World Mental Health Report 2022 which aims to transform mental health for all. Dr Antoinette Miric (co-founder of the Healthcare Workers Care Network) ended the session by recommending that the mental health of healthcare workers be prioritised. This can be done by an improvement in working conditions (safety, hygiene, water, electricity), proactive leadership, expressing gratitude to healthcare workers, providing easy access to confidential counselors and employee assistance programs, empowering team leaders, decreasing stigma and improved access to mental healthcare.

The day continued once again with parallel sessions from 5 tracks.

The final plenary session of the conference incorporated a presentation by world-renowned Professor Dan Stein (conference co-chair) on the 10 game changers in SA mental health including: funding by provinces for the National Mental Health Policy Framework 2023-2030, a focus on overlooked and vulnerable populations, integration of mental health into other non-communicable diseases (increased taxation of substances etc.), provision of independence for authorities like the Mental Health Review Board, upskilling of health professionals in mental health, increased training and research in mental health and parity of mental health resourcing.

Deputy President Paul Mashatile closed the conference by echoing the WHO 3 pillared approach to mental health: 1. Giving greater value to mental health 2. A need to promote mental health and reduce mental illness by intersectoral collaboration 3. Continuous improvement of mental services – public and private.

THERE WAS GREAT CONCERN AROUND THE RISE IN MENTAL HEALTH CASES IN SA, WITH ONLY 27% RECEIVING TREATMENT. THE CONFERENCE WAS FRAMED AS AN IMPORTANT START TO A DIALOGUE WHICH WILL OFFER GUIDANCE ON HOW TO IMPLEMENT POLICY.

Overall, the SAMHC was a wonderful initiative focused on mental health in SA. During the course of the conference, it was clear that many are aware of the challenges we face in mental healthcare and the urgency with which solutions need to be implemented. What remains to be seen is what improvements in SA mental healthcare will materialise within the next two years, before the subsequent conference. This will be the true litmus test of whether the SAMHC was a success or not.

Tejil Morar is a Psychiatrist, Sterkfontein Psychiatric Hospital and affiliated to the Department of Psychiatry, University of the Witwatersrand, Johannesburg, South Africa.
Correspondence: tejilmorar@gmail.com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HEALING WALLS FOR MENTAL WELLBEING

Suvira Ramlall

During the pandemic, the importance of mental well-being, as an essential component of our overall health, was highlighted. At King Dinuzulu Hospital Complex (KDHC), treating mental illness and promoting mental health is our core business. We therefore recognize the link between the physical environment that we live and work in and our mental well-being. There is now, also, scientific evidence proving that there is a salutary effect of 'green' environments on our mood.

OUR PSYCHIATRIC PATIENTS ARE AMONGST THE MOST NEGLECTED AND DISADVANTAGED OF ALL CLINICAL POPULATIONS.

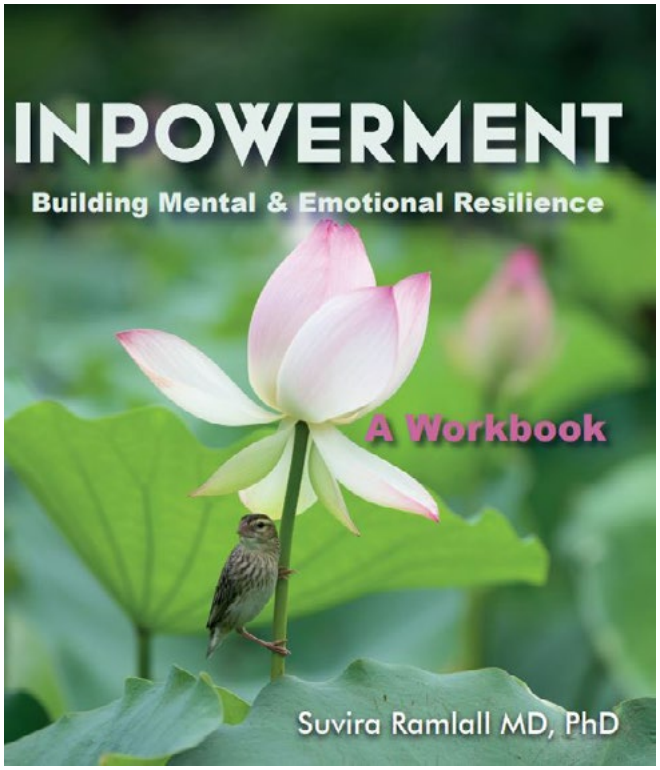
Moreover, while our patients get discharged and go home, our staff are ever-present. As most psychiatric facilities like ours have been hand me down buildings that were not designed-to-purpose as therapeutic milieux, it has been a challenge to improve the aesthetic appearance of our working and treating environment. KDHC was designed for the inpatient treatment of tuberculosis during World War II and therefore falls short of therapeutic and clinical standards necessary for the mental well-being of our staff and patients. But, in the spirit of good mental health, we do not curse the darkness, but find creative ways to light a candle! Within existing resource constraints, a pharmaceutical company was approached for a donation to have murals drawn on our outpatient department walls.

Suvira Ramlall

Thank you Lundbeck for your generosity! Well-known Durban mural artist extraordinaire, Giffy Duminy, transformed our drab walls into works of bright and beautiful floral art. Not only has this uplifted the environment but it has also had a salutogenic effect on the hearts and minds of our staff, patients, students, and the public. We hope to continue to create mentally uplifting environments through our 'Healing Walls' initiative because beauty on the outside stimulates beauty on the inside: happy workers are productive workers and happy people are healthy people. There can be no health without mental health.

Suvira Ramlall, Head Clinical Unit: Specialised Psychiatry, King Dinuzulu Hospital Complex, Durban, KZN.
Correspondence: Ramlalls4@ukzn.ac.za

INPOWERMENT:
BUILDING MENTAL & EMOTIONAL RESILIENCE



Title: Inpowerment: Building Mental & Emotional
Author: Dr Suvira Ramlall
Publisher: Micromega Publications
Price: R350

Available from www.madeindurban.co.za

This book offers a practical overview of mental and emotional crises followed by self-help strategies to build resilience and cope with psychological distress. It is both a practical and evidence-based guide to a wide range of strategies to improve mental health and build resilience as well as an accessible workbook that invites the reader to become an active participant in their self-growth journey. The book provides a holistic look at how to help yourself and others and provides clear building blocks for the user to engage with the content on an individual and meaningful level. The book is structured in such a way that it provides not just a learning platform to develop sound mental health and resilience "skills" but also offers the reader (active participant) an opening to engage in a deep personal experience and inner journey that makes it possible to change behaviours, perceptions, and attitudes – to build a better and more resilient life. It is a clear reminder that "there is no health without mental health" and how we can access our own resources and build good daily habits to ensure our wellbeing.

RATIONALE

Mental health is so often ignored in a crisis, even though it is one's mental health that is in many cases severely damaged and continues to result in suffering long after the crisis. Mental health is also still highly stigmatised and often sufferers feel alone and silenced, unable to get the vital support that they need.

THIS BOOK COMES AT A TIME WHEN MENTAL HEALTH AND PSYCHOSOCIAL CHALLENGES HAVE BEEN AMPLIFIED FOLLOWING THE IMPACT OF COVID-19 AND VARIOUS OTHER CRISIS EVENTS, INCLUDING STRUCTURAL VIOLENCE IN POLITICAL, ECONOMIC, AND SOCIAL STRUCTURES IN THE SOUTH AFRICAN CONTEXT, THAT IMPACT BOTH INDIVIDUALS' AND COMMUNITIES' EMOTIONAL AND MENTAL HEALTH.

Injustices related to poverty, race, gender identity, sexual orientation and patriarchy add to personal and collective suffering and increased

psychosocial distress. There is now more than ever a need for a book such as this which is both contextually relevant (written by a South African specialist psychiatrist, academic and activist) and which focuses specifically on mental health in a form that is practical and accessible to all (mental health does not discriminate).

The holistic nature of the guide means this book offers information and benefits for both those with a mental illness and those who are wanting to maintain or build their resilience and wellbeing. Practical advice and support for building mental and emotional resilience is especially necessary in a resource challenged environment when access to mental health care is limited and people need to turn to their own resources for support and wellbeing.

THIS WORKBOOK HELPS US TO DO THE WORK THAT IS NECESSARY TO ACHIEVE SELF-CARE - TO KNOW OURSELVES BETTER AND KNOW HOW TO BETTER SUPPORT OURSELVES, TO GET THROUGH A CRISIS AND TO LIVE WELL!

SYNOPSIS

Despite great advances materially and technologically, happiness and peace remain elusive in an increasingly turbulent world. The search for these priceless inner states defies wealth and even medical science. Humanity's relentless search for inner and lasting wellness often snowballs into self-defeating and sometimes self-destructive behaviours that perpetuate suffering.

MENTAL HEALTH SUFFERING HAS REACHED EPIDEMIC PROPORTIONS DESPITE ADVANCES MADE IN THE TREATMENT OF MENTAL DISORDERS AND DISTRESS. ULTIMATELY, IT IS IN INVESTING IN AND CULTIVATING A LOVING, COMPASSIONATE RELATIONSHIP WITH ONE'S INNER SELF THAT HOLDS THE SECRET TO ENDURING PERSONAL PEACE AND WELLBEING.

While mankind prides itself on its ability to traverse inter-galactic spaces, the key to true happiness and peace can only be found in the spaces within one's self. In this book, you will understand the fundamental tools of 'self-science' in simple language and practical steps that require negligible material resources. Self-science is the journey inward that explores the inner workings of the brain, mind, heart and soul that govern our physical, mental, emotional and spiritual health.

IT IS A JOURNEY THAT CAN LEAD YOU ON THE PATH FROM THE STRUGGLING HUMAN SELF TO THE WISER, EMPOWERED, HIGHER SELF BASED ON THE DEGREE OF INVESTMENT MADE BY THE READER.

By lovingly cultivating an understanding of one's physical, emotional, mental and spiritual 'bodies', and tapping into one's innate intelligence, eternal wisdom and inbuilt psychological healing mechanisms through basic activities, the reader will be 'in-powered' to navigate through life's vicissitudes - both mundane as well as traumatic – and in the process, help build resilience.

THE WORKBOOK AFFORDS THE READERS AN OPPORTUNITY TO TRAVEL INWARD AND ACQUAINT THEMSELVES WITH MENTAL, EMOTIONAL AND SPIRITUAL RESOURCES.

Small 'bytes' of scientific, psychological and spiritual wisdom are included for those that are sceptical of the merit and benefits of the seemingly basic activities that are promoted. Readers are invited to work through the activities in their 'inner gymnasiums' so that they can develop mental, emotional and spiritual 'muscle' that will serve them through the challenges and demands of daily living as well as those traumatic and sometimes catastrophic natural or humankind-made disasters.

Resilience and psychological immunity can be lovingly cultivated by investing in the self-science through the simple and practical activities that are so simply and eloquently described in this book.

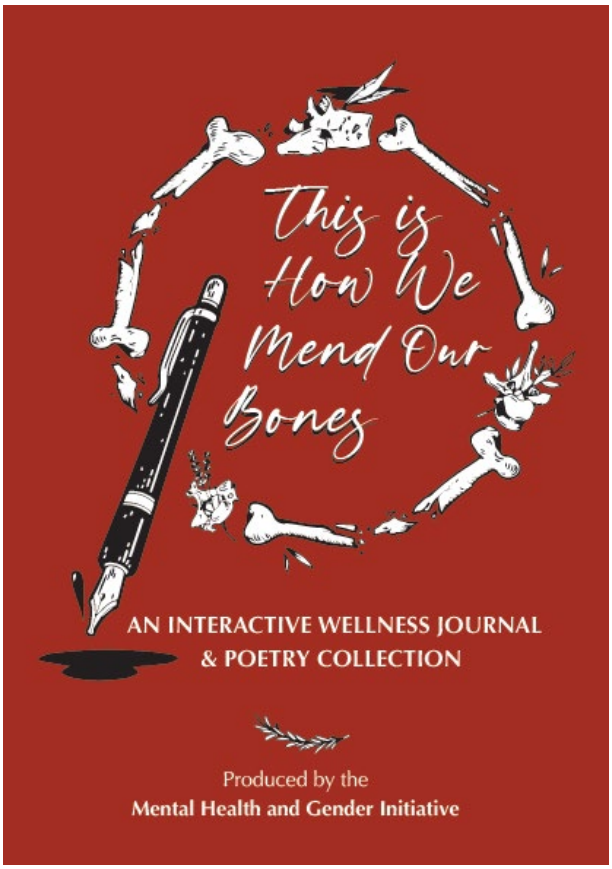
AUTHOR BIOSKETCH

Doctor Suvira Ramlall, psychiatrist, is the Clinical Head of Specialised Psychiatry at King Dinuzulu Hospital Complex, Durban and Associate Professor in Psychiatry at the University of KwaZulu Natal (UKZN). She is the current President of the College of Psychiatrists. She has featured on Gareth Cliff 's podcasts *Beyond Madness.*

Prof Ramlall has three decades of working in the field of psychiatry as a clinician, as an educator in the medical field, as a researcher and a community advocate and champion for mental wellbeing. Her work with NGOs in mental health places her at the coalface of the mental health challenges that plague society and complements her extensive experience treating patients with severe mental illnesses, a rare combination of scientific expertise and mental health in motion ■

HOW A SINGLE POEM BLOSSOMED INTO AN INTERACTIVE MENTAL HEALTH BOOK

Masoodah Mohamed



In April 2021, I submitted my poem "Guide to remain undefeated" to Lynn Norton and Suntosh Pillay, hoping to collaborate on the Mental Health and Gender Initiative (MHaGI). The MHaGI was a three-year project based in KwaZulu-Natal, led by Lynn and Suntosh, and was being funded by the Women's Voice and Leadership South Africa (WVLSA) fund, courtesy of Global Affairs Canada.
As a woman who has experienced mental illness, I found it liberating when I held a pen, wrote down my emotions and shared it with others. The act of storytelling reaffirmed my power as a survivor rather than a victim. Soon after submitting my poem, I was invited to become a project coordinator of "Share Your Story", an initiative that wanted to honour and celebrate the lived realities of women who have personally experienced mental health challenges.
Sixteen women across the country responded to our invitation to participate in poetry workshops. This book emerged from a writing task titled "Rooms in my Body." I helped them focus on their minds, their hearts and their stomachs. Through guided imagery, I invited these brave women to listen to the often-untold stories of their bodies, and to visit the visceral, rational, and emotional elements that make them unique. It was my honour to witness the capture of these sounds on paper. Participants courageously shared the wisdom of their body's stories - in poetry, selected images, and oral reading.

THE RATIONALE FOR THESE WORKSHOPS – AND SUBSEQUENT BOOK – WAS SIMPLE – OWN YOUR VULNERABILITY, SAY YOUR TRUTH, AND SET YOURSELF FREE.

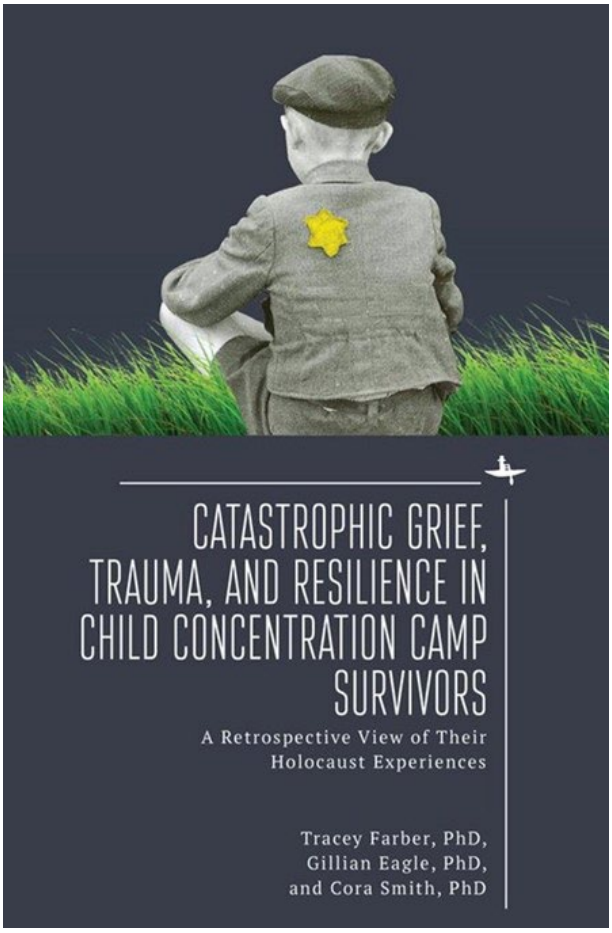
All 16 participants have diverse backgrounds, yet the transformative power of unashamedly accepting their life's journey became a catalyst for these women's mental health advocacy. Many of the participants are successful entrepreneurs, writers, humans, mothers, wives, and passionate mental health advocates. The present their poems with their real names and photographs.

This project had taught me the importance of human connection (a warm email can be a blessing when you feel like you are drowning!), contact (especially as half of the workshops were held online due to Covid-19), and how sometimes it can be easier to bare vulnerabilities behind a screen.

I would like to thank Lynn and Suntosh for believing in me and to each of the 16 women who trusted me enough to take this journey with me - I see you and I honour you. To you, dear future reader, take your pen, savour the journey, and listen to your body's wisdom. Breathe, you are just in time.

Masoodah Mohamed is a published poet who is currently completing her Masters' degree in clinical psychology. "This is how we mend our bones" was officially launched at the 8th annual Durban Mental Health Symposium on July 20, and again at the Durban International Book Fair on Women's Day, August 9. To order individual or bulk copies **contact: masoodahbegum@gmail.com**

CATASTROPHIC GRIEF, TRAUMA & RESILIENCE IN CHILD CONCENTRATION CAMP SURVIVORS



Title: Catastrophic Grief, Trauma and Resilience in child concentration camp survivors. A retrospective view of their holocaust experiences
Authors: Tracey Farber, Gillian Eagle and Cora Smith
Publisher: Academic Studies Press (June 20, 2023)
ISBN-13: 978-1644696347

Paperback version available from September 2023

This book describes the narratives of child holocaust survivors and their experiences of complex trauma, complicated bereavement, ageing, resilience and existential loneliness. The work is unique in that it describes the trauma of child Holocaust survivors who were placed in concentration camps. Most children were killed on entry. Child survivors were rare. These survivors went on to build lives with considerable resilience and coping skills but their trauma remained within for the next 70-75 years. This is a unique view of the impact of catastrophic trauma and grief over a lifespan.

The book is based on the research of Tracey Farber's PhD research in which she interviewed 10 child Holocaust survivors (one never spoke). Gill Eagle and Cora Smith were the research supervisors. The authors have added original chapters discussing the relevant research and literature in the field of massive grief, complex trauma and ethics.

THE SURVIVORS RETAINED VIVID RECOLLECTIONS OF THE HORROR OF INTERNMENT AND EXPRESSED ONGOING GRIEF FOR THE MULTIPLE LOSSES THEY HAD EXPERIENCED.

Unresolved grief contributed to a sense of existential loneliness, particularly prominent in their late life reflections. Despite indications of resilience and life productivity, a 'Trauma Trilogy' of inter-linked catastrophic grief, anger, and survivor guilt contributed to a sense of pain and struggle in negotiating Erikson's final life task of Integrity versus Despair. By publishing the body of a doctoral thesis in the form of a book the aim was to make the material available to a wide audience. The authors include some practical outcomes that may inform clinical practice, further research, and understanding of the impact of other genocides.

ABOUT THE AUTHORS:

Tracey Farber worked full time as a clinical psychologist, supervisor, and trainer in private practice for 24 years in Johannesburg, where she specialized in treating traumatized adults, adolescents and children. At present, she works as

a clinical psychologist and psychotherapist at the Tel Aviv University Psychological Services, Student Success Centre and in private practice in Tel Aviv. She developed a psychoeducational program called "Understanding Trauma and Building Resilience" that was developed from her PhD research.

THIS PROGRAM HAS BEEN TAUGHT TO MENTAL HEALTH WORKERS, STUDENTS, TEACHERS, AND PARENTS AS WELL AS EMPLOYEES AND MANAGERS IN SOUTH AFRICA.

Gill Eagle is Professor Emeritus of Psychology at the University of the Witwatersrand. She lectures primarily on the master's program in Clinical Psychology and is also a core member of the doctoral team overseeing research work. Her research interests lie in the field of psychosocial studies, with a particular focus on traumatic stress and gender and issues. She runs a small private practice, working primarily within a relational psychoanalytic psychotherapy framework.

Cora Smith is Adjunct Professor in the Division of Clinical Psychology in the Department of Psychiatry at the University of the Witwatersrand. She also holds a joint appointment post as the Chief Clinical Psychologist at the Child, Adolescent and Family Unit at Johannesburg Hospital. Her interests are in the development of personality pathology through the life cycle with a particular focus on attachment. She has a keen interest in the ethical dilemmas that emerge in clinical practice.

ENDORSEMENTS ON THE BACK COVER OF THE BOOK

"A book, raw in the visceral descriptions of the effects of the holocaust provided by ageing child survivors as they painfully and courageously re-visit their experiences in the camps, the death marches and beyond. A book of inspiration in the warmth and compassion of the interviewer who listened and cared and whose personal resonances with the survivors shone through.

A hugely informative book on all authors' scholarly research on complex trauma, complicated bereavement, ageing, resilience and existential loneliness. A remarkable, must-read book in contemporary times not only for its collection of rare testimonies of ageing survivors of the holocaust but for its insights into the very long term but individual effects of massive collective trauma, which continue to dog the twenty first century. It is a testimony to despair and hope, trauma and resilience, and a must read for those who at least wish to try to understand."

— Gillian Straker, Clinical Professor of Psychology, University of Sydney; Visiting Research Professor, University Witwatersrand

"This book captures the voices of some of the last living survivors of the Holocaust. These in-depth interviews provide valuable testimony to how the catastrophic losses and trauma suffered by children and youth in the context of a genocide shaped their life trajectories, and how these early experiences impact their engagement with the final developmental challenges of the late years in life. Farber's gentle and compassionate relationships with the survivors are an inspiration to all who know or work with trauma survivors."

— Irit Felsen, PhD, Clinical Psychologist, Co-Chair of the Trauma Working Group at the NGO on Mental Health in Consultative Relationship to the United Nations

"THIS IMPORTANT BOOK ADDS MANY LAYERS AND CONSIDERABLE CLARITY TO OUR UNDERSTANDING OF CHILD CONCENTRATION CAMP HOLOCAUST SURVIVORS' EXPERIENCES AS THEY AGE."

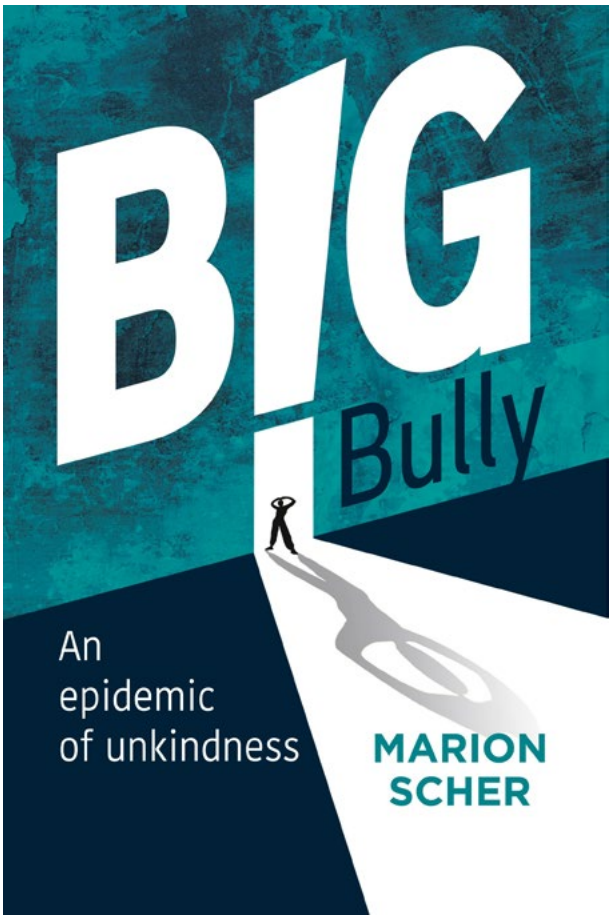
"South Africa was always on the margins of the history of the Second World War and the Holocaust; only about 350 Holocaust survivors settled in the country after the war, many of whom were children and adolescents who were not interviewed about their experiences until the 1990s. It is seldom that a group of survivors trust and feel so comfortable with a researcher such as these nine survivors have been with Tracey Farber. They have benefitted from her visible care and generosity of spirit. Through her research, she does not only study the topic but also takes important steps to make sure they are cared for through the establishment of Holocaust survivor services in South Africa. This book is a testament to the many years of dedication and real care she has displayed, of which we are all grateful beneficiaries. I encourage all to read this important book, which includes not only the cases of these survivors and analysis of their experiences, but also excellent suggested steps forward that can be implemented widely."

— Tali Nates, Founder and Director, Johannesburg Holocaust & Genocide Centre

"A must-read for those interested in a rich combination of unique perspectives on theories of childhood development and trauma, including the impact on aging for those who were children during the Holocaust. The survivor narratives are gripping and haunting, and command the reader to pause in honour of their testimonies. Be prepared to be inspired by their resilience. This book contributes to a deeper understanding of the experiences of grief and hope among those who survived the atrocities of the Holocaust as children."

— Jenni Frumer, Ph.D., LCSW, MSEd; Director, NOW for Holocaust Survivors Initiative/MorseLife Health System USA

BIG BULLY



Title: Big Bully: An epidemic of unkindness
Author: Marion Scher
Publisher: Bookstorm (June 2023)
ISBN: 978-1-77995-009-3

Paperback version available from September 2023

Based on interviews in schools, workplaces and homes, this book tells the story of an epidemic of unkindness, uncovering the stories of bullies all around us. The online environment has given bullies a much wider range of tools to use to abuse their targets. Marion Scher tracks the links between bullying and mental health issues.

- You don't only find bullies on the playground – they're in the workplace, in relationships and in schools where they wreak havoc with the mental health of their victims.
- South Africa has very high rates of bullying in many environments.
- Most victims of bullying don't ask for help – this book lets them know they're not alone and hopefully will act as a conversation starter.
- Veteran journalist Marion Scher is a well-known SA mental health journalist doing pro bono work for SADAG for over 30 years.

As Marion says: 'I had to brace myself to hear the often heartbreaking and vicious stories from those who encountered torturous relationships. The big question I kept asking myself was, "How could you get involved with such a person?" But just who is that kind of person, and is it even possible to spot them?'

SHE CALLS ON THE ADVICE OF A RANGE OF EXPERTS TO HELP MAKE SENSE OF THE BULLIES AND THEIR VICTIMS, TO HELP MANAGE THE BULLY BOSS, THE BULLY IN SCHOOL AND THE BULLY IN A RELATIONSHIP.

The book has stories, statistics, advice and helps the reader to understand how bullies work.

It's time for victims to hold bullies to account and for schools, workplaces and society as a whole to put a stop to the tormentors.

ABOUT THE AUTHOR:

Marion Scher, award-winning journalist, author and media consultant, has written much about mental health over the last 28 years. She received a Rosalynn Carter Mental Health Journalism Fellowship from the Carter Center in Atlanta in 2005. Her previous book around people's lived experiences with mental health issues, *Surfacing – people coping with depression and mental illness* was published in 2021.

Orders: Booksite Afrika orders@booksite.co.za

DEPARTMENTS OF PSYCHIATRY

UNIVERSITY OF THE WITWATERSRAND

MMED GRADUATIONS

6 Doctors graduated with their MMeds at the Winter graduations this year (July). They are Drs Alicia Swart, Katherine Ord, Boitumelo Mokgatle, Machipi Tau, Phil Pitseng and Natsai Nhiwatiwa

Dr Katherine Ord

Dr Alicia Swart

Drs Boitumelo Mokgatle, Machipi Tau, Phil Pitseng and Natsai Nhiwatiwa

RESEARCH DAY 2023

BY MEGAN FYFFE

In keeping with tradition, the Wits Annual Psychiatry Research Day 2023 was held on the coldest day of the year so far, 21st June. Despite the cold weather, the Department flocked to the Sunnyside Hotel in Parktown to attend what was sure to be a spectacular day with presentations from registrars and consultants alike. Annual Research Days are organized and run by second year registrars who work closely with the Head of Research Dr Belinda Marais to make this day a success. This year the committee comprised of: Megan Fyffe, Nicole Stephanou, Lerato Malakoane, Ahmad Peerbhay, Sarisha Narismulu and Muhammed Tayob.

Under the guidance of our fearless, passionate, dedicated leader Prof Subramaney we are pushed to perform to the best of our ability in all we do. She is often at the center of piecing us together through this trying process of specialization. This was evident through the quality of the research presented at research day.

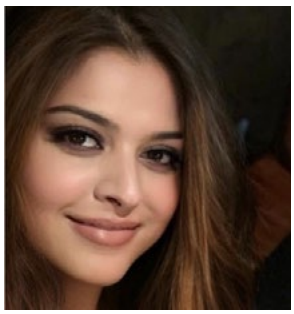
Prof Dangor, the guest speaker, emphasized these points with his keynote address on challenges he faced while trying to be both a specialist and an academic

Research Day Committee 2023 and Prof Subramaney from left to right: Dr Peerbhay, Dr Stephanou, Dr Malakoane, Prof Subramaney, Dr Fyffe, Dr Narismulu (absent Dr Tayob)

more involved in the field of clinical research. His talk was motivating to registrars still working their way through this journey, to show that a lifetime goal is achievable if you persevere, adjust, and ultimately refine your idea of your end goal.

Various topics were covered at this year's annual research day, as well as two interesting presentations from Prof Y Kadish and Dr S Naidoo on the Fate of the Psychotherapy Frame in the Aftermath of the Pandemic and a qualitative study addressing the unmet mental health care needs of female inmates, respectively.

Registrars presented a wide scope of topics ranging from: Factors Affecting Readmission of State Patients After An Extended Leave of Absence (Dr Reddy) to Common Mental Disorders Among Visual Artists (Dr Swart), Psychosocial Conditions and Mental Well-Being of South African School Heads (Dr Breedt), Preparedness of Final Year Medical Students in Caring for LGBT Patients With Mental Illness (Dr Badat) to Caregiver Burden Among Children With ASD (Dr Van Niekerk), Assessing HIV Transmission Knowledge in Mental Health Care Users (Dr Matodzi), Sleep Quality of Adult Psychiatric Outpatients at CHBAH (Dr Harlies), Epilepsy and Associated Prevalence of Psychotic Symptoms (Dr Hungwe) and Clozapine Use at a Tertiary Hospital (Dr Ord).



Dr Shalani Reddy (winner)

The overall winner for the day was Dr Shalani Reddy with her topic "Factors Associated with Readmission of State Patients After An Extended Leave of Absence from Sterkfontein Hospital." She was judged by three guest judges: Prof Kruger, Dr Ojifinni and Dr Ajith whom have a keen interest in research and provided integral support to the day. She won sponsorship to the Annual Psychiatry Congress later this year which was generously sponsored by SASOP. Dr Morar was present on behalf of Dr Mdaka to hand out the award.

Days like this cannot be arranged without the support and sponsorship from various pharmaceutical companies who so generously gave of their time and funding in order to send representatives to research day and sponsor the event. On behalf of the Psychiatry Research Committee 2023, we thank you greatly ■

UNIVERSITY OF CAPE TOWN

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SOUTH AFRICAN MENTAL HEALTH CONFERENCE

BY DAN STEIN

Several members of the department attended the South African Mental Health Conference last month. The Chair of the Conference was Prof Oliva Shisana, honorary Prof in our department. Prof Dan Stein was Vice-Chair. Profs Katherine Sorsdahl, Claire van der Westhuizen and Jason Bantjes presented keynote addresses on their work. Several other members of the department presented or attended as delegates. The South African Mental Health Policy Framework (2013-2020) was released during the course of the conference – Hon Prof Crick Lund provided important inputs into the document.

The final session comprised a presentation by Dan Stein on game-changers for mental health, while the Vice-President of South Africa Paul Mashatile spoke on the importance of mental health. Well-known singer Simphiwe Dana spoke from a lived experience perspective on the importance of recognizing and treating depression ■

Above: Minister of Health Dr Joe Phaahla, singer Simphiwe Dana, Prof Dan Stein and other delegates at the conference.

BY THE PERINATAL MENTAL HEALTH PROJECT

For the first SA Mental Health Conference that took place in April, PMHP gave six oral presentations. Tyla Prinsloo (Mental Health Counsellor) presented on "Working Inside and Outside of the Counselling Room at the PMHP" – where she described how our service model addresses the social determinants of common perinatal mental health problems at the same time as providing psychotherapy. Lele Sigwebela (Research Officer) gave two presentations on our Community Health Intervention through Musical Engagement (CHIME) in South Africa project - one on the formative investigation of feasibility and the other on developing a participatory approach to prototype an intervention.

Simone Honikman (Director) presented on the research we conducted in collaboration with the London School of Economics on the 'cost of inaction' for perinatal mental health problems, and our visiting OT doctoral candidate from the US, Leah Smith, presented on how PMHP developed the training film, "No Maternal Health without Mental Health". We launched the film with free, hot popcorn and received some great feedback. Follow this link for more news on the PMHP: https://tinyurl.com/26pu6ksm

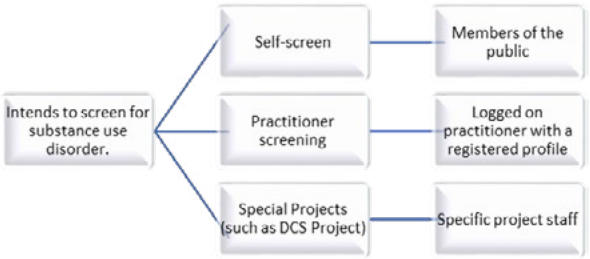
Above: Simone Honikman (second left) and other delegates at IMNHC round-table discussion.

LAUNCH OF THE UCT WEB APP ASSIST TOOL

BY GOODMAN SIBEKO

On 29 May 2023, the Division of Addiction Psychiatry, supported by the Faculty of Health Sciences, the Vice Chancellor's office and Groote Schuur hospital, hosted the launch of a UCT-developed Web App version of the WHO Alcohol, Smoking and Substance Involvement Screening Test (ASSIST). The tool was launched by the Minister of Social Development, Ms Lindiwe Zulu, as part of the National Integrated Awareness Campaign on Gender-based Violence, Anti-Substance Abuse and Social Crime Prevention.

The ASSIST assesses recent substance use over the past 3 months and also assesses for lifetime use risks. It contains a comprehensive list of substances including tobacco and alcohol and provides a level of risk for each substance. The Web App ASSIST will be integrated with other national population data dashboards, with routine dissemination being conducted alongside the 6-monthly SACENDU treatment demand data briefings by the SAMMRC. This data will feed through to the World Drug Report, further solidifying the Department's relationship with the World Health Organization. Read more about the Web App Assist tool in our departmental newsletter: https://tinyurl.com/26pu6ksm



Above: Utility of the Web App ASSIST tool

A MENTAL HEALTH COLLOQUIUM: PSYCHOTHERAPY IN LMICS

A significant portion of South Africans experience common mental health disorders, yet only a small percentage receive adequate care. This mental health treatment gap is a key priority in resource-limited settings where we need to improve the delivery of effective psychological interventions. This was the imperative of the second annual Psychotherapy Symposium held in Cape Town on 9 March 2023. The event aimed to update attendees on ongoing psychotherapy trials and explore strategies for implementation and uptake. The symposium featured keynote addresses, rapid fire presentations, workshops, and a panel discussion, with topics ranging from stakeholder engagement to recent randomised controlled trials in mental health.

Dr Yogan Pillay, a clinical psychologist and former Deputy Director-General of Health, delivered the opening plenary. He addressed the relevance of psychotherapy in resource-constrained contexts like South Africa. Dr Pillay emphasised the importance of transparent dialogue between mental health care providers and clients, as well as the significance of task-sharing to expand the reach of psychotherapy in settings with limited resources.

Various presentations highlighted the intersection of mental health and HIV, emphasising the increased risk of poor mental health outcomes for people with HIV. The symposium also highlighted research related to children and adolescents at risk of mental health disorders due to violence

and maltreatment. Interventions such as Parent-Child Interaction Therapy (PCIT) and alternative supportive interactions between parents and children were discussed as potential strategies to address these issues. Workshop breakout groups focused on training and supervision in task-sharing psychotherapy, implementation science methods, building partnerships, and economic evaluations.

The symposium called for direct engagement and collaboration among stakeholders, policymakers, and lawmakers to bring about positive change in the mental health landscape. The organising committee comprised of John Joska, Lena Anderson, Crick Lund, Lenny Naidoo, Umesh Bawa, Catherine Ward, Soraya Seedat and Ashraf Kagee. Read more: https://tinyurl.com/26pu6ksm ■

Above: Dr Yogan Pillay during his opening plenary (Photo: Zaheer Seedat: Zeus Media Productions)

NOTES ON NEUROPSYCHIATRY **BY JOHN JOSKA**

The on-line resource: Notes in Neuropsychiatry, is available at https://tinyurl.com/2ezpsfed. These notes have been created for a neuropsychiatry faculty across South Africa, and are intended for trainees, registrars, medical officers, and anyone with an interest in neuropsychiatry. They are not intended as a textbook, of which there are many, but rather as a conceptual framework, a beginner's guide, as it were ■

A NEW PUBLIC MENTAL HEALTH INITIATIVE

ARISE
African mental health Researchers InSpired and Equipped

ALAN J FLISHER CENTRE FOR PUBLIC MENTAL HEALTH

A few psychologists, nurses, researchers, social workers, a registered counsellor, an occupational therapist, a youth programme manager, a psychiatrist and a spiritual leader walk into a room. What are these people doing? Hint: they are not changing a lightbulb! It is January 2023 and they are the first cohort of a new postgraduate diploma (PGDip) in Public Mental Health offered by the Alan J Flisher Centre for Public Mental Health (CPMH) in UCT's Division of Public Mental Health. The PGDip students hail from 7 different African countries, are registered at either UCT or Stellenbosch University and interact weekly with a multi-disciplinary international faculty. Not surprisingly, conversations are vibrant and interesting as this diverse group of students get to grips with public mental health and research concepts.

The new one-year PGDip programme is founded on the principles of Africa-centredness, diversity, inclusivity and evidence-based practice. The PGDip comprises 4 courses: Introduction to Public Mental Health, Research Methodology for Public Mental Health, Mental Health Epidemiology and Interventions for Mental Health. The programme kicks off with an initial orientation block in Cape Town where the PGDip students interact with the first-year MPhil (Public Mental Health) class, and the UCT/Stellenbosch University faculty. After this two-week block, they return to their home countries and continue their studies online on the Amathuba platform. The lively combination of asynchronous and synchronous learning activities is designed to keep students engaged with each other, the faculty and the public mental health content.

Read more about the programme in our departmental newsletter: https://tinyurl.com/26pu6ksm ■

Above: PGDip and MPhil (Public Mental Health) students and faculty on the last day of the orientation block, 3 February 2023

OF CALIBRATION, COLLABORATION, CORROBORATION AND COORDINATION

Claudia Campbell

A few times in life, unexpectedly strange moments happen: Overwhelming, emotional, reflective – all the feelings, all at once, all the memories, all at once – childhood to adulthood in a millisecond.

Last week I had one of those moments. I was admitted to hospital for 5 days of observation. To begin with it was a memorable day. How often does it begin to snow in South Africa whilst you are signing admission documents? In fact, how often does it snow in South Africa? It was a bizarre mix of my own childlike excitement looking at the silent fall of snowflakes beyond the reception hall, a gut twisting nervousness of the admission itself, and a joy watching the hospital staff and patients, mobile enough, exit the doors with eyes full of wonderment at the magical white moment outside. The unusual event did delay my admission somewhat, but eventually I was directed to my ward.

I was admitted to a hospital I've spent many days and nights in, however never in this particular ward. I was not familiar with the room or its view. Bright blue, chilly skies is what I'm accustomed to when looking out winter windows in my home town. However, as it happens, the opacity of snowflakes hid a view, which aside from its angle would turn out to be a lifetime of familiarity.

I knew this admission would be a particularly grueling one, I'd not imagined the most grueling part of it would be the view from my bed. As the snow cleared and the familiar bright blue skies began to shine, I realized the few windows looking at me were ones that I had looked out of during some of the most profound, difficult, defining days of my life. Right across from me were the windows I had looked out of a dozen years before as I began my struggle with well-intentioned but unfortunately perilous medicine, up one floor to the left were the windows I peered hard to see out of during two of my most challenging admissions for 96 hour EEGs. And, teary innocence, next to those windows were the ones a 10 year old me gazed out of as her father heard of a devastating diagnosis and fought a valiant, but ultimately unsuccessful battle with cancer – a little girl standing in the room as her hero inched toward death.

Claudia Campbell

This all sounds very dramatically traumatic. As I gazed towards the windows facing me I chastised myself for catastrophizing a set of old memories. Except, I wasn't catastrophizing them at all. I needed 3 practitioners to convince me of this, and 5 days to feel that, whatever medical terminology you'd like to describe it with, trauma lives in our cells. The old traumas that looked across at me live in my brain cells and all the other cells that make me, me. It was the most obvious, visceral, psychologically apparent, and physically present proof that trauma is as much an explanation as it is a diagnosis and disease. Or is it?

One of the practitioners working with me pushed against the notion that my experience should be 'medicalized' for people to take my trauma related struggles seriously, as well efforts to reduce present and future 'struggles'. A push against the notion that I need to take on the role of a 'patient', 'subjected' to treatment, to build 'tolerance'. This whole concept proved a little too complex for a dazed mind to process last week. However, this week I have been able to give it more thought. Thought in relation to how I view myself and how others, particularly in the realm of the helping professions, view me within the ambit of 'treatment'.

IT'S A GENERALLY AGREED UPON OBSERVATION THAT THE PRACTICE OF THE 'HELPING PROFESSIONS' HAS UNFORTUNATELY FALLEN INTO A SYSTEM OF DISPARATE SILOS.

One specialty, treating one aspect of a patient, another treating a different aspect. An entirely separate discipline refrains from the term 'patient', opting instead for 'client', even though they too are a helping profession. Medicine and treatment all coming at the patient from different angles, focusing on different things, to hopefully achieve the same purpose: a better experience of existing - for a person (a single entity, not a set of systems).

My hospitalization last week proved very unique. In over a dozen years, it was the first time I had three individual practitioners working together, with me, every day over the duration of a week: an actual team, with me as a team member. In my opinion, the progress made within one week, would have taken months if the rabbit warrens beneath silos had to be navigated as opposed to the clear, unified forward motion of a team. It was powerful.

My husband, and his wonderful engineering mind, captured the experience as: calibration, collaboration, corroboration. None of which could have happened as effectively without coordination.

That's the catch though - coordination of siloed practitioners into a unified team. Because, let's face it: by virtue of the fact that a group of practitioners agree on a treatment approach, does not in itself make them a team. It's the nuts and bolts of coordinated time and communication which creates a team. So, who is in charge of coordination? Is it the admitting doctor, even though he would spend the least minutes with me, or one of the other two - or, shockingly me? Remembering, I am but one of many people/patients/clients to be seen by each of them every day.

In the work I do, I regularly hear doctors wishing patients took more responsibility for their illnesses, whilst patients wish their doctors had better active listening skills. These are not things conducive to coordination. So, what could help the maze of silos and teams, doctors and patients to achieve coordination, calibration, collaboration and corroboration?

LET ME PUT IN A DISCLAIMER: WHAT I'M ABOUT TO SAY IS A TOTAL GENERALIZATION, AND ADMITTEDLY CANNOT HAVE A BLANKET APPLICATION. NO, IT'S MERELY FOOD FOR THOUGHT, A HOPEFUL STARTING POINT FOR EXPANDED APPROACHES. SO PLEASE ENTERTAIN ME.

Disclaimer said: Is it not perhaps me, the person whom you may refer to as your patient or client who should be the coordinator? Should patients not be given a greater role in their care? Not just a patient receiving treatment, but a team member, actively participating in the decisions and administration of treatment? Are we not the central pivot point? Personally I think so, however, we have to be specifically notified of this role and educated as to what to do, and what to expect. At the same time what we say needs to be listened to with the same gravitas as any of the other practitioners - patient as practitioner. This generally does not happen.

When we as patients try to assume some responsibility of coordinator (because medical aids require us to do many things to approve admission), we are often faced with 'gatekeepers'. Don't get me wrong, the majority of practices would fail miserably if secretaries and PAs were not on the frontline. Although privy to some patient information, they are not privy to all of it, or to any direct conversations with patients and other practitioners. In terms of organising a treatment team, they are frequently not party to all the necessary information to aid in setting up the team effectively. It creates a frustrating cycle of halting exchanges between doctor and PA, PA and patient, PA and doctor, back to patient, then patient and other practitioner's PAs, patient and doctor PA, other practitioners and their PAs, all the while requiring PAs to leave messages and 'wait for doctor' to revert back to then attempt to contact the patient between a multitude of other tasks they have to get through. It's infuriating for everyone.

However, in relation to admitting doctors, PAs take on the biggest role of coordinator. But, are they the most effective coordinators when arranging treatment involving a team - especially the kind of treatment wherein the patient takes on the role of team member too? In my experience, they can be gatekeepers which hinder and not help patients in this context - often because of a lack of understanding regarding the treatment and its logistical complexities.

Whilst in hospital, a text chat was setup where each day feedback of what happened was posted by my practitioners as well as myself. It was, in a way, a 'working document'. It was not formal report, but an in-the-moment capturing of the process of a team working together. The comments could be a sentence or two, perhaps a lot more. The informal nature made it easy. It would even work using voice notes. For me it seemed that every day we all started on the same page, and that saved so much time.

I wish that this chat had been set up as soon as the treatment process was agreed upon, when the process of coordinating the hospitalization started. It would have simplified so much, and saved many hours for each of us. There is one very simple, but major issue in doing this: the majority of doctors do not want patients to have access to their direct contact numbers. In many cases this is an entirely understandable choice. But, when does this choice ultimately create more frustration for everyone involved, and is it worthwhile?

How can a patient be an active participant (patient practitioner) in their treatment, when they often need to rely on a PA or other practitioner to be their mouthpiece? Shouldn't a patient have equal access to the team if they are part of the team?

Coming to treatment consensus between practitioners and patients takes time and effort - it's not something that happens every day. It only happens after careful consideration by all. After all of this is done should patients not be equal in setting up teams, in coordinating care; in ultimately facilitating calibration, corroboration and collaboration?

It's an idealized dream, but I wish it would come true.

Claudia Campbell holds a post-graduate degree in psychology and has 10 years experience in the field of corporate transformation strategy. Claudia works in a voluntary capacity as a psychosocial facilitator, public speaker, and consultant. Due to various health challenges, Claudia's personal life includes many experiences from the patient's side of the consultation room. **Correspondence: claudia@redbench.co.za**

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REPUBLIC OF SOUTH AFRICA

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Jakana Male. Photo courtesy of Lennart Eriksson, Psychiatrist – Pennington, KZN, lennarte@iafrica.com

KetaMIND CLINICS OF SOUTH AFRICA
"There is a new way"

TRD, BORDERLINE PERSONALITY DISORDER & KETAMINE

Mood disorders are frequently comorbid in patients with Borderline Personality Disorder (BPD). Treatment Resistant depression (TRD) is a common bedfellow. Comorbid BPD and TRD is associated with a poorer response to traditional antidepressants... but what about ketamine?

Research out of Canada published in *Psychiatry Research* in May this year conducted on a sample size of 100 after four ketamine infusions concluded: "Patients with TRD and comorbid BPD receiving ketamine exhibited a significant reduction in symptoms of depression, borderline personality, suicidality, and anxiety".

"This research is extremely relevant," says Dr Alan Howard, founder and National Medical Director of KCSA. "We have perhaps been overcautious in the past administering KIT to patients with comorbid BPD, expecting sub-par outcomes. This is exciting news."

Read the full article: https://tinyurl.com/yjv5ff8j ■

ARE KETAMINE INFUSIONS AN ALTERNATIVE FOR THOSE PATIENTS WHO DON'T RESPOND TO TMS?

Transcranial Magnetic Stimulation (TMS) is a highly effective treatment option for patients with resistant depression (TRD) - but, as with ketamine infusions and other novel treatments, not all will respond.

Advances in interventional psychiatry have lead to several novel treatment options for TRD, TMS and ketamine infusion amongst the most effective. All have their pros and cons, and all will have non-responders.

Researchers in Montreal studied the effects of a standard series of ketamine infusions in 21 TMS 'non-responders' with TRD. Mean baseline MADRS scores improved by 35%.

Given the global TRD epidemic, integration of the various treatments and cooperation between providers is essential to curb its spread.

Learn more about TMS in South Africa:
https://www.rewire.co.za/

Read the article in the JAD:
https://tinyurl.com/4f7xue72■

SERIAL KETAMINE INFUSIONS FOR MDD CHANGE WHITE MATTER MICROSTRUCTURE

Ketamine-related changes in brain activity in TRD have been reported in prior studies. This new study demonstrates significant changes in neurite features and density in tracts linked to anhedonia.

Exciting research out of the Department of Neurology, University of California, examines white matter neuroplasticity linked to clinical improvement in depressed patients following four ketamine infusions.

The authors conclude that:

"Serial ketamine infusion leads to significant changes in the microstructural features of neurites within occipitotemporal tracts. Changes in neurite density within tracts connecting the basal ganglia, thalamus, and cortex relate to improvements in anhedonia".

Read the article: https://tinyurl.com/39pavj2r ■

WE ARE OPENING IN THE WINELANDS

KetaMIND will open it's 6th clinic nationally and its second in the Western Cape during the coming weeks.

"We are delighted to announce the opening of our Paarl facility to compliment our Constantia clinic in the Western Cape," says Dr Alan Howard, founder of KCSA. "We wish Kathryn Mann and her team every success."

Invitations to the launch will soon be sent out to regional psychiatrists, GPs and other mental health professionals ■

IN THE NEXT NEWSLETTER...

CAN A SINGLE KETAMINE INFUSION PROVIDE LONG-TERM BENEFIT IN PTSD?

Compared with a control group receiving a midazolam infusion, PTSD patients randomly assigned to a single ketamine infusion showed a lower amygdala and hippocampal reactivation to trauma memories.

Together with other demonstrable effects in these patients, researchers from the Yale University School of Medicine conclude that ketamine may modulate the fear response for at least 30-days post-extinction.

In the next newsletter we will link to the American College of Neuropsychopharmacology article published in *Nature* in June 2023.

Finding the 'sweet spot' in the timing of KIT and psychotherapy for PTSD patients warrants further study ■

KētaMIND

CLINICS OF SOUTH AFRICA

The trusted name in outpatient ketamine infusion therapy (*Est 2019*)

WHO ARE YOU BACKING IN THE RACE TO BEAT MDD AND SUICIDALITY?

Glutamate or The Monoamine Deficiency Hypothesis? The choice is yours.

GLUTAMATE

MONOAMINE DEFICIENCY HYPOTHESIS

PATIENT SAFETY IS OUR PRIORITY

- Over **7000** safe outpatient ketamine infusions.
- **6** accredited outpatient ketamine clinics in **3** provinces
- Our experienced doctors are all SOSPOSA[1] members with requisite ALS skills.
- Reduction in suicidal ideation in **>70%** of patients, **80%** sustain response at 4-weeks, **60%** at 8-weeks, even without maintenance infusions. [2]
- Ketamine Infusion promotes dendritic sprouting and synaptogenesis through the actions of glutamate in brains damaged by chronic MDD

CONTACT US

info@ketamind.co.za

www.ketamind.co.za

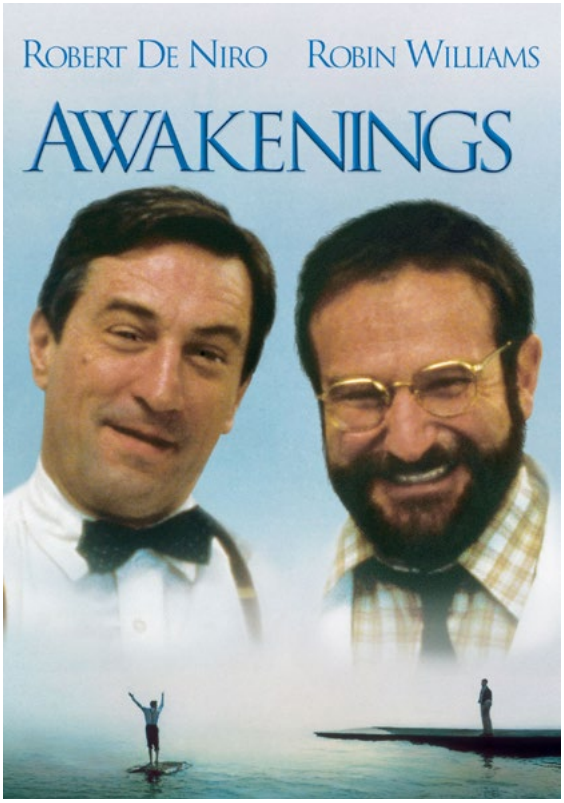
[1] Society of Sedation Practitioners of South Africa, a special interest group of SASA (South African Society of Anaesthesiologists)

[2] L. Alison McInnes, A retrospective analysis of ketamine intravenous therapy for depression in real-world care settings Journal of Affective Disorders, https://doi.org/10.1016/j.jad.2021.12.097

SOKePSA

SECOND CHANCES

Kim Laxton



What if you woke from 50 years of sleeping? You would imagine this would give you a second chance at life. What if a doctor took the risk to prescribe for you a novel medication, one which was experimental at the time? And when you opened your eyes, you found yourself in a hospital with others just like you, awakening, beginning to live again. *Awakenings* is that story.

Oliver Sacks, a renowned and much- loved author and neurologist wrote a 1973 memoire, named just that, *Awakenings*, that was adapted into a screenplay by Steven Zaillian in 1990. This film, directed by Penny Marshall, would go on to be nominated for three Academy Awards with its budget of $29million, grossing $108.7million at the box office. A raging commercial success

The book and movie are based on a story whereby a caring physician, Dr Malcolm Sayer (played by the late Robin Williams), in New York in 1969 took the risk of using the new drug L-DOPA treating Parkinson's Disease on his own patients, those who survived the 1917-1928 epidemic of Encephalitis Lethargica.

Encephalitis Lethargica commonly known as "sleeping sickness", essentially does just that – puts people to sleep by attacking the brain leaving victims in a statue-like condition or catatonia. One such patient (Leonard Lowe) beautifully portrayed by Robert de Niro, completely *awakens* from his catatonic-like state. Leonard's adjustment to life journeys him to love and the frightening reality of what might be, the uncertainties of a new future, and what was lost.

The story twists and turns into a court room drama with de Niro and Williams creating characters of such depth and substance that it's difficult not to flinch in front of the screen. Sacks, known for his books such as *The Man Who Mistook His Wife for a Hat* and *An Anthropologist on Mars* creates stories of neurology but with a distinct and even a magical human element. Born in 1933 Sacks was a British neurologist, naturalist, historian of science and author. He was essentially a physician who, if you venture into his works, discovers the true essence of what it is to be human, and pathology, that is not simply the presence of disease but which paints a unique picture for each person who is diagnosed.

It is a tough ask to adapt such a special piece of authorship into film, but Marshall does this with confidence and ease, demonstrating a deep empathy and understanding of those who suffered a sleeping fate but were awakened and began to live again.The movie is a second chance for this fascinating story to be told in a different medium but also asks the question, what would you do if you received a second chance at living?

Kim Laxton qualified as a psychiatrist in 2016 and is currently in private practice at Akeso Crescent Clinic, Johannesburg. She works within the life insurance industry in addition to teaching, academia and clinical practice. At SASOP 2021, she assisted in coordinating a parallel session: "The Art of Psychiatry and the Therapy of Play".This included the movie evening at the conference. She is an avid movie-goer, Funko-Pop collector and wildlife fanatic! **Correspondence: drkimlaxton@gmail.com**

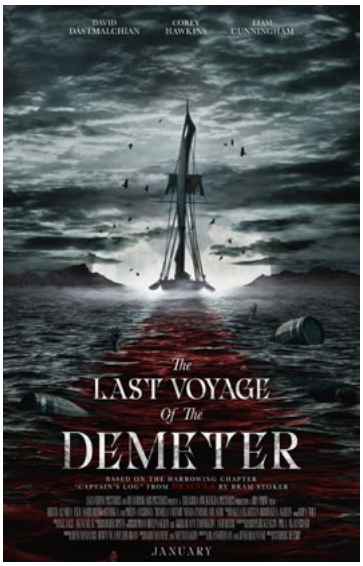
MOVIES

Title: Gran Turismo
Release Date: 11 Aug 2023
Director: Neil Blomkamp

Based on the unbelievable, inspiring true story of a team of underdogs - who risk it all to take on the most elite sport in the world.

Title: Sarafina
Release Date: 11 Aug 2023
Director: Darrell Roodt

The cinematic re-release of the 1992 classic where South African teenagers fight against apartheid in the Soweto Uprising



Title: Last Voyage of the Demeter
Release Date: 18 August 2023
Director: André Ovredal

A crew sailing from Carpathia to England find that they are carrying very dangerous cargo.

Title: Sound of Freedom
Release Date: 18 Aug 2023
Director: Alejandro Monteverde

The incredible true story of a former government agent turned vigilante who embarks on a dangerous mission to rescue hundreds of children from sex traffickers.

Title: Golda
Release Date: 25 Aug 2023
Director: Guy Nattiv

Focuses on the intensely dramatic and high stake responsibilities and decisions that Golda Meir, also known as the 'Iron Lady of Israel' faced during the Yom Kippur War

Title: Retribution
Release Date: 25 Sep 2023
Director: Nimrod Antal

A bank executive receives a bomb threat while driving his children to school that his car will explode if they stop and get out.

RESTING A HEAD BETWEEN HEAVEN & EARTH

David Swingler

Sensibility, and tighter drink-driving regulations, have introduced a new logistic to wine-routing in general, and its anorak expression as wine-tasting in particular. [Anorak = British slang for a person with an obsessive interest in a particular subject, investing far more time and money in it than it warrants. Like petrol-heads or trainspotters, or wine-tasters…]

Wine events around town posing the 'spit and drive or pay and stay' conundrum have been blessed with easy access to e-hail taxis and, although Uber has its dangers, its largely now a no-brainer. Sorties out of town – say a tasting in Stellenbosch, 50km from Cape Town – require some ingenuity. I know of more than one group that maintains a database of students willing to drive the tasters home for a few bob; one needs a variety of options as essay deadlines, exams and social dates may rule individuals unavailable. But a 'shared chariot' with a dedicated driver home is an increasingly popular option.

THEN THERE ARE 'OVER THE MOUNTAIN' CHALLENGES. THE BREEDE RIVER VALLEY FOR EXAMPLE, OR MY HAPPY PLACE, THE HEMEL-EN-AARDE VALLEY.

This is Farm Stay or Air BnB territory. It's surprising that the Hemel-en-Aarde Valley, with a status as arguably the finest Chardonnay and Pinot Noir producing site in the southern hemisphere, has so many world class producers, and yet relatively few beds available in the valley.
A favourite at one end of the spectrum is Volmoed.

Hemel en Aarde Map


David Swingler

Set in 130 hectares of fynbos with the Onrust River running through it, this is a tranquil spot with natural beauty; a peaceful venue for individuals, family holidays, weddings, conferences, and church retreats.

Always known as Volmoed (meaning full of courage and hope) it was first a place of healing during the 18th century when the site of a leper colony. The oversight Trust established it in the early eighties as a place that would minister to people who felt battered by their life's experience. Under the chairmanship of well-known anti-apartheid Christian theologian and academic John de Gruchy and with Patrons Rev Dr Lionel Louw, Dr Mary Burton and Prof Pumla Gobodo-Madikizela, today it serves the wider community for conferences and courses while still being accessible to individuals and families who simply need to get away from it all. Or wine-tasters needing to rest a head between heaven and earth.


Chapel over the pond


Vyeboom

Volmoed offers comfortable accommodation in well-equipped houses accepting 2 to 12 people each. All units are self-catering, and braai facilities are available. Indicative prices range from R5000 per night for the dormitory style 'Boekenhout Upper' sleeping 12 adults to the 2-sleeper 'Grace Cottage' at R545 pppn. The latter – my favourite – is an old fashioned Plettenberg mobile home unit with a wooden patio overlooking a green meadow.

The style of Volmoed is quiet and tranquil, peaceful, and trusting. There are no TVs, WiFi is sparse and loud music is, well, discouraged. I did not encounter another human being there over one weekend. Key pickup was an honesty system in the office. Staff worship rather than work on Sundays, so units are not serviced, and no new guests are accepted on the Sabbath. It may all be described as a touch austere, but I find it soothing and restorative.

At the other end of the spectrum – no better or worse, but very different – is The Guardian, strap-lined 'Luxury Self-Catering'. Well, yes. Sort of… It too overlooks lawns, fynbos and the Onrust River under Babylonstoren mountain, it too has been described as tranquil and serene and it too is self-catering. But while Volmoed embraces an (attractive) minimalist austerity, The Guardian is at the pointy end of luxury. It's elegant furnishings, plush linens, art and décor create an ambience of sheer indulgence.

The Guardian Cottage

IT'S THE PROJECT OF DERICK AND SHARON WILSON WHO HAIL FROM KWAZULU-NATAL WHERE DEREK STILL DIRECTS A SKILLS/LEADERSHIP TRAINING CONSULTANCY AS HE HAS FOR OVER THREE DECADES.

They live in the sumptuous main home above The Apartment, an expansive yet private residence that sleeps two adults in a lavishly dressed extra-length king bed, with close access to the 16m rim-flow swimming pool. A separate double story house – The Cottage – consists of two deluxe ensuite bedrooms upstairs with a spacious kitchen and lounge with wraparound balcony leading to a private garden. Both facilities have extravagant valley, river and mountain views and use of the spectacular pool. Each has private braais.

The Apartment

ALL TOO OFTEN, SUCH LUXURY IS OVERDONE AND ENDS UP OSTENTATIOUS, EVEN GAUCHE. NOT SO HERE, WHERE STYLE WAS NEVER GOING TO BE SACRIFICED.

As freelance lifestyle journalist Bianca Coleman put it: 'The sheer luxury of The Guardian makes it look super expensive, but it is in fact more affordable than you'd think.' Rates depend on season, with certain minimum stays required and discount for long duration bookings, and range between R3900 – R6200 pn for The Cottage (sleeps 4) and R2500 – R3600 pn for The Apartment (sleeps 2). 'Reset your clock,' say the Wilsons.

Charming Cottage De Werf

Other options? I'm a frequent visitor at the delightful 'Charming cottage in the Hemel & Aarde Wine Valley' on Air BnB. Situated at De Werf in the Valley on the road up to Moggs Country Cookhouse, its owned by friends of mine and is, indeed, charming as opposed to either 'austere' or 'luxury'. It starts at R1800 for four in the main house, add R500 for the additional ensuite double room with a private entrance. The outdoor hot shower is legendary.

Spookfontein cottage

Spookfontein Cottages are delightful, and High Season Farm accommodates 38 guests in eight luxury cottages. Websites like Lekkeslaap and Afristay also carry most of the usual suspects. Enjoy resting your head between heaven and earth.

David Swingler is a writer and taster for Platter's South African Wine Guide for over 21 years to date. Dave Swingler has over the years consulted to restaurants, game lodges and convention centres, taught wine courses and contributed to radio, print and other media. A psychiatrist by day, he's intrigued by language in general, and its application to wine in particular.
Correspondence: swingler@telkomsa.net

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Further information available on the website. Congress Website: www.adhdcongress.co.za

This conference features an array of esteemed speakers with cutting-edge presentations, designed to equip medical professionals like you with the latest knowledge and advancements in the field.

As the event is less than a month away, we urge you to secure your spot by registering as soon as possible. We understand that your schedule may be busy, but investing time in this conference will undoubtedly pay dividends in terms of knowledge and professional growth.

Together, let's make this conference an unforgettable and enriching experience for all!

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View Programme here:
https://adhdcongress.co.za/register/

Congress Speakers:
https://adhdcongress.co.za/invited-speakers/

Congress Convenor
Prof Renata Schoeman
renata@renataschoeman.co.za

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NEW

WHEN SCHIZOPHRENIA ALTERS THEIR LIVES,

REAGILA® gives them hope.

Dear Healthcare Provider,

Introducing REAGILA® - capsules to be available in pharmacies from August 2023

REAGILA® contains cariprazine, a new atypical antipsychotic with a unique pharmacological profile[1] to be available in South Africa for the treatment of schizophrenia in adults.[2] Although positive symptoms of schizophrenia are effectively managed, the primary negative symptoms generally do not respond well to currently available antipsychotics and remain an unmet medical need.[3]

Cariprazine is unique among antipsychotics in having a higher affinity for the D_3 receptor than dopamine itself.[1] Consistent broad-spectrum efficacy for positive and negative symptoms has been shown across 3 pivotal trials in the treatment of acute schizophrenia.[4-6]

Furthermore, it has proven superiority over other second-generation antipsychotics in improvement of predominant negative symptoms of schizophrenia.[7,8] Four different dosage strengths enable easy dose titration to suit individual needs.[2]

Proprietary Name[2]	Reg. No.[2]	Nappi Code	Product Schedule[2]	Active Ingredient[2]	Strength[2]	Unit[2]	Dosage Form[2]	Pack size[2]	SEP excl. VAT[9,10]	SEP incl. VAT[9,10]
REAGILA® 1,5 mg	55/2.6.5/0097	3006591001	S5	Cariprazine hydrochloride	1,5	mg	Capsule	28	R 675,00	R 776,25
REAGILA® 3 mg	55/2.6.5/0098	3006593001	S5	Cariprazine hydrochloride	3	mg	Capsule	28	R 675,00	R 776,25
REAGILA® 4,5 mg	55/2.6.5/0099	3006596001	S5	Cariprazine hydrochloride	4,5	mg	Capsule	28	R 675,00	R 776,25
REAGILA® 6 mg	55/2.6.5/0100	3006597001	S5	Cariprazine hydrochloride	6	mg	Capsule	28	R 675,00	R 776,25

Should you require any additional information, please do not hesitate to contact your helpful Adcock Ingram Sales Representative.

Yours sincerely

Anneke Vlok

Brand Manager: CNS

Adcock Ingram Healthcare (Pty) Ltd

Email: customer.care@adcock.com

References: 1. Stahl SM. Mechanism of action of cariprazine. *CNS Spectrums* 2016;21:123–127. doi:10.1017/S1092852916000043. **2.** REAGILA® professional information, November 2022. **3.** Correll CU, Schooler NR. Negative Symptoms in Schizophrenia: A Review and Clinical Guide for Recognition, Assessment, and Treatment. *Neuropsych Dis Treat* 2020:16 519–534. http://doi.org/10.2147/NDT.S225643. **4.** Durgam S, Starace A, Li D, *et al*. An evaluation of the safety and efficacy of cariprazine in patients with acute exacerbation of schizophrenia: A phase II, randomized clinical trial. *Schizophr Res* 2014;152:450-457. http://dx.doi.org/10.1016/j.schres.2013.11.041. **5.** Durgam S, Cutler AJ, Lu K, *et al*. Cariprazine in Acute Exacerbation of Schizophrenia: A Fixed-Dose, Phase 3, Randomized, Double-Blind, Placebo- and Active-Controlled Trial. *J Clin Psychiatry* 2015;76(12):e1574-e1582. Dx.doi.org/10.4088/JCP.15m09997. **6.** Kane JM, Zukin S, Wang Y, *et al*. Efficacy and Safety of Cariprazine in Acute Exacerbation of Schizophrenia. Results From an International, Phase III Clinical Trial. *J Clin Psychopharmacol* 2015;35: 367–373. DOI: 10.1097/JCP.0000000000000346. **7.** Barabassy A, Szatmári B, Laszlovszky I, *et al*. Negative Symptoms of Schizophrenia: Constructs, Burden, and Management. IntechOpen 2018, Chapter 4:43-62. http://dx.doi.org/10.5772/intechopen.73300. **8.** Németh G, Laszlovszky I, Czobor P, *et al*. Cariprazine versus risperidone monotherapy for treatment of predominant negative symptoms in patients with schizophrenia: a randomised, double-blind, controlled trial. *Lancet* 2017;389:1103-1113. DOI: http://dx.doi.org/10.1016/S0140-6736(17)30060-0. **9.** South African Medicine Price Registry. Database of Medicine Prices (26 June 2023). Available at: http://www.mpr.gov.za/PublishedDocuments.aspx#DocCatId=21. Last accessed June 2023. **10.** Data on file SEP and SEP approval.

S5 Reagila® 1,5 mg hard capsules. Each hard capsule contains cariprazine hydrochloride corresponding to 1,5 mg cariprazine. Reg. No.: 55/2.6.5/0097. S5 Reagila® 3 mg hard capsules. Each hard capsule contains cariprazine hydrochloride corresponding to 3 mg cariprazine. Each hard capsule contains 0,0003 mg Allura red AC (E129). Reg. No.: 55/2.6.5/0098. S5 Reagila® 4,5 mg hard capsules. Each hard capsule contains cariprazine hydrochloride corresponding to 4,5 mg cariprazine. Each hard capsule contains 0,0008 mg Allura red AC (E129). Reg. No.: 55/2.6.5/0099. S5 Reagila® 6 mg hard capsules. Each hard capsule contains cariprazine hydrochloride corresponding to 6 mg cariprazine. Each hard capsule contains 0,0096 mg Allura red AC (E129). Reg. No.: 55/2.6.5/0100. For full prescribing information refer to professional information approved by the medicines regulatory authority (November 2022).

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GEDEON RICHTER

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SASOP

Call for Abstracts

21st National Congress of the South African Society of Psychiatrists

Shifting the paradigm towards community care and the unheard voices in mental health

All abstracts (oral or poster presentations) must be submitted online via the website

Scan here to submit your abstracts

- The deadline for the submission of abstracts is 18 August 2023. Registrars are specifically invited to submit their abstracts.
- All abstracts will be reviewed by the scientific committee.
- All abstracts received will be acknowledged, and authors will be sent acceptance or rejection letters by 19 September 2023.
- Please note that presenting authors of accepted abstracts must be registered delegates.
- Registration costs are at the presenter's own expense.

INSTRUCTIONS TO AUTHORS

Each abstract must clearly state the following:

- Abstract title (must not exceed 25 words)
- Stick to the sections as provided and limit the abstract to 350 words.
- List of the author(s) (first and last name for each). The name of the presenting author must appear first in the list of authors. Do not include qualifications.
- Affiliation of author(s)
- Abstracts must be typed in English, single line spacing, Arial font size 12.

Please adhere to the following format:

- Background: should be brief and informative and state the aim of the study.
- Methodology: include a description of sample/ participants and research methodology, including statistical analysis
- Results: outline the findings of the study supported by statistics as appropriate. Provide relevant data aligned to the aims and conclusions. Do not use figures, graphs, or tables in the abstract. A short discussion may be added if appropriate
- Conclusion: provide summary and relevance of the main findings

All accepted abstracts will be published without further editing. Abstracts that do not adhere to the specific format will not be published. Prizes will be awarded for the best abstract presentationsat the congress dinner.

Congress registration:
https://sasop2023.co.za/online-registration/

Accommodation:
https://sasop2023.co.za/accommodation/

More information is available on the website:
www.sasop2023.co.za

pharma dynamics
EFFECTIVE AFFORDABLE HEALTHCARE

S A S O P ROADSHOW

Dear Colleagues,

PharmaDynamics has made sponsorship possible again this year for a Roadshow, taking the leaders of SASOP and PsychMg to the major centres. We have found in the past that these are valuable opportunities to meet with psychiatrists at a local level and learn about the unique challenges encountered in each area, whilst also updating our colleagues on developments pertaining to issues that affect us all.

This year we want to provide an opportunity for all SASOP members to attend, both Public Sector and Private colleagues.

THE PROPOSED AGENDA FOR THE ROADSHOW:

15h00-16h00:	Arrival & Registration
16h00-18h30:	Workshop: "Your 20 Questions Answered" (session facilitated by Drs Ian Westmore, Eugene Allers, Kobus Roux and Sebo Seape)
18h30-19h00:	Pre-dinner drinks.
19h00-21h00:	Dinner with presentation from SASOP/PsychMg/Pubsec

Each Subgroup will have an opportunity to draw up "20 Questions" beforehand that will be used to form the basis of the discussion. It is hoped that this will ensure that any aspects pertaining to private practice, public sector service, managed healthcare, billing, hospital "politics" etc. will be covered in a way that will be relevant to each area. It will be expected that each Subgroup Chairperson will collate these questions and submit them to me at least 7 days prior to your specific event.

We look forward to meeting you in your region on the following dates:

28.06.2023:	Southern Gauteng
29.06.2023:	Northern Gauteng
30.06.2023:	Nelspruit
19.07.2023:	Free State
17.08.2023:	Western Cape
06.09.2023:	KZN
11-12.10.2023:	Eastern Cape (Gqeberha and East London)
01.11.2023:	Limpopo

For catering and logistical purposes it is essential that you register for your region as soon as possible.

Please use the link below to register and secure your attendance, as space is limited:

https://tinyurl.com/ymbvuma3

Regards,

Dr Ian Westmore
Convenor

SOUTH AFRICAN SOCIETY OF PSYCHIATRISTS

SASOP PUBSEC MEETING AND PROGRAMME - 9 JUNE 2023

Dear SASOP Member,

SASOP was afforded the opportunity to host the afternoon session at the Dr Reddy's weekend from 9 June to 11 June 2023. We realise that it was not possible for all SASOP members to attend the weekend and we therefore also hosted this SASOP Programme virtually.

The programme proceeded as follows:

Session 1

13:55 to 14:00 Welcome
Dr Kagisho Maaroganye

14:00 to 15:00 Models for Long Stay Placement for Psychiatric Patients –
Prof Melvyn Freeman

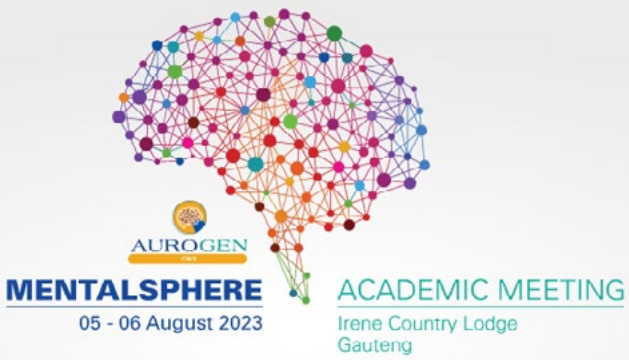
15:00 to 16:00 Need and Viability of Telepsychiatry post Covid-19 pandemic –
Prof Maurice Mars

Session 2

16:15 to 17:15 Introduction to the 2023 - 2030 National Mental Health Policy –
Prof Crick Lund

17:15 to 18:00 PPP Initiatives (DMH training and Care Pathways) –
Prof Rita Thom

AUROGEN MENTALSPHERE ACADEMIC WEEKEND



When: 5 - 6 August 2023
Time: Arrival and Registration: 8h30 - 9h00
Where: Irene Country Lodge, Gauteng
(Nelmapius Drive, Irene, Pretoria 0062)

CPD Accreditation:
6 Clinical
1 Ethics

SOUTH AFRICAN SOCIETY OF PSYCHIATRISTS
Southern Gauteng

SUN PHARMA

SOUTHERN GAUTENG WEBINAR TOPIC:

CHILD AND ADOLESCENT PSYCHIATRY: MANAGEMENT OF AGGRESSION

When:	16 August 2023	SASOP Members:	Free
Time:	18:00 - 19:00	Non-Members:	R200
Speaker:	Dr Alicia Porter	CPD Accreditation:	General 1

Register here:
https://tinyurl.com/4utvuup4

SOUTH AFRICAN SOCIETY OF PSYCHIATRISTS

SPIRITUALITY & PSYCHIATRY SIG

WEBINAR INVITATION

PROBLEMS OF LIVING: PERSPECTIVES FROM PHILOSOPHY, PSYCHIATRY, AND COGNITIVE AFFECTIVE SCIENCES

BY **PROF DAN STEIN**

Thursday, 7 September 2023 @ 19:00-20:00

hosted by:

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joey@takenoteevents.co.za

Register here:
https://tinyurl.com/3fz5jb6j

INSTRUCTIONS TO AUTHORS

South African Psychiatry publishes original contributions that relate to South African Psychiatry. The aim of the publication is to inform the discipline about the discipline and in so doing, connect and promote cohesion.

The following types of content are published, noting that the list is not prescriptive or limited and potential contributors are welcome to submit content that they think might be relevant but does not broadly conform to the categories noted:

LETTERS TO THE EDITOR

* Novel experiences
* Response to published content
* Issues

FEATURES

* Related to a specific area of interest
* Related to service development
* Related to a specific project
* A detailed opinion piece

REPORTS

* Related to events e.g. conferences, symposia, workshops

PERSPECTIVES

* Personal opinions written by non-medical contributors

NEWS

* Departments of Psychiatry e.g. graduations, promotions, appointments, events, publications

ANNOUNCEMENTS

* Congresses, symposia, workshops
* Publications, especially books

The format of the abovementioned contributions does not need to conform to typical scientific papers. Contributors are encouraged to write in a style that is best suited to the content. There is no required word count and authors are not restricted, but content will be subject to editing for publication. Referencing - if included - should conform to the Vancouver style i.e. superscript numeral in text (outside the full stop with the following illustration for the reference section: *Other AN, Person CD. Title of article. Name of Journal, Year of publication; Volume (Issue): page number/s. doi number (if available)*. **Where referencing is not included, it will be noted that references will be available from the author/authors.** All content should be accompanied by a relevant photo (preferably high resolution – to ensure quality reproduction) of the author/authors as well as the event or with the necessary graphic content. A brief biography of the author/authors should accompany content, including discipline, current position, notable/relevant interests and an email address. Contributions are encouraged and welcome from the broader mental health professional community i.e. all related professionals, including industry. All submitted content will be subject to review by the editor-in-chief, and where necessary the advisory board.

REVIEW / ORIGINAL ARTICLES

Such content will specifically comprise the literature review or data of the final version of a research report towards the MMed - or equivalent degree - as a 5000 word article

* A 300 word abstract that succinctly summarizes the content will be required.
* Referencing should preferably conform to the Vancouver style i.e. superscript numeral in text (outside the full stop with the following illustration for the reference section: *Other AN, Person CD. Title of article. Name of Journal, Year of publication; Volume (Issue): page number/s. doi number (if available);* Harvard style or variations of either will also be acceptable
* The submission should be accompanied by the University/Faculty letter noting successful completion of the research report.

Acceptance of submitted material will be subject to editorial discretion

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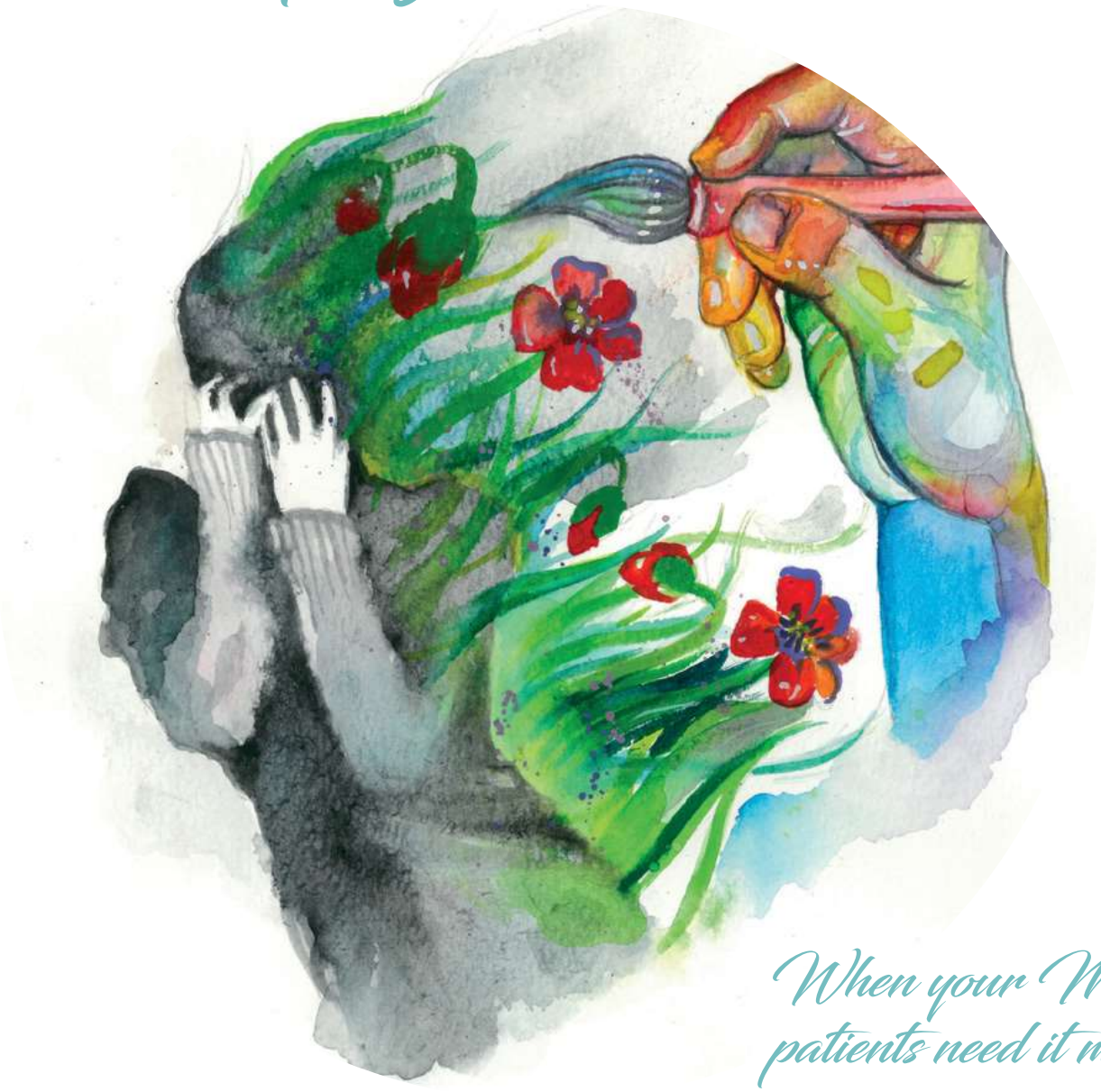
A helping hand



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