MARKET LEADING
DESVENLAFAXINE[1]

EXTEND THEIR RELIEF

EXLOV XR
DESVENLAFAXINE 50 / 100

THE ONLY
DESVENLAFAXINE
ON THE MARKET
PACKED IN 30's[2]

zolnorem MR

ZOLPIDEM TARTRATE 12,5 mg

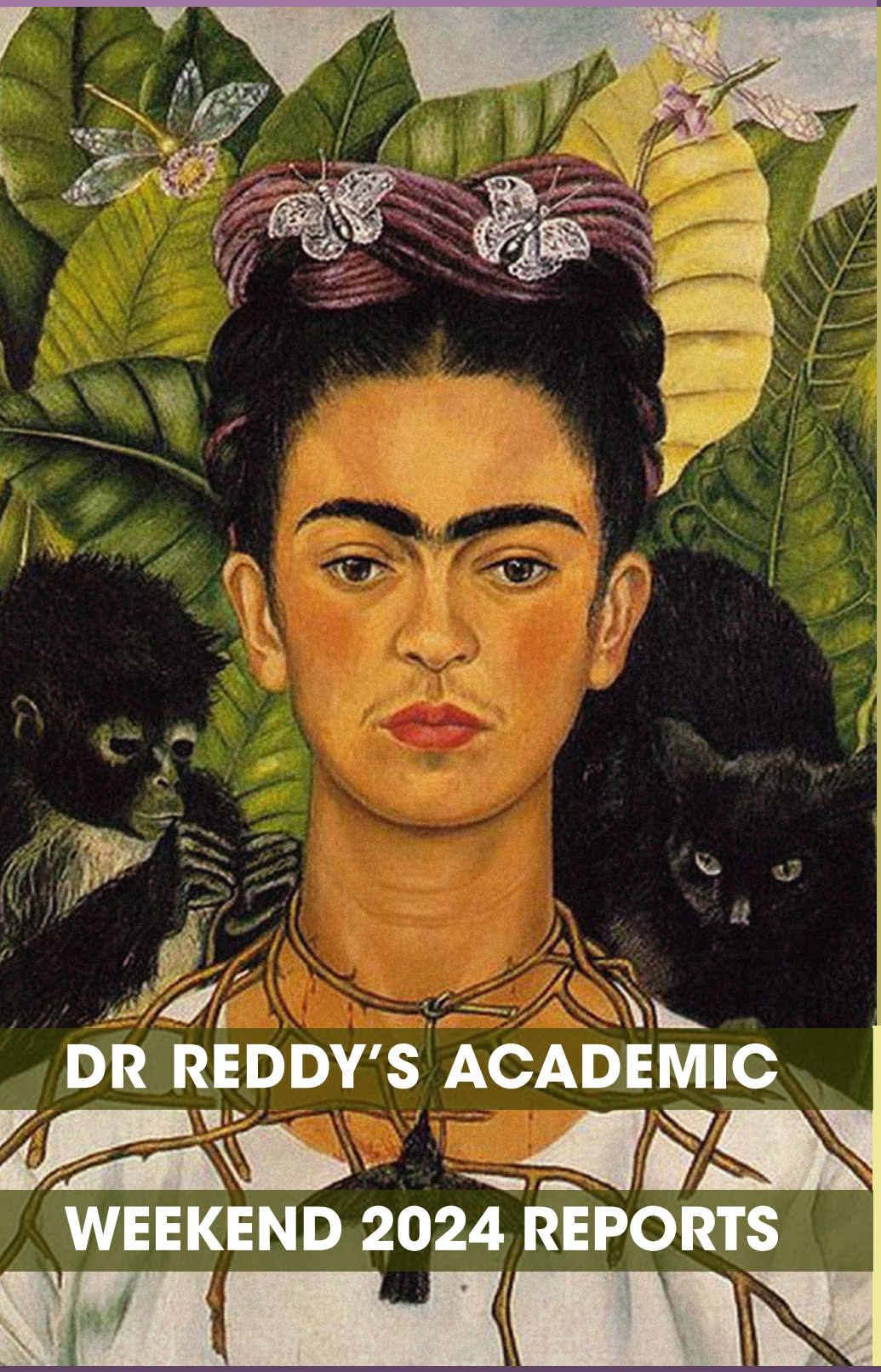
A suitable option for patients whose sleep is not maintained by immediate-release zolpidem[1]
- Kirkwood *et al.*

ISSN 2409-5699

SOUTH AFRICAN PSYCHIATRY

ABOUT the discipline **FOR** the discipline

issue 43 • MAY 2025



ASTRONOMY AND MENTAL WELLNESS

VALUES AND PROFESSIONAL RELATIONSHIPS

THE ROLE OF HOPE IN MEDICINE

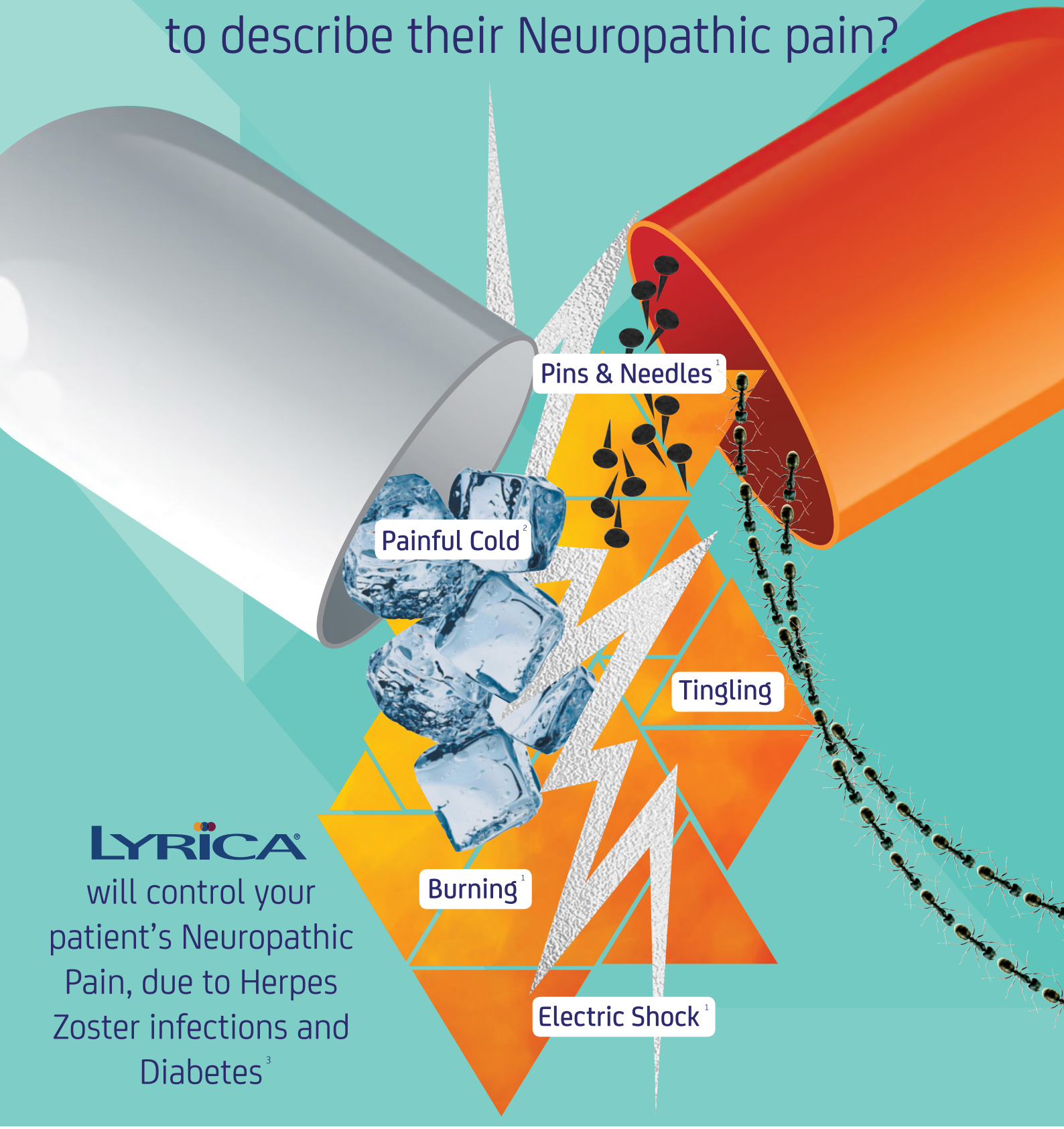
PTSD OR PTSI?

LESSONS IN HEALING, LEADING, AND LIVING

DR REDDY'S ACADEMIC WEEKEND 2024 REPORTS

PUBLISHED IN ASSOCIATION WITH THE SOUTH AFRICAN SOCIETY OF PSYCHIATRISTS www.southafricanpsychiatry.co.za

Are these the words your patients use to describe their Neuropathic pain?



LYRICA®
will control your patient's Neuropathic Pain, due to Herpes Zoster infections and Diabetes[3]

VIATRIS

LYRICA® PREGABALIN
Rapid onset.[4] *Sustained relief.*[4,5]

References: **1.** Chetty S, Baalbergen E, Bhigjee AI, et al. Clinical practice guidelines for management of neuropathic pain: expert panel recommendations for South Africa. SAMJ. 2012;102(5):312-325. **2.** Bouhassira D, Attal N, Alchaar H, et al. Comparison of pain syndromes with nervous or somatic lesions and development of new neuropathic pain diagnostic questionnare (DN4). Pain. 2005;114:29-36. **3.** Lyrica Package Insert, 21 December 2022. **4.** Freeman R, Durso-DeCruz E, Emir B. Efficacy, Safety, and Tolerability of Pregabalin Treatment for Painful Diabetic Peripheral Neuropathy. Diabetes Care. 2008 July; 31(7): 1448-1454. **5.** Satoh J, Yagihashi S, Baba M, et al. Efficacy and safety evaluation of pregabalin treatment over 52 weeks in patients with diabetic neuropathic pain extended after a double-blind placebo controlled trial. J Diabetes Invest. 2011 December; 2(6): 457-463.

S5 **LYRICA®** 25 mg, 75 mg and 150 mg capsules (Reg. nos.: A39/2.5/0264, 0266, 0268). Each capsule contains 25 mg, 75 mg and 150 mg pregabalin respectively. **LICENCE HOLDER:** Viatris Healthcare (Pty) Ltd. Reg. No. 1949/035112/07. 4 Brewery Street, Isando, Gauteng, 1609. Tel.: +27(011) 451 1400. For full prescribing information, refer to the professional information approved by the medicines regulatory authority. **LYR-2023-0471.** Exp. 04/2025.

CONTENTS

MAY 2025

Advertising: The Source Events and Marketing
Design and Layout: Rigel Andreoli and Kirsten Brooks
Web: www.southafricanpsychiatry.co.za
Contact Person: Vanessa Beyers - vanessa@thesourcesolutions.com
COVER IMAGE: Gallo Images I Getty Images "Self-Portrait with Thorn Necklace and Hummingbird" - Frida Kahlo 1940
Design and layout: The Source **Printers:** Raptor Print
South African Psychiatry is published quarterly by The Source Solutions. It's mission is to communicate the latest news and developments in the area of South African Psychiatry

CPD questions are available at:
www.southafricanpsychiatry.co.za

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

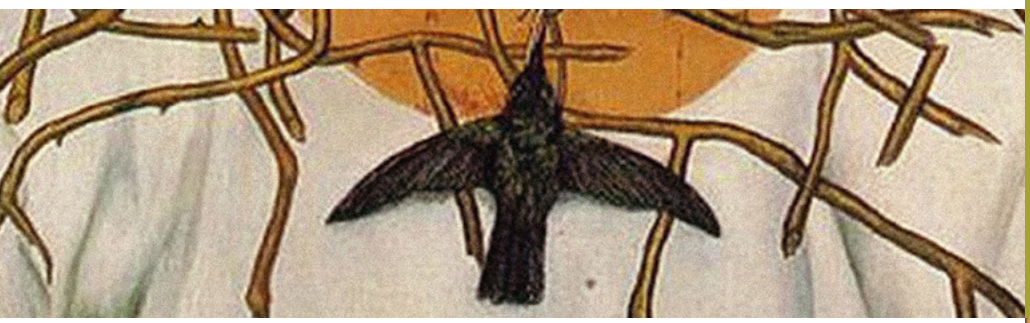
Dear Reader, welcome to the second issue of 2025. We are pleased to publish a range of *Reports* emanating from the 2024 Academic Weekend hosted by Dr Reddy's. In the publishing of these *Reports* an important issue is highlighted – the relationship between the discipline of Psychiatry and industry. Each *Report* details the content of a presentation made at the Academic Weekend, based on an industry funded Congress attendance. The presentations allowed for a sharing of content with a larger local audience, albeit invited. For those who were not present at the event, the publication of such content ensures that each local psychiatrist now benefits from those who attended the Congress in question. This represents an illustration of how industry investment in funding Congress attendance benefits the discipline beyond those who attend. In my opinion, a positive initiative that has been in existence for some years and will hopefully continue. The relationship between industry and practitioners has received much attention with a tendency to question industry motivation and a concern that practitioners will be readily swayed in their prescribing habits – raising the issue of 'perverse incentives'

https://www.hpcsa.co.za/ethics. Each practitioner has an ethical obligation to practice in accordance with the fundamental principles of beneficence and non-maleficence together with those of justice and autonomy. The best interests of the patient must always be at the centre of all interventions. Marketing and third-party agendas cannot be ignored and are quite legitimate. The pharmaceutical industry operates for profit, yet within that there is benefit – for patients. Within the context of *South African Psychiatry* my personal view has always been that industry is welcome. Specifically, I acknowledge the constructive role that industry can and does play in contributing to the discipline of Psychiatry. In this regard involvement with the publication beyond commercial is welcome, whilst also affirming editorial independence. To date, it has been a win-win situation with an ease of interaction and mutual respect. In this regard, providing a platform for dissemination of content that contributes to an informed discipline contributes meaningfully to patient care.

The issue also features an interesting contribution related to astronomy and mental health which might encourage some of us to turn our gaze upwards with greater interest and curiosity. There are also articles dealing with values and hope – both thought provoking. Finally, a piece that I thought raises an interesting question – prompted by an engagement I had with a military man and suggested by my co-author as something to consider writing about i.e. consideration of a name change for PTSD.

The August 2025 issue will be dedicated to the forthcoming National Congress of the South African Society of Psychiatrists (SASOP) to be held in September in East London. We look forward to bringing you all the abstracts, together with invited speaker bios, as well as messages from the Congress organizing committee convenor and the President of SASOP.

For now, enjoy reading.



NOTE: "instructions to authors" are available at www.southafricanpsychiatry.co.za

Acknowledgement: Thanks to Lisa Selwood for assistance with proof reading

MARKET LEADING
QUETIAPINE XR
FORMULATION[1]

SUSTAINED PLASMA CONCENTRATION

WITH ONCE A DAY DOSING[2]

QueroXR
QUETIAPINE 50 mg, 150 mg, 200 mg, 300 mg, 400 mg

For further product information contact **PHARMA DYNAMICS**
Email info@pharmadynamics.co.za **CUSTOMER CARE LINE** +27 21 707 7000

Quero XR 50, 150, 200, 300, 400 mg. Each prolonged release tablet contains quetiapine fumarate equivalent to 50, 150, 200, 300, 400 mg quetiapine respectively. S5 A49/2.6.5/0280, 0281, 0282, 0283, 0284. For full prescribing information, refer to the professional information approved by SAHPRA, May 2021. **1)** Source: Based on internal analysis by Pharmadynamics (Pty) Ltd using data from the following source: IQVIA TPM MAT December 2023 ATC1 A1A- Brands measured in Units, reflecting estimates of real-world activity. Copyright IQVIA. All rights reserved. **2)** Bui, K., *et al,* (2013). Pharmacokinetic profile of the extended-release formulation of quetiapine fumarate (quetiapine XR): clinical implications. *Current medical research and opinion*, 29(7), pp.813-825. **00E964/04/2024.**

pharma dynamics
EFFECTIVE AFFORDABLE HEALTHCARE

www.pharmadynamics.co.za

STARGAZING & THE MIND

AMATEUR ASTRONOMY & MENTAL WELLBEING

Marc Roffey

"I have loved the stars too truly to be fearful of the night."[1]

Astronomy, and its scientific cousin cosmology, comprise the scientific study of the composition and structure of the universe. Amateur astronomy, more colloquially known as 'stargazing', is the activity of observing stars, planets, and so-called 'deep sky' objects which cannot be seen with the naked eye (such as galaxies outside of our own). It is usually done with the aid of optical instruments, including binoculars and telescopes, and includes the burgeoning field of 'astronomical imaging' (popularly known as astrophotography), which is capturing and processing images of celestial objects. Members of stargazing communities often arrange excursions into nature environments which are relatively light unpolluted, and far away from urban settings – these outings are referred to as 'star parties', and they are typically of at least a few days duration.

Upon first glance, it may appear odd that there could be any kind of relationship between the broad disciplines of astronomy and mental health (and scientific fields related to the latter). However, an analysis of the intersection between these topics reveals a surprising abundance of connected themes.

SOME INTERESTING IDEAS LINKING ASTRONOMY AND NEUROSCIENCE

In the first instance, astronomy and clinical neuroscience both involve *observation* and *imaging.* In the case of astronomy, it is extraordinary to realise that our sophisticated and comprehensive knowledge of the size, structure and composition of the observable universe is almost entirely derived from the detection and analysis of electromagnetic radiation which is emitted by celestial objects. These are anything up to millions of light-years away from us, and of course (with the exception of a few objects within our solar system) cannot otherwise be directly investigated – which makes our considerable knowledge about them even more remarkable.

Much of this radiation is outside of the visible light spectrum, and the term 'multiwavelength astronomy' is derived from this fact. Radio astronomy, for example, studies celestial objects at radio frequencies, and imaging them at these frequencies yields information about the evolution of galaxies (stretching back billions of years into the past), and their composition, which simply cannot be provided by optical wavelength astronomy alone.

South Africa is of course privileged to be the primary site of the SKA (Square Kilometre Array) radio telescope in the Karoo, which has been hailed as one of the most ambitious engineering projects ever undertaken. Although construction of the full SKA will only be completed around 2030, precursors of the telescope, such as MeerKAT, have already yielded ground-breaking scientific findings about the cosmos.[2]

The SKA precursor MeerKAT telescope array, which is in the Northern Cape Karoo. Credit: SKAO

Imaging techniques employed by neuroscience also involve analysis of electromagnetic information (typically at radio and X-ray frequencies). Whilst neuroscience has the advantage, over astronomy, of being able to directly study the structure and function of biological systems at various levels, our understanding, from a historical perspective, of the brain has lagged behind that of the universe. Having said that, great strides in neuroscience[3] have been made over the last few decades, and both disciplines currently share similar challenges of managing and analysing 'big data'.[4]

1 From the poem 'The Old Astronomer' by Sarah Williams (1837–1868).

2 More information about this enterprising science, and MeerKAT and the SKA, can be found at the following websites: Home - South African Radio Astronomy Observatory - NRF/SARAO; Explore | SKAO; and SARAO Timeline of Results - YouTube.

3 The Neuroscience Institute, the first initiative of its kind in Africa, has established itself as a centre of excellence. It is situated in Cape Town, at Groote Schuur Hospital, and is affiliated to the University of Cape Town. Home | Neuroscience Institute

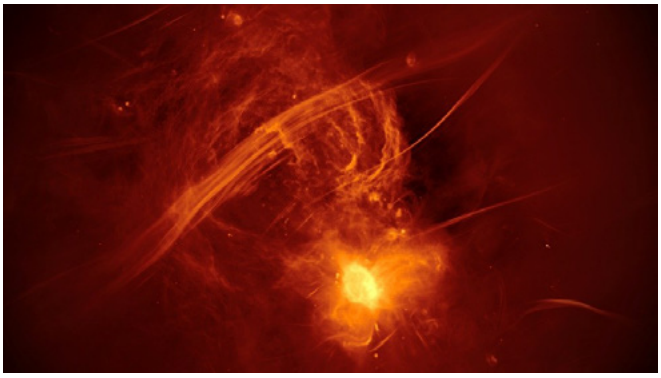
4 The data transfer rate from SKA precursor telescopes in the Karoo, to the data processing facility in Cape Town, is about 20 terabits per second – this is 100 000 times faster than the global average home broadband speed in 2022.

In addition, each discipline is poised to address enormously significant existential and scientific questions: in the case of neuroscience, the 'hard' question of elucidating consciousness, and in astronomy, questions of origins and whether we are alone in the universe.

Artificial intelligence, of which machine-learning is a core component, will be utilised in analysing the massive amounts of data which each discipline will collect and analyse over the coming decades. It is interesting to note that computational 'neural networks', comprised of artificial 'neurons' which are analogous to biological ones in providing inputs and outputs at nodal points, are an integral feature of these information-processing systems.

Perhaps less abstractly, it is worth pausing to note that our conception of the external universe is held entirely as a model in the human brain. Consisting of a 'connectome' with trillions of possible synaptic connections, but weighing around just 1.5kg, it is the most complex known object in the universe.

Moreover, we owe the existence of our brains, and our biology in general, directly to the stars: we are literally made of 'star-dust'. This derives from the astronomical fact that stars which end their lives as exploding supernovae distribute elements essential to life such as calcium and nitrogen - and heavier metallic elements, for example iron - into the cosmos. This is the only way in which these elements, which are then deposited onto newly formed planets, are formed. Such elements were deposited several billion years ago onto the Earth, and have been included in the make-up of all living organisms during their evolution on this planet.



A MeerKAT image, at radio wavelengths, of the chaotic centre of our galaxy, which surrounds a supermassive black hole. Such images revealed new discoveries about the dynamic nature of this area in space. Image: I. Heywood, SARAO.

There are roughly 170 billion neurons in the human brain (including scaffolding glial cells), and anything from 100 – 400 billion stars in our ('Milky Way') galaxy. The rough approximation between these figures may or not be significant and may just be coincidental, but something more interesting emerges when the structures of the human brain and the wider universe are comparatively studied. Two researchers (an astrophysicist and a neurosurgeon) did just that and published their findings in 2020. They found that both systems consist of nodes and filaments, and that twenty-seven orders of magnitude difference in scale exist between the two networks. Both have significant and comparable amounts of passive material (water in brains, and 'dark energy' in the universe), and the authors concluded that widely diverse physical processes can create structures characterised by similar levels of complexity.

THE MULTIVERSE

The 'multiverse' concept, also described as 'alternate' and 'parallel' universes, and the 'many worlds' hypothesis, is a contentious concept in modern cosmology (and philosophy) which has prominent adherents and critics within these communities. It posits that in an infinite universe there are infinite worlds, and it can be accommodated within, and even predicted by, quantum theory. Taking great poetic licence with this idea, it can be argued that we quite plausibly exist within a multiverse, as no two observers perceive, experience, and interpret the world in exactly the same way – in some sense there are, therefore, as many universes as there are observers. This interpretation will make sense to mental health professionals, who understand how our psychological schemas and cognitive biases profoundly affect the way we perceive the world.

Related to this is personality, a fundamental concept in psychology and psychiatry. It is interesting to note that astrology (not to be confused with astronomy, although until the modern scientific era many astronomers also adhered to astrology) was one of the first attempts at categorising personality. It suggests that human personalities, which are fixed, and behaviours which arise from them, are ordained by the positions of the stars and planets. Of course, whilst we still recognise that personalities do tend to be stable, we know now that they are determined not by the stars, but by genes and the environment.

THE ANTHROPIC COSMOLOGICAL PRINCIPLE (ACP)

This is based on a long-held idea that the four fundamental forces (gravity, the electromagnetic force, and the strong and weak nuclear forces), and the amount and density of matter in the universe are 'just right' to allow life to develop. The universe appears to be 'fine-tuned' in this way. Slight deviations in any of the above parameters would lead to a universe in which life could not evolve. Stated in this way (the so-called 'weak' form of the principle), the ACP is not really contentious - although it can be argued that it is self-evident, because if we did not exist, we would not be able to formulate it!

Its expression in 'stronger' forms (e.g. that the universe must have properties which allow life to develop in it) is contentious and has been heavily criticised. Nevertheless, one variant of it, proposed in 1977 by John Wheeler, a formidable physicist who made significant contributions to the fields of black hole theory and quantum mechanics, is stated as "observers are necessary to bring the universe into being". Echoes of this idea have occurred more recently, and a good example is the statement by retired astronaut Ron Garan, that "we are the universe becoming conscious of itself."[5]

Going beyond scientific scrutiny, these ideas are powerful, and have an intuitive appeal. Also, recalling that we are partly comprised of stellar material, these statements create a

5 YouTube link: I went to space and discovered an enormous lie | Ron Garan

profound link between the stars that are in the night sky, and the bodies/brains that enable them to be seen.

THE POTENTIAL BENEFITS OF STARGAZING ON WELLBEING

South Africa is blessed with an abundance of light-unpolluted night skies. As mentioned in the introduction, local amateur astronomy communities arrange immersive excursions during which members (and newcomers) can marvel at and explore the grandeur of the night sky, and the myriad celestial objects it contains.

These experiences are invariably rejuvenating in nature, and as with many good interventions, increasing the duration and frequency of these nocturnal adventures appears, subjectively at least, to lead to greater effects.

Any engaging and immersive hobby will lead to a sense of accomplishment and fulfilment, which in itself is rewarding and beneficial. Stargazing comprises a unique constellation of elements which provide this, as summarised in the table below.

Benefits of stargazing
• Provides changes in perspective
• Induces wonder and awe
• Is often experienced in nature
• Creates communities
• Exercises cognition
• Has mindfulness aspects

CHANGES IN PERSPECTIVE

Amateur and professional astronomers possess a conceptualisation and experience of the world which is informed by their knowledge of astronomy. This is due to habitually internalising a model of it as a planet rotating around its axis, and revolving around the sun. There is indeed a 'felt' sense of this that can arise from long nights spent under the stars at different times of the year.

They furthermore understand that our home-planet is just one of trillions which exist in the universe, but that ours is uniquely positioned to support life. Its biosphere teems with life but is fragile – it is not commonly known, for example, that if the Earth was the size of a basket-ball, its atmosphere, which supports all life on it, would only be as thick as a layer of paint coated upon its surface. Our species is just one of countless millions which have evolved on it, and we are 'of' the Earth, and not merely 'on' it. The AIU's (Astronomical International Union) slogan 'all people, one sky', serves to unite people beyond artificial, imposed borders and categorisations.

Astronauts, upon returning to Earth from space, frequently describe a sense of awe, and a transformed sense of the Earth and our place upon it, known as the 'overview' effect. A direct experience of this is not possible for most of us. However, something faintly akin to it can arise in people who have spent much time contemplating the stars, and for whom iconic, paradigm shifting images of our planet are very well known – these include the 'Earthrise' photo (taken from lunar orbit by the Apollo crew in 1968) and the famous 'Pale Blue Dot' photo (taken by the Voyager 1 spacecraft in 1990 after it had passed the planet Saturn on its journey beyond the solar system, showing Earth as a pixel-sized dot against the vastness of space).

In short, the above factors arguably lead to a changed global perspective of the multiple crises which threaten and envelop our world, including climate change and geopolitical conflicts. Personal shifts in perspective might include that our problems may seem less significant and burdensome (anecdotally this, rather the reverse - that the vastness of space enhances a sense of existential futility - is true).

WONDER AND AWE

Few who gaze at the night sky in an immersive way will not experience feelings of wonder and awe. Both of these have an expansive and 'in the moment' quality, and invoke a sense of the sublime; wonder includes a sense of curiosity, and a desire to explore and to learn.

Awe is an interesting emotion, and it is not commonly recognised that it exists in 'positive' and 'negative' forms. The latter includes threat, and may be induced by a powerful but fearful leader (and this may be its evolutionary origin). It also occurs when confronted by a powerful but dangerous animal, or by a powerful environmental threat (for example a tornado).

Numerous recent studies have explored the beneficial effects of positive awe. They include decreased self-awareness, a sense of expanded time availability, promotion of prosocial behaviours, and enhanced life satisfaction.

BENEFITS OF BEING IN NATURE

Interestingly, stargazing is one of a group of increasingly popular night-time pastimes known collectively as 'dark nature' activities. Others include night fishing, moon gardening, camping, and wildlife observing of nocturnal species.

Immersive stargazing is ideally done in nature settings which are light unpolluted. In the Western Cape region of South Africa, for example, the Cederberg and Karoo are popular destinations for stargazing, and there are several amateur astronomical observatories in these areas.

Very many studies have shown that exposure to nature provides psychological and physical benefits to humans, and this likely contributes to stargazing's appeal as a hobby. In addition, recent findings suggest that positive emotional effects are amplified by being in biodiverse environments, and not just basic 'green spaces'.

In 1984 the renowned naturalist Edward O. Wilson coined the term 'biophilia', which refers to our propensity to focus on life and lifelike processes. From a neuroscience perspective, we are likely 'hard-wired' to feel an affinity with nature. This makes intuitive sense, and although several theories propose to explain this, exact causative mechanisms remain elusive.

The 'connectedness to nature' concept seeks to explore cognitive, affective, and behavioural aspects of our relationship with nature, and a scale of the same name, which purports to measure this, has been developed. Related areas of interest include environmental psychology, ecopsychology, and deep ecology, which all broadly concern themselves with the relationship between the natural environment, and human behaviours and wellbeing.

Leeuwenboschfontein Guest Farm in the Western Cape Karoo, where the author does much of his stargazing. The farm hosts stargazing events, and is home to a well-equipped amateur observatory which is open to the public. LBF Astronomical Observatory - Leeuwenboschfontein Guest Farm. Photo by the author.

Over and above the appeal of being in natural and biodiverse settings whilst stargazing (which of course includes being in these settings during the day), the sky itself can be viewed as a last (and vast) unspoiled wilderness. This however is being seriously challenged by ever-increasing amounts of light pollution across the globe. An additional and growing threat to professional astronomy is present in the sky itself, in the form of increasing numbers of satellites in low-Earth orbit which emit bright light across a range of electromagnetic frequencies.[6]

COMMUNITY BUILDING

Any hobby will naturally lead to the formation of communities of people with similar interests, and amateur astronomy is no exception to this. In addition, amateur astronomy outreach projects to the public are very extensive, and people dedicate much time and energy to this. Similarly, professional astronomers willingly provide intensive mentoring and support to amateur astronomy communities.

Additional community projects include astro-tourism in Southern Africa, and initiatives which promote indigenous astronomy. The SKA project has led to upliftment programmes for residents of Carnarvon and other towns situated near it, and has injected much interest in astronomy into young, emerging members of the scientific community.[7] It has also created citizen science projects.

The OAD (Office of Astronomy for Development)[8], which is a joint project of the International Astronomical Union (IAU) and the South African National Research Foundation (NRF) with the support of the Department of Science, Technology, and Innovation (DSTI), is based at the South African Astronomical Observatory in Cape Town. One of its flagship projects is 'Astronomy for Mental Health', which aims to promote stargazing as a mental health tool at community levels.

STARGAZING AS COGNITIVE EXERCISE

Understanding the theoretical and practical aspects of amateur astronomy requires the active engagement of numerous cognitive domains. Many serious amateur astronomers have memorised a wealth of information about celestial objects, including their names, and/or system catalogue numbers, and very many facts and figures associated with them, together with aspects of astronomical knowledge in general.

Keeping up with developments in astronomy and cosmology requires considerable cognitive effort and flexibility, especially as new information is accumulating at an accelerated pace, and is becoming increasingly technical and specialised. Astronomical principles are generally derived from mathematics and physics. While, needless to say, most amateur astronomers are not trained in these fields, considerable reasoning is required to understand how these principles translate into practical stargazing.

For example the celestial sphere, which is an imaginary sphere surrounding the globe, and upon which celestial objects appear to be superimposed, is a core concept in stargazing. Understanding it, and how its axial inclination relates to one's latitudinal position on the Earth, is foundational knowledge, yet considerable visuospatial and abstract cognition is required to grasp this when encountered for the first time.

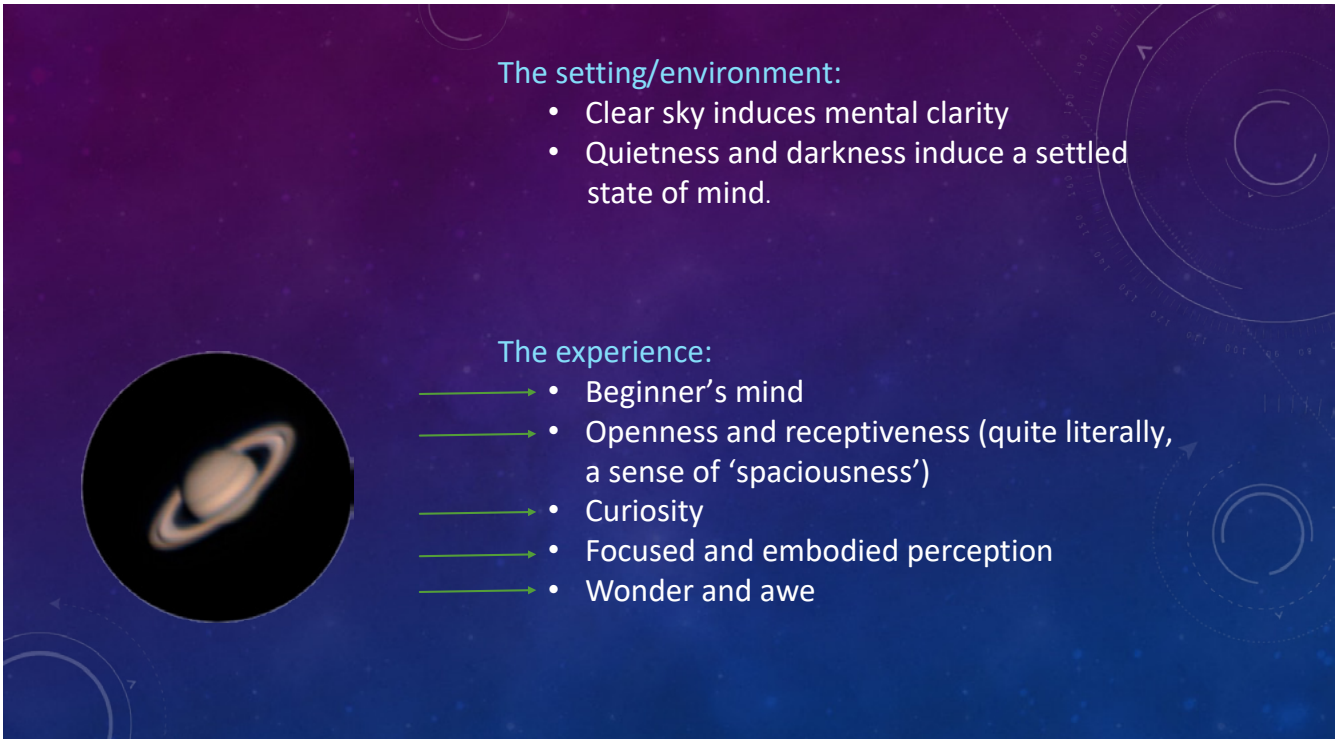
Looking beyond purely computational cognition, *embodied cognition* comprises abilities that emerge from active exchange with one's physical and social environment. This perspective may be useful, for example, in explaining recent research which suggests that new words and symbols are better learned when written with paper and pen, rather than with a keyboard.

In stargazing, manually manipulating a telescope to find objects of interest is an act of embodied cognition. These objects may be invisible to the naked eye, and are found by actively reading star-maps (or star apps), whilst using techniques such as 'star-hopping', to hone in on them. Planning, attention, and perceptual-motor skills are used whilst doing so. Consider how this differs from using a so-called 'Go To' telescope, which is motor-driven and uses a computerised controller to automatically find objects - and

6 There are currently about 8000 satellites in low-Earth orbit, and this number is expected to rise to over 100 000 by the end of the decade.

7 Since 2005, the SKA Youth into Science and Engineering project has awarded 293 bursaries to learners in various areas of astronomy. This includes 38 PhDs, 63 MScs and 15 postdoctoral fellowships. Grants have been made to 72 women and 39 students from other African countries. In addition, six research chairs have been established at South African universities. (Square Kilometre Array (SKA) | South African Government)

8 Further information can be found on the OAD website: Home page - IAU Office of Astronomy for Development



Mindfulness aspects of stargazing.

even more so, from sitting in a planetarium and watching a presentation on the night sky.

MINDFULNESS

Most readers will have some knowledge of mindfulness principles, and of the benefits which structured mindfulness programmes can provide to clinical and non-clinical populations. In the interests of brevity this will not discussed further here.

In the author's opinion, stargazing opens a gateway into the mindful experience – it presents itself when simply looking up at the sky in an attentive and immersive way, and at the moment when one's eye is brought to the telescope to view an object.

In the first instance, being outdoors in nature on a still night, under a clear sky, induces a mental state of clarity and calm, out of which further aspects of mindfulness emerge.

All stargazers have experienced an unfailing sense of freshness, 'newness' and discovery whenever familiar objects are seen, no matter how many times one has viewed them before – whether they be the craters on the moon, the rings of Saturn, the moons of Jupiter, the wispy glow of the Orion nebula, or the brilliance of a star cluster in the Milky Way. This is 'beginner's mind', a quintessential mindfulness quality. Other aspects of the mindfulness experience which arise during stargazing are illustrated in the figure below.

One is tempted to say, light-heartedly, that stargazing and mindfulness are a 'match made in heaven'. This relationship would in fact be an interesting one to explore, and outings which offer both would provide opportunities to do so.

CONCLUSION

This is an exciting and burgeoning time for professional astronomy in South Africa, and much important research will emerge from it over the coming years. Amateur astronomers can likewise benefit from exploring the splendour of South African skies, knowing that – in theory at least – numerous aspects of their stargazing activities can have positive impacts on their overall mental wellbeing.

Marc Roffey is a psychiatrist and certified mindfulness facilitator. He has had a deep, lifelong interest in astronomy, and is a member of the Cape Centre of ASSA (the Astronomical Society of South Africa). Article references are available on request. **Correspondence: marc.roffey@uct.ac.za**

Two optical images, taken at Leeuwenboschfontein by Cape Town based astrophotographer Maurice Grapendaal. The image on the left is the Pleiades star cluster in the constellation Taurus; the other is a star-forming nebula in the constellation Ara – popularly referred to as 'The Fighting Dragons of Ara'.

Dr.Reddy's
NEUROPSYCHIATRY
GOOD HEALTH CAN'T WAIT

Our constant endeavour - Patients first![1]

Access our neuropsychiatry medicines for your patient needs

Dr.Reddy's
Building Balance Together
PATIENTS
HEALTH CARE PROFESSIONALS

Atypical Antipsychotic

S5 **Dopaquel**
QUETIAPINE FUMARATE
Restoring balance & calm

Epilepsy

S3 **Redilev**
LEVETIRACETAM
When seizures fade dreams flourish

ADHD

S5 **Inir**
ATOMOXETINE
Build them up again

Antidepressant

S5 **Yelate**
DULOXETINE HCl
Celebrating Freedom

S5 **VOXBRINT**
VORTIOXETINE
Perform better everyday

S5 **BUPROPION XL DRL**
BUPROPION HYDROCHLORIDE
Feel alive again

References: **1**. https://www.drreddys.com/who-we-are. [Accessed 23 April 2025]. **2.** Product Tagline information on file

S5 DOPAQUEL 25. Reg.No.: 43/2.6.5/0429. Each tablet contains quetiapine fumarate equivalent to quetiapine 25 mg. Contains sugar (lactose monohydrate). S5 DOPAQUEL 100. Reg.No.: 43/2.6.5/0430. Each tablet contains quetiapine fumarate equivalent to quetiapine 100 mg. Contains sugar (lactose monohydrate). S5 DOPAQUEL 200. Reg.No.: 43/2.6.5/0431. Each tablet contains quetiapine fumarate equivalent to quetiapine 200 mg. Contains sugar (lactose monohydrate). S5 DOPAQUEL 300. Reg.No.: 43/2.6.5/0432. Each tablet contains quetiapine fumarate equivalent to quetiapine 300 mg. Contains sugar (lactose monohydrate). S3 REDILEV 250. Reg.No.: 41/2.5/0460. Each film-coated tablet contains levetiracetam 250 mg. S3 REDILEV 500. Reg.No.: 41/2.5/0461. Each film-coated tablet contains levetiracetam 500 mg. S3 REDILEV 750. Reg.No.: 41/2.5/0462. Each film-coated tablet contains levetiracetam 750 mg. S3 REDILEV ORAL SOLUTION. Reg.No.: 51/2.5/0095.094. Each 1 ml contains 100 mg of levetiracetam. Holder of the certificate of registration (HCR): Hetero Drugs South Africa (Pty) Ltd. Reg.No.:2016/260234/07. Waterfall Corporate Campus, Building No. 2, First floor, 74 Waterfall Drive, Midrand, 2066. Marketed by: Dr. Reddy's Laboratories (Pty) Ltd. Block C, Woodmead North Office Park, 54 Maxwell Drive, Woodmead, Sandton, Gauteng, 2191. Reg.No.: 2002/014163/07. Tel: +27 11 324 2100. www.drreddys.co.za. S5 INIR 10. Reg.No.: 43/1.2/0809. Each capsule contains atomoxetine hydrochloride equivalent to atomoxetine 10 mg. S5 INIR 18. Reg.No.: 43/1.2/0810. Each capsule contains atomoxetine hydrochloride equivalent to atomoxetine 18 mg. S5 INIR 25. Reg.No.: 43/1.2/0811. Each capsule contains atomoxetine hydrochloride equivalent to atomoxetine 25 mg. S5 INIR 40. Reg.No.: 43/1.2/0812. Each capsule contains atomoxetine hydrochloride equivalent to atomoxetine 40 mg. S5 INIR 60. Reg.No.: 43/1.2/0813. Each capsule contains atomoxetine hydrochloride equivalent to atomoxetine 60 mg. S5 YELATE 30. Reg.No.: 44/1.2/0114. Each capsule contains duloxetine hydrochloride equivalent to duloxetine 30 mg. Contains sugar (sucrose). S5 YELATE 60. Reg.No.: 44/1.2/0115. Each capsule contains duloxetine hydrochloride equivalent to duloxetine 60 mg. Contains sugar (sucrose). S5 VOXBRINT 5. Reg.No.: 55/1.2/0600.597. Each film-coated tablet contains 5 mg vortioxetine (as vortioxetine hydrobromide). Contains sugar alcohol (mannitol). S5 VOXBRINT 10. Reg.No.: 55/1.2/0601.598. Each film-coated tablet contains 10 mg vortioxetine (as vortioxetine hydrobromide). Contains sugar alcohol (mannitol). S5 VOXBRINT 20. Reg.No.: 55/1.2/0602.599. Each film-coated tablet contains 20 mg vortioxetine (as vortioxetine hydrobromide). Contains sugar alcohol (mannitol). Holder of the certificate of registration (HCR): LeBasi Pharmaceuticals (Pty) Ltd. San Domenico Building, Unit G6, 10 Church Street, Durbanville, 7551, Western Cape, South Africa. Reg.No.: 2020/537601/07. Marketed by: Dr. Reddy's Laboratories (Pty) Ltd. Block C, Woodmead North Office Park, 54 Maxwell Drive, Woodmead, Sandton, Gauteng, 2191. Reg.No.: 2002/014163/07. Tel: +27 11 324 2100. www.drreddys.co.za.
S5 BUPROPION 150 XL DRL. Reg.No.: 56/1.2/0292. Each film-coated tablet contains 150 mg of bupropion hydrochloride. S5 BUPROPION 300 XL DRL. Reg.No.: 56/1.2/0293. Each film-coated tablet contains 300 mg of bupropion hydrochloride.
For full prescribing information please refer to the professional information approved by the Medicines Regulatory Authority.
Dr. Reddy's Laboratories (Pty) Ltd. Block C, Woodmead North Office Park, 54 Maxwell Drive, Woodmead, Sandton, Gauteng, 2191. Reg.No.: 2002/014163/07. Tel: +27 11 324 2100. www.drreddys.co.za.
FOR HEATHCARE PROFESSIONALS ONLY. R1346934-ZA-CO-23042025-1208-31 May 2027.

Psychedelics in mental health: Are we there yet?

Presented by Piet Oosthuizen

*This Report was compiled by **Dr David Webb**, based on a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held in 2024. The presentation was a feedback session based on presentations at the European College of Neuropsychopharmacology (ECNP) meeting in Barcelona, Spain in August 2024.The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd.*

Correspondence: dawebb@mweb.co.za

Piet Oosthuizen

PHARMACOLOGY OF THE CLASSIC PSYCHEDELICS

Recently there has been renewed interest in the potential use of psychedelics to treat psychiatric disorders. Based on results from clinical trials, in Australia, both psilocybin and 3, 4-methylenedioxy-N-methamphetamine (MDMA, Ecstasy) have been rescheduled so that they may be used legally as part of a treatment plan under special circumstances.

Basic research to understand the pharmacology and mechanism of action of the psychedelics is essential. The US Food and Drug administration has drafted guidelines to inform researchers what information they would require before approving a psychedelic drug for use in clinical psychiatry (Table 1).

Table 1. New FDA Draft Guidelines for Clinical Trials with Psychedelic Drugs (June 2023)

1.	Adequacy in vitro and in vivo
2.	Pharmacokinetics and pharmacodynamics
3.	Drug-drug interactions
4.	5HT2B receptor interactions (cardiofibrosis and valvulopathy risk)
5.	Dose response relationships
6.	Drug-food interactions

There are four classic psychedelics, lysergic acid diethylamide (LSD), psilocybin, dimethyltryptamine (DMT), and mescaline. All of them are agonists at the 5HT2A receptor, but each of them has additional unique pharmacodynamic effects that differ from the others.

Dr Friederike Holze and her colleagues have done various studies with a randomised, cross-over design to compare the effects of psilocybin with LSD in healthy volunteers. Overall, high dose psilocybin (30 mg) and both low and high doses of LSD (100 mcg and 200 mcg) had similar effects, and there was a very low risk of adverse side effects at all doses. High doses of both lead to the experience of "ego-dissolution", where users report feeling that their sense of being a self or 'I' distinct from the rest of the world has diminished or altogether dissolved. This 'psychedelic experience' appears to be important for a therapeutic effect. Low doses of psilocybin (15 mg) did not have this effect, which might explain the disappointing results in clinical trials using microdosing.

LSD and psilocybin differed in other physiological effects. Psilocybin was more likely to cause an increase in blood pressure (BP) and body temperature, whereas LSD was more likely to induce tachycardia. LSD had a much longer effect than psilocybin (≥10 hours versus 6 hours, respectively), commensurate with the longer half-life (3 to 4 hours versus 0.5 to 1.5 hours, respectively). It was concluded that, in heathy volunteers for ego dissolution, a dose of 100 mcg LSD was equivalent to 20 mg psilocybin.

Similar studies have been done with mescaline. Clinically, LSD and mescaline have the same effect on ego dissolution, with a dose of mescaline 500 mcg being equivalent to LSD 100 mcg. Mescaline has slower onset of effect, but the duration of effect is similar to that of LSD (8 to 11 hours).

There is potential for a wide range of drug-drug interactions with LSD, primarily related to the role of cytochrome P450 (CYP) 2D6 in its metabolism. MDMA acts as an inhibitor of CYP2D6 and, when added to LSD, significantly prolonged the duration of action of LSD. Selective serotonin reuptake inhibitors (SSRIs), such as fluoxetine and paroxetine, are potent inhibitors of CYP2D6, as are various other drugs commonly used in clinical practice, including statins and antiretroviral drugs (ARVs). Currently, it is uncertain whether these drugs should be discontinued in a patient who chooses to use a psychedelic, or in whom special permission is granted for therapeutic use of a psychedelic.

Dose finding studies have compared the effects of LSD at doses of 25, 50, 100 and 200 mcg. There was a ceiling effect at 100 mcg for effects that are likely to be beneficial to patients with depression. Although patients on a very high does (200 mcg) reported more mystical experiences, they were also more likely to report anxiety. The studies suggest that 100 mcg may be the optimal therapeutic dose for psychiatric indications.

UNVEILING THE PROSOCIAL AND ANXIOLYTIC EFFECTS OF LSD

Although there is a lot of clinical data on LSD, there is a limited understanding of the brain circuitry involved. To study brain circuitry involved in changes is social behaviour induced by LSD, Prof Danilo De Gregorio has done a number of experiments using mice and examining the effects of LSD on social behaviour and anxiety, and the impact of LSD on alcohol use disorder (AUD) in rodents. LSD was chosen as a focus of study because it is the most 'promiscuous' of the psychedelics, binding not only to 5HT2B, but also to a variety of other receptors in various areas of the brain.

In the first study, mice were injected with 30 mcg/kg LSD for 7 days and the investigators observed how they interacted with each other. Treatment with LSD was associated with an increase in social behaviour, without a significant effect on mood or anxiety. Blocking 5HT2A receptors with a 5HT2A receptor antagonist and blocking glutamatergic transmission via the AMPA receptor were both associated with a decrease in LSD-induced social behaviour. The investigators concluded that LSD selectively enhances social behaviour by potentiating excitatory transmission in the medial prefrontal cortex (mPFC) through 5-HT2A/AMPA receptors and mTOR signalling. Manipulation of these pathways might offer a potential new mechanism to treat conditions where social behaviour is impaired, such as in social anxiety disorder.

In a second study, Prof De Gregorio examined the role of the dorsal raphe nucleus (DRN) in anxiety. The DRN plays an important role in modulation of anxiety and has a high density of serotonergic neurons that project to the amygdala and other structures of the brain. After stressing mice to provoke anxiety by restricting their access to food and movement for 15 days, neurophysiological studies showed reduced firing of neurons in the DRN. Thereafter, some mice were treated with LSD 30 mcg/kg for 7 days. Treatment with LSD was associated with normalised functioning of the DRN accompanied by an increase in social behaviour. There was no effect of LSD on activity in the DRN in mice who had not been stressed. The study suggests that enhancement of serotonergic neurotransmission may represent a candidate mechanism which mediates the therapeutic effects of serotonergic psychedelics on stress-induced anxiety.

In a third study Prof de Gregorio examined the effect of LSD on AUD in mice. The mice were trained to become alcohol dependent. The addicted mice were treated with a single dose of LSD at 150 mcg/kg. Mice treated with LSD were less likely to choose to drink alcohol and reduced their alcohol intake. Reduction in alcohol intake was also associated with improved locomotor effects.

In conclusion, Prof De Gregorio's studies showed that, in mice, LSD enhanced sociability via 5HT2A and AMPA receptors; it can prevent development of anxiety disorders; and it can reduce alcohol consumption by alcohol-dependent individuals. The applicability of these results to human subjects is, as yet, unknown.

CREATING A THERAPEUTIC ENVIRONMENT FOR PSILOCYBIN WITH PSYCHIATRIC PATIENTS

The value of a psychotherapeutic component of psilocybin treatment has been under-studied, so it is uncertain whether psychotherapy is an integral component of psychedelic therapy to enhance efficacy and/or safety. In 15 studies of treatment with psilocybin done thus far, study design has been variable. The therapeutic and psychotherapy components have not been well described and differ greatly from one study to another. Most of the studies were done to investigate the effects of psilocybin on patients with major depressive disorder (MDD); all of them had a dyad of facilitators (male and female) mostly trained in mental health, and comprised a preparation phase, treatment phase and integration phase. Some were randomised, whereas others were open-label and most of them had small sample sizes. There was considerable variation in the number and duration of preparation sessions, and differences in dosing phases and integration phases.

Consequently, the utility of psychotherapy in conjunction with psychedelics is uncertain, and, if it is of benefit, the optimal protocol remains to be described.

To evaluate the benefit of a specific psychotherapy protocol in conjunction with psilocybin, Dr Maria Beckman and colleagues have initiated the PSIPSET trial, the first trial of psilocybin in Sweden. The psychotherapy protocol is manual-based and consists of one preparation session and three integration sessions. All of the facilitators have been trained in the protocol and have ongoing supervision. All sessions are recorded, and various questionnaires have been used to collect data. However, the results of the study have not been reported yet.

Dr Beckman highlighted the questions that remain unanswered when considering the potential benefit of psychotherapy with psilocybin treatment:

- Would individual or group sessions be most effective?
- What is the optimal number, duration and spacing of sessions?
- What is the appropriate approach that should be used and what content should be included in each session?
- What is the role of the psychotherapeutic setting, and is there a role for music?
- How many facilitators are optimal, how should they be trained, and what should their competencies be?

LONG-TERM OUTCOMES FROM PSILOCYBIN-ASSISTED THERAPY

Over the past decade or so, numerous studies have suggested that psilocybin may be helpful in the treatment of

treatment-resistant depression (TRD) and other psychiatric disorders. The first open-label study of psilocybin in TRD was published in 2016.

Dr Alan Davis and colleagues published a randomised clinical trial of the effects of psilocybin-assisted therapy on MDD in *JAMA Psychiatry* in 2021.[1] A total of 24 patients with an MDD diagnosis, not currently using antidepressant medications, participated in two psilocybin sessions (session 1: 20 mg/70 kg; session 2: 30 mg/70 kg) with a full day of supportive psychotherapy (approximately 11 hours). The intervention period was 8 weeks, involving at least 18 in-person visits, which included 8 hours of preparatory sessions, two day-long psilocybin administration sessions, and 2 to 3 hours of follow-up sessions. The psilocybin sessions were, on average, 1.6 weeks apart. Participants were randomised to begin treatment immediately or after an 8 week delay. The Hamilton depression (HAMD) score at baseline was 22.8.

At 1 week after the second psilocybin session the mean HAMD score was approximately 8 and this was sustained at 4 weeks. When compared to the wait listed group, the effect size for treatment with psilocybin was very large, with a Cohen d at weeks 1 and 4 after treatment of 2.5 and 2.6, respectively.

Dr Natalie Gukasyan and colleagues followed the patients up for a year.[2] The improvement in HAMD score was sustained with large decreases from baseline observed at 1, 3, 6 and 12 months (Cohen d: 2.3, 2.0, 2.6, and 2.4, respectively). At 12 months, treatment response (≥50% reduction in HAMD score from baseline) and remission were 75% and 58%, respectively. Patients who relapsed had higher HAMD scores at baseline. One third of patients (8 patients) used antidepressants during the 12 months follow-up time, and 41% (10 patients) had received psychotherapy. No-one reported using any psychedelics.

These studies indicate that psilocybin (with psychotherapy) is a powerful tool for treatment of MDD. However, it cannot entirely replace other treatments, and there are still many uncertainties regarding the optimal dose and regularity of treatments. Although it is uncertain whether patients who are taking antidepressants should stop them before receiving psilocybin, one recent small study found that psilocybin was effective in patients with treatment-resistant depression who continued treatment with an SSRI, without any obvious safety concerns.[3]

CONCLUSIONS

While there remain a lot of unanswered questions, available evidence supports use of psychedelics for a variety of psychiatric indications and that they are well tolerated with an excellent safety profile. There may be a specific place for them in the one third of patients with MDD who do not respond to other treatments. Preparatory sessions before administration of a psychedelic treatment are essential, as are integration sessions afterwards, and the setting must be carefully considered. Consequently, psychedelic therapy requires collaboration with a suitably trained psychotherapist.

REFERENCES

1 Davis AK, Barrett FS, May DG, et al. Effects of Psilocybin-Assisted Therapy on Major Depressive Disorder. A Randomized Clinical Trial. *JAMA Psychiatry* 2021;78(5):481-489.

2. Gukasyan N, Davis AK, Barrett FS, et al. Efficacy and safety of psilocybin-assisted treatment for major depressive disorder: Prospective 12-month follow-up. *J Psychopharmacol* 2022;36(2):151-158.

3. Goodwin GM, Croal M, Feifel D, et al. Psilocybin for treatment resistant depression in patients taking a concomitant SSRI medication. *Neuropsychopharmacol* 2023;48:1492-1499.

Additional references available on request.

Piet Oosthuizen studied medicine at the University of the Free State. He subsequently specialised in Psychiatry at Stellenbosch University, where he also obtained his PhD in 2003. He has a special interest in the treatment of Mood Disorders (Major Depression and Bipolar Disorder); Schizophrenia and Neuropsychiatry. Currently he works full time in private practice in Durbanville and has a part time appointment as Associate Professor in Psychiatry at Stellenbosch University. **Correspondence: pieto@hafelestreet.co.za**

Laboratory preparing micro doses psilocybin, source: Microgen

How can we better identify and manage depression and co-morbid dementia in the ageing population?

Presented by Pevashnee Naicker

*This Report was compiled by **Dr David Webb**, based on a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held in 2024. The presentation was a feedback session based on presentations at the European College of Neuropsychopharmacology (ECNP) meeting in Barcelona, Spain in August 2024.The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd.*
Correspondence: dawebb@mweb.co.za


Pevashnee Naicker

INTRODUCTION

Dementia and late life depression (LLD) are complex conditions influenced by a combination of genetic, environmental and lifestyle factors. They commonly co-occur, and, because they are similar in symptomatology, neurophysiology and findings on neuropsychological testing, distinguishing between them is difficult. Both are common. The global prevalence of dementia is estimated at 55 million, increasing by about 10 million per year. The highest incidence is in low to middle income countries, which account for about 60% of individuals with dementia. Major depressive disorder (MDD) is the leading cause of disability worldwide, and the prevalence of late life depression (LLD) is approximately 35%. Dementia itself is a risk factor for depression, and people with dementia are more than twice as likely as those without to develop LLD.

LATE LIFE DEPRESSION

LLD refers to depression with an onset after the age of 65 years, and includes diagnosis of recurrent depressive disorder with later-in-life episodes. It is often recurrent and it is difficult to treat.

LLD may be clinically and neurobiologically distinct from early onset depression and it presents differently, meaning that the diagnosis is often missed. Furthermore, patients with LLD usually present with other systemic medical and mental health comorbidities that further complicate diagnosis and treatment.

In comparison to those with early onset depression, patients with LLD have more baseline cognitive deficits and less expressed mood (alexithymia). They have high levels of apathy and are frequently more socially withdrawn. The risk of suicide is high. Other symptoms include psychomotor retardation, irritability, agitation, fluctuating mood, high morning anxiety, loss of appetite and weight loss, and various somatic complaints. These symptoms can often be attributed to ageing and frailty and must be distinguished from those.

THE COMPLEX RELATIONSHIP BETWEEN DEPRESSION AND DEMENTIA

While dementia is an organic cognitive disorder and depression is a functional cognitive disorder, they have many characteristics in common. There is considerable overlap between risk factors for the two conditions (Table 1), and behavioural and cognitive symptoms in patients with depression are similar to those in patients with dementia (Table 2). Dementia is a risk factor for depression, and irrespective of the severity of dementia, depression is a common comorbidity. Approximately 35% of patients with fronto-temporal or Lewy body dementia, 40% with Parkinson's disease or Huntington's disease, and up to 60% of patients with vascular dementia will have depression. Similarly, depression is a risk factor for, and a preceding (prodromal) symptom of dementia. It occurs early in older patients with mild cognitive impairment (MCI), 10 to 15 years before overt dementia, and is associated with slow cognitive decline. Consequently, recognising depression in these patients may allow early intervention to slow or delay progression to dementia.

Table 1. Risk factors common to late life depression and dementia		
Biological factors	Psychological factors	Social and lifestyle factors
• Age • Genetics • Cardiovascular risk factors (e.g., hypertension) • Sleep disorders (e.g., insomnia, sleep apnoea) • Diabetes mellitus • Obesity • Hearing loss • Chronic inflammation (e.g., autoimmune conditions, chronic infections, HIV) • Atherosclerosis and vascular disease • Traumatic brain injury	• Death of spouse • Personality structure • Loss of role and sense of purpose	• Poor diet • Social isolation • Loneliness • Financial difficulties • Retirement • Poor economic status • Reduced independence • Low quality of life • Functional disabilities • Low levels of physical activity • Alcohol • Smoking • Medication (especially those with anticholinergic activity)

Table 2. Overlapping behavioural and psychological symptoms in late life depression and dementia
• Dementia • Depression • Impaired working memory • Apathy • Attention deficits • Irritability and agitation • Changes in sleep and appetite

LATE LIFE DEPRESSION "SYNDROMES"

Although DSM-5 does not formally acknowledge LLD in terms of modified criteria, in the research and clinically, two subtypes stand out.

(i) Vascular depression
Cardiovascular disease (CVD) disrupts networks supporting affective and cognitive functioning and is a predisposing, precipitating and perpetuating factor of depression. Patients with vascular depression have a medical history of vascular risk factors (e.g., hypertension) and vascular hyperintensities are visible on magnetic resonance imaging (MRI). These patients have pronounced psychomotor slowing, apathy and cognitive impairment. They have a poor response to therapy and a high mortality rate.

(ii) Depression-executive dysfunction syndrome (DED)
In patients with D-DED, fronto-striatal pathways are affected by age or pathology. They have psychomotor retardation, loss of interest, suspiciousness, lack of insight, and mild neurovegetative symptoms. Impaired executive function further worsens and contributes to disability. Patients with D-DED have a poor response to antidepressants.

DISTINGUISHING BETWEEN LATE LIFE DEPRESSION AND DEMENTIA

The overlap between risk factors and presentations in patients with depression and dementia presents a challenge when attempting to distinguish between dementia and LLD in patients with mild cognitive decline.

In the DSM-5, LLD is described as depression with anxious distress ('worried well'). Cognitive impairment in individuals with LLD is characterised by an internal inconsistency where the individual is able to perform a task well, but has difficulties when it becomes the focus of attention. They have retrieval difficulties and can give a detailed account of their memory lapses, sometimes being over-inclusive, expressing a worry that they are developing dementia. They may have obsessional personalities and exaggerate imperfections of normal memory.

They are frequently more concerned than their caregivers, seeking help on their own ('attended alone'), in contrast to patients with dementia who are usually brought to the doctor by a caregiver. A core feature of the depressive symptoms in LLD is lack of persistence; the patient commonly gives up

and frequently says 'I don't know' in response to questioning. They are anhedonic, disengaged and express feelings of worthlessness. Symptoms are variable over time, and, characteristically of a functional cognitive disorder, there are marked inconsistencies between assessments.

In contrast to LLD, patients with dementia minimise and mask symptoms, and use humour to detract from their symptoms. They are usually accompanied by a caregiver and turn to them to for support when they do not understand or remember ('head-turning sign'). Cognitive function is stable or worsens over time.

COGNITIVE DEFICITS IN LATE LIFE DEPRESSION

Cognitive deficits in LLD make it difficult to distinguish between LLD and dementia. Cognitive symptoms of depression confound the results of neuropsychological testing in patients with dementia, whereas the features and functional impairments associated with depression may be masked by symptoms of dementia. Around 40% to 60% of patients with MDD (without dementia) will have cognitive impairment on neuropsychological testing (functional cognitive deficits). These deficits extend across all cognitive domains of functioning, with prominent features including slowed processing speed and executive functioning deficits. These symptoms are not always reversible; they may be persistent even after remission of depressive symptoms, and patients with residual cognitive symptoms, even though the depression has remitted, are at risk of developing a major neurocognitive disorder.

POTENTIAL BIOMARKERS TO DISTINGUISH BETWEEN LATE LIFE DEPRESSION AND DEMENTIA

Studies suggest that LLD may be consequent to age-related neuropathology that also predisposes to dementia. Therefore depression and dementia can be regarded as a continuum where depression precedes dementia by 10 to 15 years. Depression is associated with chronic inflammation; vascular pathology; hypothalamic-pituitary-adrenal (HPA) axis dysfunction and increased cortisol release; and deposition of beta-amyloid and Tau hyperphosphorylation in the brain. These lead to various pathological changes in the brain that predispose to dementia, including proinflammatory changes, alterations in nerve growth factors, increased levels of amyloid plaques, and atrophy of brain areas associated with mood regulation, motivation and memory, including the hippocampus, basal ganglia, amygdala, prefrontal cortex and striatum. Levels of inflammatory cytokines (e.g., interleukin (IL) 6, IL 8, tumour necrosis factor), Tau protein and beta-amyloid are elevated and levels of brain-derived neurotropic factor (BDNF) are decreased in the cerebrospinal fluid (CSF) of patients with depression and even more markedly so in those with dementia. These potential biomarkers might, in the future, be helpful to distinguish between LLD and dementia, or identify patients with depression who are at increased risk of developing dementia.

CONSEQUENCES OF INEFFICIENT TREATMENT OF DEPRESSION IN DEMENTIA

In addition to the similarities between depression and dementia that complicate diagnosis, a lack of consistent diagnostic criteria contributes to underdiagnosis of depression in patients with dementia. Furthermore, both caregivers and patients underestimate symptoms and their impact on daily life. Antidementia drugs are mildly effective for treatment of depression, but the side effects may aggravate anxiety and irritability. Similarly, medications for other comorbid conditions can cause depressive symptoms as a side effect. The lack of specific treatment recommendations leaves doctors with uncertainty about how to manage these patients.

Nevertheless, early diagnosis of depression in patients with dementia and providing effective treatment are essential, not only to improve patient outcomes, but also to improve life for caregivers, almost one third of whom experience depression themselves. Depression worsens dementia prognosis and significantly accelerates cognitive decline independent of sex and educational level. It reduces quality of life and may increase mortality rates. People with a recent diagnosis of MCI or mild dementia, men, single and older patients, and those with better mini mental state examination (MMSE) scores are at risk for worse depression and for attempting suicide. Depressive symptoms significantly increase other behavioural and psychological symptoms of dementia, such as agitation, anxiety and irritability, increasing the burden on caregivers.

CLINICAL CONSIDERATIONS FOR DEMENTIA PATIENTS WITH DEPRESSION

While it is easy to assume that a patient with dementia should be sad, apathetic and lose interest in things, LLD is a distinct entity and is not solely reactive to environmental stressors and the course of dementia. It is differentiated from apathy by presence of sadness, depressive thoughts and early morning awakening, and using specific geriatric scales to assess for LLD may be more helpful than using the Patient Health Questionnaire (PHQ) or DSM-5 criteria for depression, because they focus more on hopelessness and the negative cognitions of depression.

Depression is more likely in patients with vascular damage, and although structural and neuroimaging is not generally considered helpful for diagnosis, recent research suggests that PET scans may have some utility in identifying pathology in geriatric depression. Using antidepressants to treat depression in patients with dementia might prevent accelerated cognitive decline and delay the onset of dementia. Furthermore, treating MDD in older adults significantly reduces the depression-specific burden experienced by caregivers.

GENERAL MANAGEMENT PRINCIPLES

Treatment for depressed patients with dementia must be individualised, with a comprehensive multidisciplinary approach managing both mood and cognitive aspects, and aiming to improve and maintain quality of life. Contributing factors must be addressed, including pain, acute physical illness and comorbidities, and side effects of medications. Assessment includes a careful history, a detailed assessment of behavioural and psychological symptoms of dementia (BPSD), direct observations, review of sleep charts, pain charts and activities of daily living, neuropsychological assessments, and a full medical workup. Establishing a comprehensive care plan requires engagement with caregivers, to make sure it is practical and realistic according to the resources that are available. This should be followed by regular review of progress and efficacy, with removal of treatments that are not working. Caregivers need to be supported with psychoeducation and skills development.

Non-pharmacological interventions are extremely beneficial and should be prioritised as first-line approaches to treatment (Table 3).

Table 3. Nonpharmacological management of patients with depression and dementia

- Psychotherapy
- Sensory therapy, including music therapy, cognitive emotion orientated (reminiscence) therapy, animal therapy, massage and touch therapy
- Cognitive stimulation therapy
- Occupational therapy
- Social support
- Good nutrition (referral to a dietician)
- Exercise with social interaction
- Environmental modifications
- Psychoeducation; counseling and support for caregivers

Pharmacological interventions should be used with caution in elderly patients, with careful consideration of potential side effects and drug-drug interactions.

Although results from some clinical trials have been disappointing, there are theoretical reasons why antidepressants should be useful for depressed patients with cognitive impairment. They increase serotonin and noradrenaline with associated neurotropic and neuroprotective effects, enhance synaptic plasticity, increase neurogenesis, enhance HPA regulation, and reduce amyloid plaque burden. In addition, selective serotonin reuptake inhibitors (SSRIs) and serotonin noradrenalin reuptake inhibitors (SNRIs) have anti-inflammatory effects.

Recent studies have demonstrated that vortioxetine in particular improved cognitive function and symptoms in elderly patients with MDD in routine clinical practice, and 12 weeks of treatment significantly improved depressive symptoms independent of specific dementia type in patients with MDD and early dementia. Decrease in depressive symptoms was significantly correlated with improved health-related quality of life and daily functioning.

Other agents with precognitive effects that could be considered include duloxetine, venlafaxine, desvenlafaxine, and mirtazapine. SSRIs with a lower risk of drug interactions include sertraline and escitalopram. Although there are suggestions that combining antidepressants with choline esterase inhibitors might have a synergistic effect, this remains controversial. It must be borne in mind that elderly patients are at increased risk for side effects associated with antidepressants. Adverse effects of concern include falls and fall-related injury, changes in blood pressure, prolongation of the QT interval (with citalopram), syndrome of inappropriate antidiuretic hormone secretion (SIADH) and hyponatraemia, and changes in weight. Tricyclic antidepressants are not recommended.

Electroconvulsive therapy (ECT) may be helpful for patients with psychotic depression, severe suicidality, treatment-refractory depression, or catatonia. Studies have found that older age may be associated with higher rates of response and remission to ECT, and ECT may have a shorter time to remission than pharmacological treatments.

CONCLUSION

Due to the complex interplay between cognitive decline, behavioural symptoms, and physical health issues, comorbid depression is challenging to diagnose in elderly people with dementia. Underdiagnosis leads to delay in appropriate treatment, worse quality of life and worse outcomes. To achieve the best outcome, treatment requires a comprehensive and individualised approach. Unfortunately, current research is poor and difficult to interpret. More research is required to clarify diagnostic criteria and treatment and improve guideline recommendations. There is an urgent need to advocate for better screening of mental health in the elderly and better support programs for caregivers.

References available on request.

Pevashnee Naicker is a neuropsychiatrist currently based in the private sector at Akeso – Crescent Randburg in Gauteng. She has been in private practice since 2021. **Correspondence: dr.pevashnee.naicker@gmail.com**

Lifestyle medicine in mental healthcare: Treating the body and mind?

Presented by Stephanie van Vuuren

*This Report was compiled by **Dr David Webb**, based on a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held in 2024. The presentation was a feedback session based on presentations at the European College of Neuropsychopharmacology (ECNP) meeting in Barcelona, Spain in August 2024.The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd.*
Correspondence: dawebb@mweb.co.za


Stephanie van Vuuren

For some years it has been known that the immune system plays an important role in mental health. Inflammation and the activity of immune cells in the brain profoundly influences thoughts, emotions and behaviour, and neuroinflammation is believed to be one of the primary pathologies in depression and other mental illnesses. Immunopsychiatry is a relatively new branch of psychiatry that acknowledges the close and mutual relationship between the body, the mind and the environment, and seeks to understand how modulation of the immune response (e.g., through healthy lifestyle intervention) may be helpful in the treatment of psychiatric disorders.

THE ROLE OF DIET IN MODULATING IMMUNE FUNCTION AND FOSTERING MENTAL HEALTH

Data from the Global Burden of Disease (GBD) Diet Collaborators showed that, across the world, dietary habits are generally poor. Consumption of healthy foods, including fruit, vegetables and foods high in omega 3, are lower than recommended, while consumption of unhealthy foods (e.g., processed meat, salt, sweetened beverages) is high. This unhealthy diet impacts metabolic health and is associated with direct and indirect (i.e., through metabolic derangements) detrimental effects on mental health (e.g., depression and cognitive decline). Furthermore, overweight and obesity are associated with medical and neuropsychiatric complications, and people with severe obesity especially, are more likely to suffer from depression.

Different mechanisms explain the relationship between obesity and depression and there is a large body of data suggesting that inflammation plays a major role. Obesity is inherently an inflammatory condition. Adipocytes secrete inflammatory factors and immune cells, including lymphocytes and macrophages, are recruited directly in adipose tissue. In addition, a nutrient-poor pro-obesogenic diet modifies the gut microbiota which increases gut permeability and further exacerbates the inflammatory process. Inflammation in the periphery leads to inflammation in the brain, resulting in neuropsychiatric co-morbidities.

To evaluate the relationship between adiposity, neuropsychiatric symptoms and systemic inflammation, Dr Lucile Capuron and her colleagues stratified 165 subjects by body mass index (BMI) into four groups: 70 very severely obese (BMI ≥40 kg/m2), 50 severely obese (BMI 35-39.99 kg/m2), 21 overweight or moderately obese (BMI 25-34.9 kg/m2), and 24 lean (BMI <25 kg/m2) individuals. Depressive symptoms were assessed using the Montgomery-Asberg Depression Rating Scale (MADRS) and the Mini-International Neuropsychiatric Interview (MINI). Fatigue and general neurobehavioural symptoms were assessed using the Multidimensional Fatigue Inventory (MFI) and Neurotoxicity Rating Scale (NRS), respectively. Systemic inflammation was measured using serum levels of the inflammatory markers, high-sensitivity C-reactive protein (hs-CRP) and interleukin (IL)-6. In comparison to lean subjects, severely obese subjects had higher depression scores, more fatigue and general neurobehavioural symptoms. The inflammatory markers were significantly increased in even moderately obese subjects, and markedly elevated in those with severe or very severe obesity. Overall increased neuropsychiatric comorbidity was associated with greater systemic inflammation, notably hs-CRP.

To identify molecular biomarkers of inflammation-related depression, the same investigators did a second study in which they performed whole-genome expression profiling from peripheral blood of 33 severely obese patients, 15 of whom had comorbid major depressive disorder (MDD) and 18 of whom did not have depression. Twenty four of them were reanalysed 4 to 12 months after bariatric surgery (11 with MDD post-surgery and 13 without MDD post-surgery).

Transcriptomic and bioinformatic analyses identified three genes related to inflammatory pathways (*TP53, NR3C1, and NFκB*) as the most important upstream regulators predicting depression in obese patients. Before surgery, compared with patients who were not depressed, expression of these three genes was significantly increased in patients with MDD. After surgery gene signalling was decreased in concert with improvements in depression score. This data suggests that inflammation predicts depression in obese subjects, but also its remission when inflammation is reduced after surgery.

It is not only obesity itself but also diet that contributes to obesity-related systemic inflammation and vulnerability to neuropsychiatric pathology. Western diets rich in fat, refined sugar and salt have been associated with poor health outcomes. To examine the influence of an obesogenic dietary pattern with inflammatory potential on stress-induced cognitive alterations, investigators recruited a group of 50 healthy people and stratified them into two groups based on their dietary habits, obesogenic or non-obesogenic. They used hs-CRP to measure systemic inflammation and measured verbal memory and sustained attention before and after exposure to a psychological stressor. Stress response was evaluated by measuring salivary cortisol, blood pressure and heart rate. As expected the subjects with an obesogenic diet had significantly higher levels of inflammatory markers.

They then subjected them to a stress test and confirmed that the 2 groups had a similar HPA axis response and perception of the stress that they were subjected to. Although exposure to the stressor elicited a stress response in both groups, subjects with an obesogenic diet performed more poorly on a rapid visual information processing test and had greater impairment in immediate verbal recognition. The results suggest that poor dietary habits not only leads to low grade inflammation but also may sensitise healthy individuals to the detrimental effects of acute stress on cognitive performance.

The group then wanted to look at possible mechanisms that might explain this relationship between diet and obesity and neuropsychiatric symptoms. In their laboratory they focussed on the impact of inflammation on monoamine metabolism, and particularly on metabolism of tryptophan. There are three primary pathways of tryptophan metabolism:

1. A classical pathway in which tryptophan is metabolised to 5-hydroxytryptamine (serotonin);
2. The kynurenine pathway in which tryptophan is metabolised to kynurenine, kynurenic acid, and quinolinic acid. The first and rate-limiting step of this pathway is made by the enzymes tryptophan 2,3-dioxygenase (TDO) or indoleamine 2,3-dioxygenase (IDO), and the metabolites are associated with inflammation and neurotoxicity, and various psychiatric disorders including MDD; and
3. A pathway involving gut microbiota, where tryptophan is metabolised by gut microbes into various indole derivatives, including indole, indole-3-acetic acid (IAA), and indole-3-propionic acid (IPA).

A comparison of measurements of tryptophan catabolites in obese and non-obese adults showed that both kynurenine and microbiota-mediated indole routes of tryptophan metabolism were altered in obese subjects. Inflammatory markers (IL-6 and CRP) were also increased in obese individuals and were overall associated with alterations in the tryptophan metabolic pathways.

Previous studies have shown that people with depression and high levels of systemic inflammatory markers are more likely to be resistant to treatment. So these data showing that systemic inflammation influences tryptophan metabolism might, at least in part, help to explain that. Of course, obesity is not the only factor that increases systemic inflammation. Other environmental and biological factors associated with chronic inflammation include genetics, childhood and adult stress, and medical illness - conditions which also might be associated with a poorer response to antidepressant treatment in patients with depression.

To see if nutrition could modulate the response to antidepressants in patients with MDD, the investigators measured levels of omega-3 polyunsaturated fatty acids (PUFAs) in adults with depression who were treatment-naïve at baseline and performed neuropsychiatric evaluations before and after 4 and 8 weeks of treatment with standard antidepressants. Lower omega-3 PUFA levels were associated to worse symptomatology at baseline, and PUFA levels were significantly different in patients who were resistant to antidepressant treatment compared to those who were not. Resistant patients had lower docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) levels and a higher omega-6/omega-3 ratio than non-resistant patients. DHA levels and omega-6/omega-3 ratio significantly predicted response to antidepressants at study endpoint. The investigators then stratified the patients according to their level of inflammation. Those with higher inflammatory markers had lower PUFA levels and also increased levels of IDO activation (neurotoxic tryptophan metabolic pathway). These observations are consistent with previous results showing that supplementation of omega-3 PUFAs improves response rates to antidepressant medication, but only in patients who already have inflammation.

In conclusion, based on these and other results, it would seem imperative to advise patients presenting with mental health disorders to pay attention to their lifestyle: to adhere to a healthy diet, to exercise and to try, as best they can, to maintain a heathy weight. Nutritional interventions, including omega-3 PUFAs, probiotics, and antioxidants, and additional treatments such as anti-inflammatory drugs and IDO inhibitors may help to improve the efficacy of pharmacotherapy.

MEDICATION AND LIFESTYLE INTERVENTION IN REGULATING IMMUNE METABOLIC FUNCTION IN MENTAL HEALTH

The Netherlands Study of Depression and Anxiety (NESDA) is a 15 year observational study initiated in 2004. It comprises a naturalistic cohort of 3 348 subjects aged 18 to 60 years, including healthy controls, patients with depression and/or anxiety and family members. The NESDA data show that depression is linked with poor physical health. Patients with depression had a higher prevalence of metabolic syndrome and were more likely to develop dyslipidaemia, diabetes, abdominal obesity and weight increase over time. They also had more subclinical cardiovascular changes and had a higher incidence of cardiovascular disease compared to the healthy controls. There was also evidence of advanced biological aging among these patients. People with depression had a decreased telomere length and advanced epigenetic age. So the wear and tear of depression can be observed even at the cellular level.

How can this be explained? The NESDA investigators, led by Professor Brenda Penninx, first tried to rule out the obvious things, like lifestyle. We know that people with depression smoke more, are less physically active and use more alcohol. But these factors alone did not seem to explain the unfavourable health profiles observed in this group of patients. So it was hypothesised that the dysregulated stress system associated with depression might explain the worse health outcomes over time.

The stress system has three mechanisms to respond to stress; the immune system, the hypothalamic-pituitary-adrenal (HPA) axis, and the autonomic nervous system. The observational data of the NESDA study confirmed that there is an immune signature visible in patients with depression on a blood level (higher inflammatory markers, including CRP, IL-6 and TNF-alpha), at the level of RNA with higher gene expression of immune pathways, and also on the level of DNA, in that genome wide analysis has identified the involvement of genes involved in inflammatory pathways. But it is not only the immune system that is relevant; the other stress systems also seems to be involved. People with depression have a hyperactivation of the cortisol awakening response – an increase in cortisol that naturally occurs in the first hour after waking up. Similarly, cortisol can be measured in hair and although it is only a modest correlation, hair cortisol levels were increased dependent on the severity of depression.

With regards to the third stress system, the autonomic nervous system (which is the most immediate of the three stress systems), compared to people without depression, people with depression have an increase in heart rate and a decrease in heart rate variability, consistent with an increase in sympathetic activity and decrease in parasympathetic activity. However, these findings were only evident in depressed people who were receiving treatment with anti-depressants and not in those who were untreated. The question then arises whether these observations were caused by the antidepressant treatment or a result of the depression itself. So the investigators used the longitudinal design of the NESDA study to compare patients who initiated antidepressant treatment with those who stopped treatment. They found that starting a tricyclic antidepressant (TCA) or serotonin noradrenaline reuptake inhibitor (SNRI) was associated with increased heart rate and decreased heart rate variability. Conversely, stopping a TCA or SNRI was associated with the opposite - decreased heart rate and increased heart rate variability. Furthermore, patients who were taking a TCA or SNRI had higher blood pressure and were more likely to have features of the metabolic syndrome. These changes were not observed in depressed patients taking selective serotonin reuptake inhibitors (SSRIs).

This observational data from the NESDA study were used to investigate whether there are potential differences between people with typical depression and those with immune-metabolic features (Table 1). From a clinical perspective, patients with immuno-metabolic features had more atypical features of depression, with increased appetite and weight, hypersomnia and leaden paralysis. They also had had a strong genetic overlap of genes associated with obesity and metabolic dysregulation. In contrast, those with typical depression had more melancholic features, higher suicidality and a demonstrable hyperactivity of the HPA axis. Of note was that the severity of the depression between the two subgroups did not differ, they just had different symptoms. Interestingly, patients with immuno-metabolic features of depression were in a significant minority, comprising only around one quarter to one third of the total cohort with depression.

There is some evidence that patients with immuno-metabolic depressive features may have a poorer response to antidepressant therapy. However, the evidence is not strong enough to say that antidepressants will not work in this population. Nevertheless, there are additional interventions that can be helpful, not only for depressive symptoms, but also for the somatic symptoms of depression. Exercise has been widely studied and there is consistent evidence that, regardless of age, it reduces both depressive symptoms and systemic inflammation. A recent study compared group-based running therapy two or more times per week with antidepressant medication (escitalopram or sertraline), according to preference, in 141 patients with depression and/or anxiety disorder. After 16 weeks, remission rates were similar (44%), but the running group had significantly greater improvements in physical health including weight, waist circumference, systolic and diastolic blood pressures, heart rate and heart rate variability, while these parameters actually worsened from baseline in the antidepressant group.

CONCLUSION

Inflammation and metabolic status play a significant role in both the pathogenesis of neuropsychiatric disorders and the response to treatment. However, both are modifiable with simple lifestyle adjustments including adherence to a healthy diet and physical activity. Providers of mental healthcare need to focus more on advising their patients about healthy lifestyle choices and helping them to implement and sustain them.

References available on request.

Stephanie van Vuuren obtained her MBChB at the University of Stellenbosch in 1995 and qualified as a psychiatrist in 2005 (obtaining her FC Psych (SA) and M.Med degree) having worked in various medical disciplines in the public sector for several years prior to specialist training. She has been working full time in private practice since qualification. Her fields of interest include Mood Disorders, Anxiety Disorders and Neuropsychiatry.
Correspondence: Stefanie@hafelestreet.co.za

Table 1. Comparison of typical and immuno-metabolic depression

	Typical depression	Immuno-metabolic depression
Genetic basis	Stronger overlap with psychiatry (e.g., schizophrenia) genes	Overlap with obesity and metabolic regulation genes
Symptoms	Decreased appetite/weight, insomnia, suicidal ideation	Increased appetite/weight, low energy, hypersomnia, leaden paralysis
Correlates	Smoking, negative life events, childhood trauma	Female gender, early onset
Course	More persistent anxiety and suicidality	Persistent poor metabolic profile
Pathophysiology	Hyperactivity of the HPA axis (i.e., higher cortisol)	Immuno-inflammatory metabolic dysregulation of leptin and insulin resistance

Remote Electrical Neuro-modulation (REN) in Migraine Management

Presented by Johan Smuts

*This Report was compiled by **Dr David Webb**, based on a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held in 2024. The presentation was a feedback session based on presentations at the European College of Neuropsychopharmacology (ECNP) meeting in Barcelona, Spain in August 2024.The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd.*
Correspondence: dawebb@mweb.co.za

Johan Smuts

INTRODUCTION

Headache is one of the most common medical disorders worldwide. Two of the most common types of headache are tension-type headache (TTH) and migraine, with lifetime prevalences of 78% and 16%, respectively. The 1 year prevalence of episodic TTH is 36% in men and 42% in women, whereas for migraine the 1 year prevalence rates are 6% and 15% to 19%, respectively. Approximately 5% of the general population will suffer from chronic daily headache and around 0.5% experience headache on a daily basis. Headaches pose a substantial economic burden in terms of time off work and presenteeism, and healthcare costs.

MIGRAINE AND PSYCHIATRIC COMORBIDITIES

There is a high prevalence of psychiatric comorbidities associated with migraine, including depression, anxiety and posttraumatic stress disorder. Migraineurs are over 2.5 times more likely to suffer from depression compared with non-migraineurs, and the association of major depressive disorder is even stronger for patients with chronic migraine and migraine with aura. Migraineurs suffering from depression are more likely to be refractory to migraine treatments and to suffer from medication overuse and disability. The association between migraine and depression is complex. Comorbidity may be due to a common environmental risk factor or shared genetic factors, or other biological, environmental or genetic risk factors may converge to produce a brain state which predisposes to both disorders. The close relationship between migraine and psychiatric disorders is also evident in the considerable overlap in pharmacotherapies that have proven to be useful for both treatment of mood disorders and for prevention of chronic migraine. These include tricyclic antidepressants, serotonin noradrenalin reuptake inhibitors, topiramate and divalproex sodium.

CONSIDERATIONS FOR PSYCHIATRISTS WHEN TREATING MIGRAINE

Polypharmacy and medication overuse headache (MOH) are significant problems among patients with migraine and make it very difficult to treat the migraine. Polypharmacy increases the risk of drug-related adverse effects, drug-drug interactions, and physical dependency and addiction. MOH leads to a vicious cycle of daily headache and medication overuse. Both polypharmacy and MOH must be addressed before it will be possible to successfully treat the migraine or provide effective prophylactic therapy. Special populations that are very difficult to manage include women of childbearing potential, adolescents, elderly patients and those with renal insufficiency.

WHEN TO SUSPECT A MIGRAINE

Migraine should be suspected in a patients with recurrent headaches of moderate to severe intensity, when (visual) aura is present, in patients with a family history of migraine, and onset of symptoms at or around puberty. In the third edition of the International Classification of Headache Disorders (ICHD-3) migraine is classified into three main types: (1) Migraine without

aura (accounting for about 10% of migraineurs); (2) Migraine with aura (the majority of migraines); and (3) Chronic migraine. The clinical characteristics of each must be considered to ensure an accurate diagnosis.

Patients with chronic migraine initially present with episodic migraine, but as time progresses, they tend to have migraines that are less recognisable. They do not return to a normal baseline between headaches, but rather have persistent migraine-like or TTH-like headaches on most or all days of the month. Official ICHD-3 diagnostic criteria are (1) Headache on ≥15 days/month for >3 months; (2) Attacks occur in an individual who has had at least five attacks that fulfil the criteria for migraine without aura and/or for migraine with aura; (3) At least 8 days per month for more than 3 months are days with migraine with/without aura (believed by the patient to be migraine at onset and relieved by a triptan or ergot derivative); and (4) Not better accounted for by another ICHD-3 diagnosis.

The usual first-line acute treatments for migraine include aspirin and other nonsteroidal anti-inflammatory drugs (NSAIDs; e.g., ibuprofen or diclofenac potassium). Second-line medications include triptans, either alone or, when monotherapy is insufficient to provide pain relief, in combination with a rapid-acting NSAID. Alternatives include ditans and gepants, but these are not yet available in South Africa. Prokinetic antiemetics (domperidone or metoclopramide) can be used as adjunctive medications for nausea and/or vomiting.

REMOTE ELECTRICAL NEUROMODULATION

Remote electrical neuromodulation (REN) is a novel nonpharmacological modality to treat migraine. Over the past few years, it has been shown, in well-designed clinical studies, to provide meaningful relief from headache and other symptoms of migraine during acute attacks, with efficacy comparable or better than currently available migraine treatments. It can also be used to prevent recurrent headaches in people suffering from chronic migraine. It is easy and discreet to use and, because of its non-systemic mechanism of action, is almost completely free of side effects. It is safe to use during pregnancy and in adolescents and adults from 12 years of age. REN is recommended for management of migraine by the American Headache Society.

MECHANISM OF ACTION

The REN device (Nerivio®) is a wireless battery-powered armband including integrated electrodes that is wrapped around the upper arm midway between the elbow and the shoulder. It delivers painless electrical pulses to the skin, the intensity of which is controlled by a mobile application running on the user's cell phone. The app allows users to select an intensity level appropriate for them, so that the stimulation is strong but not painful. The device selectively stimulates C and A-delta noxious sensory fibers of the upper arm above their depolarization thresholds, but below the perceived pain threshold. This noxious information is transmitted through ascending spinothalamic pain pathways, activating pain processing and regulation centres in the brainstem, including the periaquaductal gray, rostral ventromedial medulla and subnucleus reticularis dorsalis. This results in release of serotonin and noradrenalin in descending inhibitory pathways which inhibits incoming messages of pain in the trigeminal cervical complex (TCC) that occur during a headache of a migraine attack.

Through the Nerivio® app, users can record pain intensity and other migraine symptoms before and after treatment, so that they can track symptoms and treatment efficacy over time.

Nerivio® has an established safety and efficacy evaluated in more than 19 000 patients in pivotal trials and real world settings. It has been shown to be effective for acute treatment of migraine in patients with episodic and/or chronic migraine, in adolescents, and in women with menstrual migraine. Furthermore, it is effective when used as a prophylactic treatment for prevention of episodic and chronic migraine.

EFFICACY IN EPISODIC MIGRAINE

In a multicenter, prospective, double-blind, randomised, sham controlled study, 252 adults with 2-8 migraine headaches per month, were randomised to active REN or sham stimulation. At baseline, approximately 50% of participants were triptan users. Participants treated their migraine attacks at home for 4-6 weeks, with their optimal stimulation intensity, as soon as possible after the migraine headache began, and always within 1 hour of symptom onset. Rescue medications were not allowed within 2 hours post-treatment. The primary outcome was pain relief at 2 hours post-treatment, defined as improvement in pain score from severe or moderate pain to mild or none, or improvement from mild pain to none. Migraine-associated symptoms including nausea, photophobia, and phonophobia were also recorded at the time of treatment, and patients rated their most bothersome symptom (MBS) associated with each attack at baseline and at 2 hours post-treatment. Pain and MBS were also rated at 48 hours.

The results are shown in Table 1. In the Nerivio® group, two thirds of participants achieved pain relief at 2 hours, compared with 39% in the sham group. Pain relief was consistent (≥50% of all attacks), and regardless of baseline pain intensity. Furthermore, participants in the Nerivio® group were more likely to be pain free at two hours and to experience MBS relief, and the benefits of Nerivio® were sustained at 48 hours post-treatment.

To compare the efficacy of Nerivio® to triptans, the investigators analysed pain relief in attacks of moderate or severe baseline severity. At 2 hours post-treatment, 73% of participants using Nerivio® (versus 45% in the sham group) achieved pain relief, indicating that Nerivio® is equivalent to triptans, which have a 42-76% response rate for pain relief at 2 hours.

The incidence of device-related adverse events was 4.8% in the Nerivio® group versus 2.4% in the sham group. They

included warm sensation, temporary arm/hand numbness, redness, itching, tingling, muscle spasm, and pain in the arm, shoulders, or neck; all were mild and resolved within 24 hours without medical intervention. No participants discontinued use due to adverse events.

Table 1. Results from the pivotal Nerivio® registration trial

	Sham (n=103)	Nerivio® (n=99)	P value
Pain relief at 2 hours	38.8%	66.7%	<0.001
Pain free at 2 hours	18.4%	37.4%	0.003
Most bothersome symptom relief at 2 hours	22.2%	46.3%	<0.001
Pain relief at 2 hours in ≥50% of all attacks	45.6%	62.6%	0.015
Sustained pain relief at 48 hours	16.9%	39.1%	0.001
Sustained pain free at 48 hours	7.9%	20.7%	0.014

PREVENTATIVE THERAPY FOR MIGRAINE

In patients whose migraine continues to impair their quality of life despite optimised acute therapy, additional preventive therapy should be considered. Patients who are generally considered for preventive treatment are those who remain adversely affected on at least 2 days per month. The aim of treatment is to reduce the frequency and severity of attacks; reduce necessity for, and improve the efficacy of, acute medications; reduce the risk of MOH; and restore normal daily functioning. However, there are a number of problems associated with currently available prophylactic therapies. Their onset of effect can take several weeks or months, and patients need to be encouraged to persevere with treatment during this initial period. If an initial prophylactic treatment is not effective then an alternative can be tried. However, the efficacy can only be assessed after 2 to 3 months with oral treatments, 3 to 6 months with monoclonal antibodies, and 6 to 9 months with onabotulinumtoxin A. Although the latter two treatments are extremely effective, they are invasive and expensive.

Nerivio® is effective for prevention of migraine. In patients with episodic or chronic migraine, using Nerivio® for 45 minutes every other day was associated with significant reduction in migraine days per month. Results were consistent regardless of whether migraine prophylactic medications had been used or not, and the benefit of Nerivio® was evident by the second week of treatment. More than half of the patients experienced at least 50% reduction in moderate or severe headache days, and no device-related adverse events were reported.

REAL WORLD DATA

Data from real clinical practice confirm that Nerivio® results in meaningful clinical benefits with minimal side effects. Of more than 1 100 people with migraine treated by headache specialists, 59% experienced pain relief at two hours in at least 50% of their treated attacks and 53% experienced consistency in improvement in function at 2 hours, without additional medication. The efficacy of Nerivio® was maintained and consistent across migraine episodes throughout 12 months of use. Among 409 patients treated with Nerivio® and followed up for 1 year, treatment was well tolerated and all patients were still using the device after 12 months.

SAFETY OF NERIVIO® DURING PREGNANCY

Migraine during pregnancy may be associated with increased risk of adverse pregnancy outcomes. Furthermore, the effects of pharmacologicals to treat migraine during pregnancy on the health of both mother and baby are a concern. In contrast, expert consensus suggests that noninvasive devices may be relatively safer. A retrospective controlled survey-study evaluated the safety of Nerivio® for migraine treatment during pregnancy and up until 3 months postpartum, in comparison to usual medications or no treatment. Pregnancy outcomes of 59 women with migraine who used Nerivio® at least three times during their pregnancy were compared to 81 women who did not use Nerivio®. There were no differences between the two groups in gestational age at delivery, baby's birth weight, miscarriage rate, preterm birth rate, birth defect rate, stillbirth rate, rate of babies meeting developmental milestones 3 months postnatal, or emergency room visits. The study indicated that Nerivio® offers a safer alternative to pharmacological migraine treatments during pregnancy.

CONCLUSION

Data from randomised clinical trials and real world studies indicate that Nerivio® is an effective, but potentially safer, alternative to usual care for acute management of both episodic and chronic migraine. The response rate is similar to that with triptans, although, if required, Nerivio® can be used in combination with other acute treatments, including NSAIDs and triptans. Regular use of Nerivio® every other day can significantly reduce the number of headache days in patients with chronic migraine. Nerivio® is well tolerated and in clinical studies there have been no discontinuations due to adverse effects. Importantly, incorporating Nerivio® into usual care, has potential to reduce the risk for medication overuse headache, improve patient adherence to treatment, and improve overall quality of life for adolescents and adults who suffer from migraine.

References available on request.

Johan Smuts is a neurologist based in Pretoria, where he has been in private practice since 1996. He earned his MB.Ch.B in 1984 from the University of Pretoria and completed his neurology specialization in 1994. Demonstrating a keen interest in the intersection of medical and legal fields, he later pursued a Bachelor of Laws (LLB) degree from the University of South Africa. He is a former president of both the Dystonia Society of South Africa and PAIN SA. Currently, he serves as an executive member of the South African Headache Society, where he continues to influence and drive advancements in the field of neurology. **Correspondence: jasmuts@gmail.com**

Increasing resolution in stress neurobiology

Presented by Fanie Meyer

*This Report was compiled by **Dr David Webb**, based on a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held in 2024. The presentation was a feedback session based on presentations at the European College of Neuropsychopharmacology (ECNP) meeting in Barcelona, Spain in August 2024.The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd.*
Correspondence: dawebb@mweb.*co.za*

Fanie Meyer

STRESS AND NEUROBIOLOGY

Stress plays an important role in the development of neuropsychiatric disorders, including major depression, anxiety, post-traumatic stress disorder (PTSD), and other mood disorders. To understand the cellular and molecular mechanisms driving the pathophysiology of these conditions, it is essential to develop preclinical animal models. This requires computational tools for integration of cellular, molecular, and behavioural data. Advances in molecular and cellular neuroscience have paved the way for new developments in computational science and data analysis software that allow combination of multiple layers of data in a time-effective manner, while considerably reducing manual scoring-related bias and increasing spatio-temporal resolution in cell biology and behavioural science.

In animal studies, the response to stress can be explored at different levels; for example, the type of stressor (physical vs. psychological), duration of the stressor (acute vs. chronic), developmental stage (early life, adolescence, adulthood, old age), or sex (male vs. female). Thus far, neurobiological studies in animals have identified genes and molecular profiles involved in these stress responses, the cell types and their location (spatial information), how the cells behave and communicate, the brain networks, and the physiological effects related to those. The computational science enables precision tracking and integrating modalities that facilitate extrapolation of this animal data to human physiology. The end result is a better understanding of the mechanisms by which stressors are perceived and processed into molecular, neuroendocrine, and behavioural responses under healthy and pathological conditions.

SINGLE CELLS: INCREASING SPATIAL AND TEMPORAL RESOLUTION

Developments in RNA sequencing technologies and genome-wide analyses (GWAS), have allowed for quantification of thousands of genes in a single experiment. However, although GWAS identifies multiple genes involved in a process at a specific moment, it lacks cell-type specificity, so it does not identify the actual cells involved in those processes. Single-cell RNA sequencing (scRNA-seq) addresses that. It identifies the specific contributions of different cell types, and interaction between different cells, in relation to a stressful event. Maynard and colleagues analysed expression across the six layers of the human dorsolateral prefrontal cortex and identified genes that were differentially expressed in specific layers (i.e., cells that were adjacent, but acting differently). This data was used to improve the annotation of previously obtained, non-spatial datasets, and thereby increase the molecular resolution of how stress exposure influences changes in the expression of genes and specific cell types.

ACTIVITY SENSORS: UNDERSTANDING THE ROLE OF INDIVIDUAL BRAIN CELLS AND CIRCUITS IN STRESS

Exposure to a stressful event triggers cellular activation in multiple temporal waves across different cells within different brain regions. This ultimately drives neuroendocrine and behavioural responses. Stressors can activate a spatially scattered subset of cells within specific brain regions, which communicate via neuromodulators and neurotransmitters.
GPCR activation-based (GRAB) sensors are a relatively new technology that can be used to explore the

activity of individual cells and neuronal circuits within a network. These are sensors that can be genetically encoded into specific cells and they monitor *in vivo* fluctuations of neurotransmitters and neuromodulators. They are highly selective to the neurotransmitter or neuromodulator of interest, and upon binding will change their conformation, leading to a fluorescent signal being detected within a millisecond time window. This makes the GRAB sensor a powerful tool for investigating the cellular response to stress in the brain, as it has high molecular selectivity and temporal sensitivity.Using virus vectors and genetic mouse lines (targeted recombination in active populations [TRAP] and TRAP2 mice), activated cell populations throughout the brain can be targeted and tracked in a specific time window.

Using *in vivo* tracking tools, such as electrophysiology, optogenetics, Designer Receptors Exclusively Activated by Designer Drugs (DREADD)-based chemogenetic tools, calcium imaging, as well as GRAB sensors, investigators can gain a deeper understanding of the physiology of a healthy versus a pathological stress response.

BRAIN AND BODY: INVESTIGATING WHOLE SYSTEMS TO UNDERSTAND THE STRESS RESPONSE

There are a number of investigational techniques that can be used to investigate how the molecular events during the stress response link to the physiological response. While circulating levels of glucocorticoids have widely been used to measure the stress response in animal models and in humans, advances in multiplex immunoassays now can provide a more comprehensive view of biological markers (e.g. glucocorticoids, cytokines, catecholamines, vasopressin, among others), and even distinguish markers related to different types of stressors (e.g. acute versus chronic stress).

Magnetic resonance imaging (MRI) and functional ultrasound imaging (fUS) can be used to monitor cerebrovascular fluctuations and identify specific brain regions involved in reactions to stress. Brain clearing is a technique that can explore cellular activity and protein expression across the entire brain, but with remarkably high (single-cell) resolution, making it possible to identify specific individual cells that are active at one time.

COMPUTATIONAL SCIENCE

As technology advances, more data becomes available in different areas such as genomics, transcriptomics, proteomics, circuits, physiology and behaviour, and this requires development of new tools that use tailored computational solutions. This has given rise to continuous development of statistical and machine learning tools designed to tackle different arising problems, and automate complex time consuming tasks, making such analyses manageable. Precision tracking technology has provided automated systems to dissect the behavioural language of rodents in stress research. Automated tracking can measure social behaviour and, using image data and motion tracking, personality traits of individual mice can be evaluated to detect stress-induced behavioural patterns following chronic social stressors. These and other techniques free investigators of laborious manual quantification and reduce potential for investigator-related bias in behavioural studies.

Various novel methods have been developed to translate the data generated in animal models to humans and to better understand human behaviour under controlled stressful conditions. These include use of virtual reality to track movement with precision in carefully created environments, making it possible to translate paradigms such as fear conditioning to human subjects in a noninvasive way. This can be combined with imaging techniques, such as structural and functional MRI, to identify brain areas involved in stress responses. Using this data, machine learning tools can be used to develop software to analyse brain imaging data, which may aid in diagnosis, prognosis prediction, and treatment optimisation in stress-related disorders.

CONCLUSIONS

Ultimately, all of the data acquired in studies examining stress responses at different biological levels (i.e., genetics, transcriptomics, epigenomics, proteomics, neural signalling, behaviour, and environmental factors) have to be integrated. Each level is not mutually exclusive and understanding how they interact and constantly regulate each other is essential to understand physiological, psychological and behavioural responses to stress, how they change over time, and how they are expressed as different phenotypes. Integration of behavioural and neural data remains fundamental to studies going from basic neuroscience to psychiatric research and paves the way to gain better insights into mechanisms causing pathology and therapies that can be used to ameliorate the suffering for people with stress-related pathologies.

Reference:

Miranda L, Bordes J, Gasperioni S, Lopez JP. Increasing resolution in stress neurobiology: from single cells to complex group behaviors. Stress 2023;26(1):2186141. http://doi.org/10.1080/10253890.2023.2186141

Fanie Meyer is a specialist psychiatrist in private practice, currently working at the Optima Rustenvrede Hospital outside of Stellenbosch. He has served on the national councils of SA Society of Psychiatrists, PAINSA, and presented numerous talks at local, national and international forums.He is also the Managing Director of the M-Care Optima Psychiatric hospitals in Bloemfontein and Stellenbosch. He has a special interest in the Mind - Body interface and how this relates to the clinical presentations in Anxiety, Pain, and other Brain disorders. **Correspondence: drfm66@gmail.com**

Food for the brain

Presented by Ilse du Plessis

*This Report was compiled by **Dr David Webb**, based on a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held in 2024. The presentation was a feedback session based on presentations at the European College of Neuropsychopharmacology (ECNP) meeting in Barcelona, Spain in August 2024.The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd.*

Correspondence: dawebb@mweb.*co.za*

Ilse du Plessis

INTRODUCTION

Mental illness is a global pandemic accounting for as much as one third of years lived with disability worldwide. Although psychotherapies and pharmacotherapies are recommended as first line treatments, evidence has emerged that their efficacy may be overestimated, due to a variety of shortcomings in clinical trials (e.g., publication bias, weak control conditions such as waiting lists). A meta-analytic evaluation of 102 recent meta-analyses published between 2014 and 2021, including data from almost 4 000 studies evaluating psychotherapies and pharmacotherapies for a range of mental disorders, showed that the efficacy of currently available therapies is modest. Fewer than half of patients respond to therapy, and effect sizes for pharmacotherapies and psychotherapies compared with placebo or treatment-as-usual were less than 0.4. Therefore, additional approaches to treatment are urgently needed. Healthy lifestyle changes, including healthy nutrition, exercise, sleep, mindfulness, avoidance of alcohol and other substances, and socialisation, have been shown to be helpful in people with mental health disorders. However, these interventions are rarely prescribed to patients by healthcare professionals. Nutrition, in particular, plays a significant role in maintenance of healthy brain function, mood and behaviour.

Nutritional psychiatry is a new field of psychiatry that draws attention to the importance of sufficient food and healthy nutrition for mental health. The adult brain comprises 2% of body mass, but uses at least 20% of the body's energy requirements. In children, during infancy the energy usage of the brain is up to 70% and what children are fed influences who they will become. In addition to an energy source, food provides the building blocks for brain structure and neuronal signalling.

Diets based on healthy food choices, such as the Mediterranean diet, MIND diet, and low carbohydrate diets, and sufficient intake of omega-3 polyunsaturated fatty acids (PUFAs), have been shown to maintain brain health or augment treatment for psychiatric disorders. PUFAs are essential for neuronal function and favourable changes in brain structure can be observed within 6 weeks of supplementing the diet with omega-3 PUFAs.

SPECIFIC NUTRIENTS AND THE BRAIN

Essential fatty acids (EFAs) directly modulate immune function in the brain and are necessary for normal microglial activity. Microglia are the primary immune cells of the nervous system. They phagocytose and remove redundant synapses, and amyloid and reactive particles, which damage brain tissue and disrupt normal brain function. Specific micronutrients that are essential for normal gene expression and neuronal function

include folic acid (vitamin B9), vitamins B6 and B12, choline and thiamine. There is a high level of psychiatric comorbidity in patients with systemic medical conditions, and general healthy nutrition that promotes cardiovascular health (e.g., Mediterranean and DASH diets), a healthy microbiome and gut health (e.g., probiotics, fibre) and a healthy body weight, also supports the health of the central nervous system.

STRESS

Stress is a major risk factor for mental illness. Exposure to early life adversity is the single greatest predictor of illness in later life, including mental illness. This is particularly true during the first 3 years of life, and inadequate nutrition during this time can have lasting effects on mental health into adulthood. Stress alters eating behaviour, which in turn affects both digestion and metabolism, influencing health.

CONSIDERATIONS RELATING TO NUTRITIONAL INTERVENTION TO PREVENT OR TREAT ILL HEALTH

Different populations of patients may benefit from nutritional intervention. It can be used as primary prevention, treatment, or as secondary prevention for mental illness and patients with comorbidities.

Aspects to consider when prescribing nutritional interventions include the following:

1. Who will benefit? For which patients (e.g., age group), in which mental illness, and in what context (e.g., inpatient or outpatient) will nutritional intervention be beneficial?

In South Africa, one fifth of households have insufficient food, having to beg for it, and 5% of the population has severe inadequate food access. It goes without saying that attention to healthy nutrition is urgently required for this sector of the population. However, even among middle class individuals who do have access to food, malnourishment is common, due to poor food choices and consumption of a high calorie diet with low nutritional value.

2. What type of intervention is appropriate?

Nutritional intervention may include whole diets, individual diet components (e.g., major food groups or micronutrients), and supplements targeting specific nutrients.

3. What is the mechanism of the nutritional intervention? What is it expected to achieve?

The exact mechanism of action of various foods is uncertain. There are no receptor-specific actions associated with food, although some down-stream effects of different nutrients have been identified. Most studies showing benefit of different foods and diets are association studies, and it is difficult to draw firm conclusions from them due to the many confounding factors associated with different populations who consume specific diets (e.g., environmental factors, level of physical activity, exposure to stress, genetics). Another limiting factor in determining the benefit of nutritional supplementation with respect to mental illness is the lack of specific biomarkers that could make it possible to identify individuals who are at high risk and who might be candidates for early nutritional intervention. Although nutrient blood levels and metabolites can be used as biomarkers to identify individuals with nutrient deficiencies who might benefit from nutritional supplementation, this is an individualised approach to treatment and is not generalisable to a population of people.

Current understanding of the pathophysiology of mental health disorders and the effect of nutrients on that further complicates understanding of who will benefit from nutritional intervention. It is unlikely that mental disorders are always associated with a nutritional deficiency, and even when one can be identified, it is unclear whether correcting it will have an effect on pathology or symptoms. Similarly, while inflammation has been identified as an important precipitating and potentiating factor in depression, dementia and other neuropsychiatric illnesses, it is likely that it is not always a primary aetiological factor. Consequently, the potential utility of anti-inflammatory treatments and nutritional interventions to treat patients or reduce risk, and who might benefit from them, is uncertain. Lastly, the long-term benefit of nutritional intervention in early life and whether it might help protect against development of mental disorders in adolescence and adulthood, is unknown.

Considering these uncertainties and gaps in the understanding of the effect of nutritional strategies on neuropsychiatric conditions, it is unlikely that dietary strategies will be able to replace medications in the near future. Furthermore, despite efforts to empower patients to take charge of their own health, psychiatric patients are often too ill and apathetic to make the lifestyle and dietary changes that might be optimal for their health. Aggressive marketing and widespread availability of unhealthy dietary options that are frequently cheaper than healthy foods means that, even for people who know about the importance of nutrition, compliance with a healthy diet is poor. Furthermore, individual supplements are no replacement for a healthy diet. While it is easier to take a pill than to change a diet, nutraceuticals are largely unregulated in South Africa with few or no studies (especially long-term studies) to back up the health claims that are made for them. A Cochrane review of published data for most individual nutrients did not support claims of efficacy. They concluded that studies

on vitamins B12, B6 and B9, folic acid, l-carnitine, fermented milk products (e.g., kefir, cheese, and yoghurt), dietary fibre and various other nutrients provided little or no evidence of benefits on cognitive function.

EFFECTS OF SPECIFIC DIETS ON MENTAL HEALTH

In contrast to the findings of studies on individual nutrients, whole dietary approaches including caloric restriction and intermittent fasting, reducing the diet inflammatory index (e.g., Mediterranean diet), and including omega-3 PUFAs have been shown to be of benefit to reduce symptoms in patients with psychiatric disorders.

The Mediterranean diet has been shown to reduce the incidence of a wide range of adverse health conditions, including death from any cause, cardiovascular diseases, coronary heart disease, myocardial infarction, cancer, neurodegenerative diseases, and diabetes. These beneficial effects may be mediated through multiple mechanisms, including reductions of blood lipids and inflammatory and oxidative stress markers, improvement in insulin sensitivity, enhancement of endothelial and antithrombotic function, and reduction in cerebral neurodegenerative changes. These effects are directly related to the quantity of omega-3 PUFAs that are ingested in the diet. Ketogenic and carbohydrate-restricted diets are effective for weight loss and effectively reduce cardiovascular risk factors (levels of blood glucose, HbA1c, and certain, but not all, blood lipids), especially in patients with overweight or obesity and type 2 diabetes. Studies show that they can reduce seizure frequency in people with treatment-resistant epilepsy and have potentially beneficial effects in some patients with schizophrenia, mood disorders, Alzheimer's disease and other dementias. Carbohydrate restriction changes cell metabolism, shifting away from the Krebs cycle and glycolysis to preferential use of fatty acids for fuel, and generation of ketones. This changes the ATP-sensitive potassium channels which down-regulates glutaminergic sensitivity and neuronal excitability. Low fat diets have been associated with decreased mortality in women with breast cancer and lead to weight loss, but may be less effective than low-carbohydrate or other diets. They have a beneficial effect on blood lipids and blood pressure, with reduced risks of myocardial infarction, diabetes and death from any cause. The Dietary Approaches to Stop Hypertension (DASH) diet, developed to test the effect of dietary intervention on blood pressure, is associated with significant reductions in both diastolic and systolic blood pressure of approximately 3 mmHg and 5 mmHg, respectively. Greater adherence to the diet is associated with a decreased incidence of cardiovascular disease, coronary heart disease, stroke, and metabolic diseases such as diabetes.

The MIND diet combines features of the Mediterranean and DASH diets. It was developed specifically to address cognitive function, and there is some data showing that it may have potential benefits to cognitive outcomes. However, a recent study did not demonstrate differences in cognitive outcomes or brain-imaging markers of dementia in cognitively unimpaired older participants with a family history of dementia (average age at baseline, 70 years) after 3 years of adherence to the MIND diet with mild caloric restriction versus a control diet with mild caloric restriction.

DISEASE-SPECIFIC FINDINGS

The microbiome and the gut-brain axis play a significant role in cognitive function, mood and behaviour, and there is evidence that probiotics may modulate symptoms in people with depression. Other nutrients where supplementation might have a role in management of depression include folic acid, vitamins B6 and B12; magnesium (in middle-aged men); and dietary flavonoids (especially in older women). Weight loss may improve cognition in severely obese patients. Those who lost weight after bariatric surgery had higher cortical thickness and improved measures of cognition 2 years later, compared to baseline. Omega-3 PUFA supplementation can be effective in alleviating symptoms and improving cognitive functions in patients with schizophrenia.

FINAL COMMENTS

A healthy diet consists of real food – fresh fruit and vegetables, protein (poultry, meat, fish, beans and nuts), whole grains and dairy products. People in general should be encouraged to avoid processed foods and added sugars. The US 'MyPlate' dietary guide recommends that at least half of the diet should consist of plant-based foods.

Lastly, it is important to remember that healthy nutrition is only one aspect of a healthy lifestyle. Regular physical activity, restorative sleep, avoidance of risky substances, positive social connections and learning to manage stress (e.g., with a mindfulness practice) are all essential to optimise both physical and mental health.

References available on request.

Ilse du Plessis is a Psychiatrist working in private practice at Denmar Psychiatric Hospital. She qualified as psychiatrist from the University of Pretoria in 2011, and stayed on as a full-time consultant at the Weskoppies Hospital and the university until she commenced fulltime private practice at the end of 2015. She remains a special consultant working at the University of Pretoria and is involved in post-graduate training. **Correspondence: ilseduplessis@vodamail.co.za**

Are Antidepressants Overprescribed?

Presented by Avisha Chunilal

*This Report was compiled by **Dr David Webb**, based on a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held in 2024. The presentation was a feedback session based on presentations at the European College of Neuropsychopharmacology (ECNP) meeting in Barcelona, Spain in August 2024.The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd.*

Correspondence: dawebb@mweb.co.za

Avisha Chunilal

Depression is now regarded by the World Health Organization (WHO) as one of the most burdensome diseases in the world and it has become a public health priority. The point prevalence of depression in a general population is approximately 5%, and the lifetime risk is about 15%. The most common form of treatment for depression is antidepressant medication; currently ranked ninth among prescription drugs with global sales well over $20 billion. Treatment guidelines like those published by National Institute for Health and Care Excellence (NICE) or the American Psychiatric Association (APA) strongly recommend antidepressant medication as an intervention of proven value for maintenance treatment in people with (or at risk of) recurrent depression, and to prevent relapses.

The rate and duration of antidepressant treatment has been steadily increasing in the general population, and this trend has stirred a lot of controversy. Various antidepressant drugs have been approved by the US Food and Drug Administration for the treatment of a wide range of psychiatric disorders, including mood disorders, obsessive-compulsive disorder, social phobia, panic disorder, posttraumatic stress disorder, bulimia, neuropathic pain and migraine. In addition, newer antidepressants have been approved for minor mood disorders or even lifestyle adjustments, which would previously have not been considered serious enough to require medication.

The increase in antidepressants consumption has spurred an ongoing debate whether antidepressants are overprescribed (medicalization) or underprescribed (poor access to treatment). With the increasing burden of disease due to mental health disorders worldwide, knowledge of the epidemiology of these disorders are of increasing interest.

STATISTICS

The use of antidepressants has increased dramatically over the past 20 years in the US and other higher-income countries. About 10% of US adults fill one or more antidepressant prescriptions in a year, and the majority of prescriptions are written by primary care physicians. Community surveys suggest that the rates of antidepressant use exceed the prevalence of depression, especially among older adults. The 2003 Collaborative Psychiatric Epidemiologic Surveys found that 26% of recent antidepressant users did not meet DSM-IV diagnostic criteria for any psychiatric diagnosis according to a structured research interview. In the 2010 National Survey on Drug Use and Health, only 44% of respondents using antidepressants reported experiencing a major depressive episode during the past year.

In South Africa, there also continues to be an upward trend in antidepressant prescribing, which is similar to the pattern of prescribing found in other countries such as Iceland, Canada and the United States. This is despite evidence suggesting that rates of depression are not changing substantially. Although some of this trend is due to a rise in the number of patients receiving long-term treatment and an increase in treatment duration, the factors behind the rise remain poorly understood.

Even if we accept that antidepressants are effective, a recent Cochrane review suggests that only one in seven people actually benefits from them. Consequently, millions of people are enduring at least six months of treatment that may be ineffective. People who do not respond to antidepressants fare worse, and are subjected to switching of medications and polypharmacy, potentially exposing them to medication-related adverse effects and drug-drug interactions .

The increase in prescriptions is not only observed among adult patients. NHS data show that, in the UK, prescribing of antidepressants for children aged between 5 and 12 years has increased by more than 40% between 2015 and 2021.

EVIDENCE SUPPORTING THE ARGUMENT THAT ANTIDEPRESSANTS ARE OVERPRESCRIBED

Several factors such as easy accessibility of drugs, available treatment alternatives, clinical practice and national guidelines, perceived effectiveness by users, and also an effect of limited access to alternative treatment like psychotherapy, may influence patterns of prescribing and use of antidepressant drugs. Potential overprescribing mainly occurs with newer antidepressants, such as selective serotonin reuptake inhibitors (SSRIs), serotonin noradrenaline reuptake inhibitors (SNRIs) and mirtazapine, which are often prescribed for nonspecific psychiatric symptoms and subthreshold psychiatric diagnoses, such as adjustment disorders and bereavement.

Pharmaceutical companies aggressively market antidepressants, which contribute billions of dollars in revenue, increasing the pressure to prescribe. In some primary care settings, antidepressants are prescribed too casually, after too little evaluation time, and for instances of normal stress or everyday sadness, rather than for major depressive disorder (MDD). Rates of potential antidepressant overprescribing were highest when they were prescribed for non-specific psychiatric indications (e.g., insomnia) (18%), specific psychiatric indications (MDD and anxiety disorders) (3.5%), and general medical indications (e.g., fibromyalgia and neuropathic pain) (2.5%).

In a cohort study of new antidepressant prescriptions for elderly patients in Minnesota in the USA, potential antidepressant overprescribing occurred in 24% of 3 199 incident antidepressant prescriptions during the study period of 2005 to 2012. Overprescribing involved primarily newer antidepressants that were prescribed for non-specific psychiatric symptoms and subthreshold diagnoses. It was especially common for nursing home residents, patients with higher number of comorbid medical conditions, outpatients (who also take more concomitant medications), patients requiring urgent or acute services, and patients who were consulted virtually and prescribed antidepressants via telephone or e-mail. Virtual prescribing in particular has increased dramatically since the COVID-19 pandemic.

Surveys of antidepressant users suggest 30-50% have no evidence-based indication to continue. However, coming off antidepressants is often difficult due to fears of relapse, withdrawal symptoms and a lack of psychological treatments to replace maintenance treatment and prevent relapse.

Some patients even believe they will never feel “happy” without medication. The STAR*D trial showed clearly that antidepressants are more effective in the short term than long term, and about half of the patients relapse within a few months despite staying on the same treatment or dose.

Studies have shown that lower baseline depression scores among patients taking antidepressants were more common in patients living in more economically advantaged neighbourhoods. This pattern could reflect either a general tendency toward less severe depression in more advantaged patients or a tendency for more advantaged patients with mild depression to more often seek or receive treatment. Lower baseline depression scores were also more common among patients treated by psychiatrists, which might be explained by a lower threshold for prescribing among psychiatrists or the fact that patients seen in specialty settings may more often present with other indications for treatment, such as comorbid psychiatric conditions or a past history of severe depression, or family history.

Data also suggest a higher threshold for prescribing of antidepressants to members of racial/ethnic minority groups. This could reflect a bias in providers’ decision processes or a difference in patients’ treatment preferences.

Long-term use of antidepressants puts patients at increasing risk of side effects over time, some of which can be severe and long-lasting. The SSRIs frequently cause significant weight change, emotional flattening, dry mouth, headache, sleep disturbance, sexual dysfunction, and metabolic dysregulation that can remain after long-term use. Antidepressant side effects may be worse in older patients, and their use in people older than 65 years of age is associated with serious adverse events and increased mortality. A retrospective cohort study of over 61 000 patients from 570 general practices found absolute risks over 1 year of exposure to SSRIs (adjusted for comorbidities and a range of potential confounding variables) of 5.7% for falls, 2.6% for stoke or transient ischaemic attack, 0.5% for upper gastrointestinal bleeding, 0.38% for seizures, and 0.44% for hyponatraemia.

ARGUMENTS AGAINST OVERPRESCRIPTION

At the ECNP conference in 2024, Dr Gemma Lewis and colleagues reported the results of the PANDA (Prescribing ANtiDepressAnts) study. The purpose of the study was to provide more guidance about whether antidepressants are effective in a larger, broader, and more vaguely defined primary care population. Patients presenting to primary care with depressive symptoms were individually randomised to sertraline 100 mg daily or an identical placebo. The Patient Health Questionnaire (PHQ)-9 and

Generalised Anxiety Disorder 7 item (GAD-7) screening tools were used to assess changes mood and anxiety. The results showed that sertraline had a small effect on anxiety in the first 6 weeks of treatment, but no effect on depression. There was weak evidence for an effect on depression at 12 weeks. Treatment with sertraline was also associated with self-reported improvements in mental health. The investigators concluded that the results provide support for the use of SSRIs in a wider group of patients in primary care with mild to moderate symptoms who do not meet criteria for MDD and generalised anxiety disorder (GAD). In 2018, a large network meta-analysis including data from 522 trials of 21 antidepressant drugs (including 116 477 participants) concluded that all antidepressant drugs were more efficacious than placebo in adults with major MDD. However, the effect sizes were small.

In the Minnesota cohort study, the majority of incident antidepressant initiations did not represent potential overprescribing. When overprescribing did occur, it was associated with factors representing higher multimorbidity, clinical complexity, and severity. Antidepressant prescribing patterns and economic indicators and more specifically, the relationship between socioeconomic disadvantage and higher psychiatric morbidity, is also well documented. At an individual level, a number of studies have shown that there is a strong link between depression and unemployment, which has been further exacerbated by COVID-19, and also between socioeconomic disadvantage and deprivation and poor mental health. Therefore, it is likely that the recent growth of unemployment, poverty and inequality caused by the economic recession will lead to an increase in mental health problems, and a subsequent demand for mental health services and medication. This may be facilitated by recent trends in less stigmatisation and improved recognition of mental health disorders, and improved treatments for them. Studies also show that people from a lower socioeconomic background face more disabilities and a poorer prognosis, even when considering problem severity. This relationship is bi-directional whereby those who are unemployed are more likely to suffer from depression, while depression can increase the risk of becoming unemployed. Additionally, inflation has increased more than wages, leading to a rise in the cost of living. Such changes could have an impact on the prevalence of mental health problems and require changes in the services delivered.

CONCLUSIONS

While antidepressants have an irreplaceable role in the treatment of moderate to severe forms of depression and anxiety, in some cases (e.g., in combination with other medications, comorbidity, or age) the risks may outweigh the benefits, particularly in cases involving milder symptoms, which is probably the most common type of presentation in primary care.

The reality is that many patients often continue their antidepressants for months or even years after symptom remission, even though they might wish to discontinue treatment. Long-term antidepressant use then increases medicalisation, contrasts with patient wishes, and contributes to a reduced sense of recovery. Therefore, when pharmacotherapy is considered, antidepressant discontinuation deserves as much clinical attention as antidepressant initiation. If careful consideration of the risks and benefits of treatment suggest that the antidepressant is no longer necessary, then decisions to deprescribe should also take into account the potential harms of deprescribing, including serious withdrawal symptoms, and a potential relapse of symptoms (which may occur with some latency), particularly in those with a history of severe psychiatric disorders.

Both psychiatrists and GPs could better serve their patients by taking enough time, whenever possible, to ensure that the patient feels understood, to consider all alternatives before prescribing antidepressants, and to always give each patient sufficient information, regardless of one's fears that too much information might lead to non-compliance. This will ensure that one's practice is in keeping with the fundamental ethical imperative of 'informed choice'. When antidepressants are prescribed, they need to be carefully reviewed within a few weeks and thereafter at regular intervals.

Finally, feeling depressed when depressing things have happened is not a disorder that is always in need of biological correction. Depression is often a meaningful, healthy, functional, and potentially growth-enhancing response to losses and disappointments. Closer adherence to evidence-based prescribing, and to the ethical principle of informed consent as well as informed choice, may lead to a reduction in unnecessary, ineffective, and potentially harmful prescribing.

However, at the same time, we must be careful not to demonise antidepressants in the public eye, adding to the stigmatisation of mental illness, and erecting unnecessary barriers to effective care.

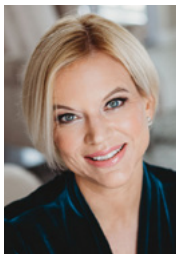
References available on request.

Avisha Chunilal is a psychiatrist in private practice, currently based at the Netcare Akeso Umhlanga. Her special interests include neuropsychiatry and she has worked very closely with the MS society of SA. **Correspondence: avishachunilal@gmail.com**

ADHD and epilepsy

Presented by Renata Schoeman

*This Report was compiled by **Dr David Webb**, based on a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held in 2024. The presentation was a feedback session based on presentations at the European College of Neuropsychopharmacology (ECNP) meeting in Barcelona, Spain in August 2024.The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd.*
Correspondence: dawebb@mweb.co.za



Renata Schoeman

EPILEPSY IN CHILDREN WITH ADHD

Attention-Deficit/Hyperactivity Disorder (ADHD) is the most common psychiatric condition in childhood affecting between 2% to 16% of the school-age population. Approximately 60% to 70% of patients' symptoms persist into adulthood, and the prevalence of ADHD in adults is estimated at 2.5% to 4.3%. Epilepsy is considered the most common neurological disorder in childhood, with a prevalence of 0.3% to 0.5% in children and 0.4% to 1% of adults, and seizure disorders are common in children with ADHD. Between 1.2% to 14% of children with ADHD will have seizures, and risk of seizures is some 4-fold higher in children with ADHD than in those without ADHD. Furthermore, epileptiform abnormalities on EEG are more common in children with ADHD without clinical seizures than in controls (approximately 7% and 3.5%, respectively); and are observed more often females and those with the inattentive subtype of ADHD (ADHD-I). Children with ADHD have an earlier seizure onset and greater frequency of seizures than children with epilepsy without ADHD, and compared to children with epilepsy alone, those with epilepsy and ADHD are more likely to have status epilepticus and treatment-refractory seizures.

ADHD IN CHILDREN WITH EPILEPSY

The prevalence of ADHD is 2 to 5 times higher in people with epilepsy than in those without, and symptoms of ADHD are present in up to 40% of children and 20% of adults with epilepsy. ADHD symptoms (e.g., cognitive impairment, fidgetiness, impulsivity) may be a first presenting symptom of epilepsy, and clinicians should have a high clinical suspicion of epilepsy in children who present with symptoms of ADHD, especially if it is the inattentive type. Attentional and executive dysfunction occur in 50% of adults with new onset epilepsy before treatment, and adults with epilepsy may have increased rates of inattention, hyperactivity, irritability, memory impairment, and decreased processing speed. However, identification of ADHD in patients with epilepsy is difficult because the symptoms and management related to epilepsy can directly contribute to attention deficits, and cognitive side-effects of antiepileptic drugs (AEDs) can further complicate the recognition of underlying ADHD.

DO ADHD AND EPILEPSY SHARE A COMMON PATHOPHYSIOLOGY?

ADHD-I subtype is more common than other ADHD presentations in people with epilepsy, and the high co-occurrence of epilepsy and ADHD-I has led to the suggestion that the two conditions may share a common underlying pathway. AEDs also increase the risk of ADHD symptoms. The ADHD comorbidity rate in children treated with antiepileptic drugs (AEDs) was higher than in those without AED therapy (28% versus 14%, respectively), and was higher in children treated with multiple AEDs than with a single AED. Furthermore, the incidence of comorbid ADHD in epileptic children treated with traditional single AEDs was significantly higher than those treated with novel single AEDs.

Dunbar and colleagues screened adult patients attending an Epilepsy Monitoring Unit at a level 4 epilepsy center using the Adult ADHD Self-Report Scale version (ASRS) and Conner's Continuous Performance Test (CPT). Of a total of 101 patients with seizures, 41% screened positive for ADHD on the ASRS and 54% on the CPT. A significantly greater proportion of patients with psychogenic nonepileptic seizures (PNES) screened positive than patients with epileptic seizures (64% vs 28%, respectively), suggesting that ADHD symptoms and PNES may share a common aetiology. However, whether that is neurological or psychiatric remains uncertain.

The relationship between ADHD and a comorbid seizure disorder may be an independent circumstantial one; i.e., they coexist by chance. However, they may also have a dependent circumstantial relationship. This may include a common genetic predisposition, or underlying brain pathology that causes both. The latter may involve brain network disorders, dysfunction of glutaminergic activity and neuronal excitability, dysfunction of monoaminergic and adrenergic neurons, or structural brain lesions and brain dysplasia. A multifactorial sequence of events

may be responsible for comorbid ADHD and seizures. When specific genetic and environmental variables interact, they may initiate a chain reaction of transcriptional changes in the brain, changing plasticity, apoptosis, and neurogenesis, and modifying behaviour or cognition before seizures begin.

There may be a direct causative relationship between the two conditions. Unlike in developmental ADHD, in epilepsy, attentional impairment is secondary to several unique factors, including (1) underlying brain pathology (which causes both the cognitive deficits and seizures); (2) seizures themselves (causing pre-ictal, ictal, and postictal symptomatology); (3) seizure localisation in linguistic, mnemonic, or other cognitive areas; (4) certain seizure types (e.g., absence seizures) may be behaviourally indistinguishable from mere inattention; (5) interictal EEG phenomena often result in disrupted attention; and (5) certain AEDs may be associated with neurologic/ neuropsychiatric ADHD-like adverse effects, including cognitive slowing, inattention, aggression and various behavioural disturbances.

All people with a diagnosis of ADHD should be asked about seizures. However, it must be born in mind that seizures in people with ADHD may not be typical, and they may not be recognised by either the patient themself or their caregivers. Therefore, a careful history (and collateral history) with further investigations as necessary is required to identify comorbid atypical (e.g., absence) and nocturnal seizures.

Both ADHD and epilepsy are commonly associated with other psychiatric comorbidities (e.g., anxiety and depression).

DIFFERENTIATING BETWEEN ADHD AND EPILEPSY

There are key differences between ADHD and epilepsy which may help to differentiate between the two conditions (Table 1). Importantly, in people with ADHD, symptoms tend to be persistent and affect daily activities in various settings, whereas those of epilepsy fluctuate and are more likely to be present during peri-ictal periods.

Studies suggest that the neuropsychological endophenotypes in developmental ADHD versus ADHD in epilepsy differ, with seizure-related variables predicting cognitive dysfunction. In a comparison of children with ADHD-I or ADHD-Combined subtype (ADHD-C) without seizures versus children with ADHD-I or ADHD-C with epilepsy, those with ADHD and epilepsy performed significantly worse on measures of intellectual function (e.g., Full-Scale IQ, Verbal IQ, Performance IQ), auditory attention, working memory and a continuous performance test. Among the children with epilepsy, those with ADHD-I performed more poorly on these tests than those with ADHD-C. Follow-up correlational analyses showed that seizure frequency and number of anti-epilepsy medications predicted cognitive dysfunction in the epilepsy groups.

EFFECT OF ANTI-EPILEPTIC DRUGS ON ADHD

AEDs are commonly used in psychiatry to control seizures, but also off-label for other conditions, including ADHD. Phenobarbital, topiramate and valproic acid induce symptoms of ADHD and impair cognition. Phenytoin, gabapentin and vigabatrin have adverse effects on cognition, and risks and benefits should be carefully considered before prescribing them. Oxcarbazepine, rufinamide and eslicarbazepine have a neutral effect and do not seem to aggravate or induce ADHD symptoms. The effect of levetiracetam on cognition is uncertain. Carbamazepine and lamotrigine (up to 300 mg/day), which are also used as mood stabilisers and in difficult-to-treat depression, are procognitive and exert favourable effects on attention and behaviour.

EFFECT OF ADHD DRUGS ON SEIZURES

Although the US Food and Drug Administration (FDA) issued a black box warning that methylphenidate (MPH) might reduce the seizure threshold, the evidence for this is extremely limited. Furthermore, the impact of MPH on EEG readings is variable; 32% of patients on treatment with MPH demonstrate abnormalities, but this figure is consistent with that expected from patients with ADHD regardless of treatment. In contrast, almost one third of patients show improvement on EEG findings if their ADHD is treated. Most studies and clinical registers suggest that MPH does not increase seizure risk in children and adolescents with active epilepsy and ADHD, and epilepsy should not automatically preclude patients from receiving ADHD medications.

Table 1. Key differences between ADHD and epilepsy

ADHD	Epilepsy
Numerous symptoms occur throughout the day and in various settings	Symptoms are more likely to arise during the peri-ictal interval
Restlessness, fidgeting, and hyperactivity are prominent	Fidgeting is less common (except in aura), but automatisms may exist
Disorganisation is clearly visible	The ability to organize may be intact
In unstructured surroundings or circumstances requiring waiting, impulsivity may be more obvious	Impulsivity may be absent
Globally, social relationships may be harmed	Social impairment is common, frequently as a result of social anxiety or isolation
Inability to follow complex commands on a regular basis	Fluctuating ability to follow complex commands

Furthermore, routine EEGs are not recommended during stimulant treatment, as changes in EEG with MPH, if they do occur, are usually unrelated to clinical seizure activity.

In a large population-based, self-controlled case series of almost 30 000 individuals aged 6-25 years without a previous history of seizures who received at least one MPH prescription during the study period (2001 to 2017), 269 had incident seizures. The overall incidence of seizures during methylphenidate treatment was 4.4 per 10 000 patient-years. Compared to non-exposed periods, there was an increased risk of seizures during the first 30 days of MPH treatment (incidence rate ratio of 4; 95%CI 2.0 to 7.7), but there was no increase in risk during the following 31-180 days of treatment or during subsequent treatment. These data suggest that patients with ADHD and epilepsy should be carefully monitored for the first month after starting treatment with MPH. Conversely, an analysis of data from more than 800 000 patients with or without epilepsy in a claims database found that ADHD medication was actually associated with a lower risk of seizures. It was postulated that modulation of dopamine receptor signalling by MPH may help to supress seizure activity.

RECOMMENDATIONS FOR SCREENING, DIAGNOSIS AND MANAGEMENT OF ADHD IN CHILDREN WITH EPILEPSY

Routine screening for psychiatric co-morbidity is recommended for all children with epilepsy. They should be screened for ADHD at 6 years of age, at diagnosis and annually thereafter, and after a change in AEDs. Especially after initiation of AEDs or changes in medication, it is important to specifically ask parents about cognitive difficulties or worsening symptoms. Formal cognitive testing is recommended for those who are struggling at school and who might have learning difficulties. Diagnosis and treatment should be managed by a multidisciplinary team, including healthcare providers with expert training in ADHD. In a child who presents with symptoms of ADHD, current treatments must be carefully reviewed, and medications that cause cognitive impairment (e.g., benzodiazepines, gabapentin) should be reconsidered.

Recommended ADHD treatments for children with epilepsy and ADHD are MPH and atomoxetine. MPH is preferred, because currently there no studies that have evaluated the long-term safety of atomoxetine and seizure threshold in children with epilepsy.

Recommendations for choosing AEDs in children with epilepsy and comorbid ADHD are as follows:

- Carbamazepine or oxcarbazepine are treatments of choice and may be beneficial for some patients with partial epilepsy due to positive effects on ADHD-related behavioural and mood problems and improvement in attention. Long-term use of carbamazepine has been linked with personality changes and lowered verbal IQ. Combination treatment with clonazepam is not recommended, due to an increased incidence of behavioural problems, especially increased severity of anxiety and depression and decreased performance IQ.
- Although valproate should generally be avoided in children with ADHD, there is some evidence that it might be useful in lowering impulsivity in ADHD and reducing concomitant oppositional defiant disorder.
- Topiramate has the potential to cause significant behavioural changes in pediatric epilepsy with ADHD and should generally be avoided.
- Levetiracetam is helpful for nocturnal focal epileptic discharges, but up to 40% of children may experience non-psychotic behavioural changes, including aggression and agitation.
- Lamotrigine is effective at lowering epileptic discharges and improving behaviour and attention.
- AEDs and ADHD medications should be used with caution in this patient population because of the potential for negative pharmacokinetic drug-drug interactions and untoward side effects of the medications. Importantly, carbamazepine reduces the serum concentration of MPH, resulting in reduced efficacy.

CONCLUSION

Epilepsy is a common disease in children and adolescents, and in one-third of cases it is associated with ADHD symptoms. ADHD symptoms in patients with epilepsy and their impact on cognitive function and normal development are frequently underestimated and they are undertreated. Even if it is recognised, undertreatment of ADHD is compounded by the myth that stimulants may lower seizure threshold. Furthermore, some antiepileptic drugs have the potential of inducing or worsening ADHD symptoms and these should be avoided.

In comparison to those with epilepsy without ADHD, children with comorbid epilepsy and ADHD have a significantly decreased quality of life, so early recognition and diagnosis of coexisting ADHD, and timely intervention, are essential to improve prognosis. Clinicians need to maintain a high suspicion for ADHD, and especially ADHD-I, in children with epilepsy. It is easy to dismiss a child as a 'dreamer', when in fact they might be suffering from absence seizures! MPH is a safe and effective treatment for ADHD in most patients with comorbid epilepsy.

References available on request.

Renata Schoeman has been in full-time private practice as a general psychiatrist (child, adolescent, and adult psychiatry) since 2008, currently based in Oude Westhof (Bellville). As a psychiatrist, she has special interests in cognition (i.e., disorders affecting attention, concentration, learning and memory – such as ADHD), eating disorders, mood disorders and anxiety disorders.

Renata also holds appointments as associate professor in Leadership (USB), and as head of the Healthcare Leadership MBA specialization stream. She serves on the Ministerial Advisory Committee on Mental Health (South Africa),where she chairs the sub-committee on Child, Adolescent and Family Mental Health. She is the convenor of the South African Society of Psychiatrist (SASOP) special interest group for ADHD, and co-founder of the Goldilocks and The Bear Foundation (www.gb4adhd.co.za) **Correspondence: renata@renataschoeman.co.za**

Why should we care about anhedonia in major depressive disorder?

Presented by Mayuri Ramdhial

*This Report was compiled by **Dr David Webb**, based on a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held in 2024. The presentation was a feedback session based on presentations at the European College of Neuropsychopharmacology (ECNP) meeting in Barcelona, Spain in August 2024.The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd.* **Correspondence: dawebb@mweb.co.za**

Mayuri Ramdhial

ANHEDONIA

Anhedonia is a core characteristic of major depressive disorder (MDD) and is considered to be one of the most impairing symptoms. It is common, occurring in as many as 70% of depressed patients, and presents as an inability to experience pleasure and loss of interest in previously enjoyable activities. As might be expected, it has substantial impact on psychosocial and daily functioning, and health-related quality of life, and is associated with a poor response to treatment. Patients with anhedonia report feelings of disconnection and loss of belonging, which contribute to an increased risk of suicidality.

The underlying pathology includes disturbances of central dopaminergic, mesolimbic and mesocortical reward circuit pathways in the brain, which are responsible for hedonic drive, motivation, cognition and perception. Anhedonia may be differentiated into two presentations, consummatory anhedonia and anticipatory anhedonia. The first describes the inability to feel pleasure during current events ('liking'). It is characterised by reduced joy or interest in interpersonal or social interactions and natural rewards, including eating and sexual behaviour. In contrast, anticipatory anhedonia is an inability to predict future experience of pleasure, presenting with reduced motivation to do pleasurable things ('wanting').

In patients with MDD, anhedonia is a significant predictor of impaired psychosocial functioning that can persist despite patients achieving a symptomatic response to antidepressant treatment. It is associated with higher rates of social withdrawal, social impairment, reactivity of mood and rejection sensitivity, brooding about past events and diurnal mood variation. Conversely, improvement in anhedonia is significantly associated with improvements in psychosocial functioning. Clinicians may underestimate the prevalence and severity of anhedonia in patients with MDD. Patients in both acute and remission phases of MDD typically report a higher prevalence and impact of anhedonia than their clinicians. These differences are most apparent for patients in the remission phase of MDD, of whom more than half may continue to experience anhedonia.

The mental health effects of anhedonia can, in turn, impact physical health. Anhedonia may diminish motivation to engage in physical activity and exercise, leading to reduced frequency and duration of physical activities. Conversely, engaging in physical exercise has been shown to significantly improve symptoms of anhedonia.

Anhedonia, and especially anticipatory anhedonia, is associated with increased risk of suicide in both the general population and in psychiatric patients with MDD. It predicts poor response to antidepressant treatment, longer time to achieve remission, and a significantly lower likelihood of achieving remission from depressive symptoms. In one study of adolescents with MDD, in comparison with other negative symptoms including depressed mood, somatic symptoms, morbid thoughts and observed depression, anhedonia was the only unique negative predictor of both time to remission with a selective serotonin reuptake inhibitor (SSRI) and the number of depression-free days over a 24 week period. Consequently, anhedonia is not only an important treatment target in people with depression, but also a potential marker of severity of disease.

The Montgomery-Asberg Depression Rating Scale (MADRS) also contains a subscale for assessing anhedonia. It consists of five items: apparent sadness, reported sadness, concentration difficulties, lassitude, and inability to feel.

Treating anhedonia in clinical practice can be challenging. Traditional antidepressant strategies often demonstrate poor efficacy against anhedonia, which, in turn, predicts treatment non-response. However, some pharmacological treatments have been associated with improvements in anhedonia. A systematic review evaluated the effects of pharmacologic treatments on measures of anhedonia among adults with depression using data from 17 studies. It concluded that monoaminergic antidepressants, glutamatergic agents, psychedelics and stimulants have, in varying degrees, been associated with improvements in anhedonia. Other studies have demonstrated that both agomelatine and vortioxetine may be helpful to improve symptoms of anhedonia. Improvements in SHAPS and the MADRS anhedonia subscale after treatment with vortioxetine correlated with improvements in general function and quality of life. However, more research is needed to understand the comparative efficacy of pharmacological treatments on anhedonia and the impact of improvements in anhedonia on measures of function and quality of life.

EMOTIONAL BLUNTING

Emotional blunting, which is experienced by around 50% of patients with MDD, is described as emotional indifference (not caring), or numbing or flattening of emotions (an 'inability to feel'). Although it includes symptoms of anhedonia (inability to feel positive emotion), patients also describe an inability to feel negative emotions (e.g., unable to cry). Both of these significantly impact relationships and activities of daily living. Subjects with emotional blunting report feeling numb and less able to laugh or cry; they have less empathy, often lose inspiration and creativity, and they feel indifferent towards others.

For patients with MDD, emotional blunting is a strong predictor of poor functioning and is associated with worse general wellbeing and health-related quality of life. Like anhedonia, the impact of emotional blunting is often underestimated by clinicians. Although it is typically more pronounced in the acute phase of MDD, significant negative impacts of emotional blunting on functioning, well-being and health-related quality of life are also reported among patients in remission. Specific areas where patients report the greatest difficulties include participation in social activities or sport, having satisfactory sexual relationships, activities at work, and cognitive functions.

Emotional blunting can be caused by antidepressant treatment. In one study including over 700 patients with MDD, almost half identified their antidepressants as a cause of inability to feel emotions, and around 40% said that they had stopped, or were considering stopping, their antidepressant for that reason. It is particularly associated with higher doses of SSRIs and may become evident as early as 1 week after starting treatment. input. Antidepressant-induced emotional blunting is dose-dependent and reversible, and the main strategy for treatment is dose reduction. It is thought that emotional blunting on SSRI treatment is related to serotonergic effects in the frontal lobes and serotonergic modulation of midbrain dopaminergic systems, which project to the prefrontal cortex.

By enhancing serotonergic transmission, SSRIs activate gamma-aminobutyric acid (GABA) interneurons, dampening down the noradrenergic and dopaminergic

Other antidepressants do not necessarily share the emotional blunting effects of the SSRIs. In a study comparing agomelatine with escitalopram for patients with MDD, patients treated with agomelatine were significantly less likely to report emotional blunting than those on escitalopram (16% versus 53%, respectively). Vortioxetine has a multimodal mechanism of action, acting on multiple serotonin receptor subtypes, and modulating the activity of dopamine, acetylecholine, noradrenaline and histamine. It does not have a downstream negative effect on dopamine, but rather a positive effect, and appears to actually reduce emotional blunting. In a study designed specifically to assess the impact of vortioxetine on emotional blunting, patients with MDD who experienced a partial response to treatment with SSRI or serotonin noradrenaline reuptake inhibitor (SNRI) monotherapy at an adequate dose were switched to vortioxetine for 8 weeks. Vortioxetine significantly improved emotional blunting, with broad improvements in both positive and negative emotions obtained from as early as the first week of treatment. Furthermore, vortioxetine significantly improved social motivation, as well as cognitive and physical energy. By week 8, improvements in energy and motivation and overall functioning directly correlated with improvements in emotional blunting.

The severity of anhedonia can be quantified using the Snaith-Hamilton Pleasure Scale (SHAPS) (Table 1). SHAPS is a 14-item, self-report scale that measures 4 domains, namely social interaction, food and drink, sensory experience and interest/past-times. It is scored on a 4-point Likert scale, where 0 = strongly disagree, 1 = disagree, 2 = agree, 3 = strongly agree. Higher scores indicate worse symptom severity.

Table 1. Snaith-Hamilton Pleasure Scale (SHAPS)

1.	I would enjoy my favourite television or radio programme
2.	I would enjoy looking smart when I have made an effort with my appearance
3.	I would enjoy being with my family or close friends
4.	I would enjoy reading a book, magazine or newspaper
5.	I would find pleasure in my hobbies and pastimes
6.	I would enjoy a cup of tea or coffee, or my favourite drink
7.	I would be able to enjoy my favourite meal
8.	I would find pleasure in small things, e.g., bright sunny day, a telephone call from a friend
9.	I would enjoy a warm bath or refreshing shower
10.	I would be able to enjoy a beautiful landscape or view
11.	I would find pleasure in the scent of flowers or the smell of a fresh sea breeze or freshly baked bread
12.	I would get pleasure from helping others
13.	I would enjoy seeing other people's smiling faces
14.	I would feel pleasure when I receive praise from other people

THE IMPACT OF CHILDHOOD TRAUMA ON PATIENTS WITH MDD

A history of childhood trauma is a risk factor for depression in adulthood and is associated with greater illness complexity. Childhood trauma is more commonly reported by people with MDD compared to those without. In one study, approximately two thirds of patients reported two or more childhood traumatic events, compared to just over one quarter of control individuals. Patients with MDD and a history of trauma are at greater risk of early onset depression, relapse, suicidality and chronic depression.

Childhood trauma is associated with altered core reward circuitry that predominantly impacts on the anhedonic aspect of MDD, and patients with childhood trauma also experience higher rates of emotional blunting, as well as functional impairment. Of all types of traumatic events, abuse is the strongest predictor of a poor response to antidepressant treatment and lower rates of remission, especially with SSRIs. In contrast, treatment with vortioxetine has been shown to improve symptoms of depression and overall functioning within 8 weeks in patients with MDD and a history of childhood trauma. In a long-term relapse prevention study, compared with placebo, patients treated with vortioxetine had a lower risk of relapse, better functioning and better overall health-related quality of life.

CONCLUSION

Anhedonia and emotional blunting are common among patients with MDD and are often associated with childhood trauma. Patients with these conditions respond less well to some antidepressants and are more prone to relapse. Vortioxetine may help to relieve symptoms of anhedonia and emotional blunting, including in patients who experienced childhood trauma, and improvement in these symptoms is associated with lower risk of relapse, improved functioning and better health-related quality of life.

References available on request.

Mayuri Ramdhial is a general psychiatrist in private practice in Durban. Her primary interests are in neuropsychiatry and consultation liaison psychiatry.She has previously worked extensively in the field of HIV Management in clinical medicine, research and as a Deputy Director at the Reproductive Health and HIV Research unit.
Correspondence: mramdhial@yahoo.com

Innovating Approaches in Prevention of Suicide Using Biomarkers and Data

Presented by Frans A Korb

*This Report was compiled by **Dr David Webb**, based on a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held in 2024. The presentation was a feedback session based on presentations at the European College of Neuropsychopharmacology (ECNP) meeting in Barcelona, Spain in August 2024.The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd.* **Correspondence: dawebb@mweb.co.za**

Frams Korb

Suicide is a societal epidemic and a public health crisis. According to the Centers for Disease Control and Prevention (CDC), in the United States in 2021 there was a death by suicide every 11 minutes, equating to nearly 50 000 suicide deaths in the USA every year. In the same year, an additional 1.7 million people attempted suicide, and over 12 million more reported having suicidal thoughts.

SUICIDAL THOUGHTS AND BEHAVIOURS IN INDIVIDUALS WITH BIPOLAR DISORDER: INSIGHTS FROM BRAIN IMAGING

An understanding of the brain regions involved in suicidal thoughts and behaviours might facilitate targeted therapy to reduce suicide risk. Using functional magnetic resonance imaging of brains from patients with bipolar disorder (BD), a condition that carries a high risk of suicide, and applying intrinsic connectivity distribution (ICD), Anjali Sankar and colleagues have attempted to identify brain networks that might be involved in suicidal ideation and behaviours. ICD is a whole brain graph-theoretical approach, to identify hubs of functional connectivity (FC) disturbances associated with suicide attempts.

The investigators compared ICD data from BD patients with prior suicide attempts to ICD data from BD patients without suicide attempts and healthy volunteers. The data were collected while the subjects performed a task involving implicit emotion regulation processes important in BD and suicide behaviours. Areas of significant differences between groups implicated the ventromedial prefrontal cortex (vmPFC) and right anterior insula (RaIns) as central hubs of dysfunction, with reduced ICD in patients with suicide attempts, and this was associated with altered functional connectivity between these hubs and other ventral frontal, temporopolar and cerebellar cortices. Reduced functional connectivity in the VmPFC and RaIns were negatively associated with suicidal ideation severity (measured with the Beck Scale for Suicidal Ideation), and in the vmPFC with hopelessness (Beck Hopelessness Scale) and attempt lethality severity (Beck Medical Lethality Scale). Identification of abnormal functional connectivity in these brain networks may provide targets for novel therapeutics and psychotherapeutic approaches to reduce the high levels of hopelessness, suicidal ideation, and suicide behaviour, and thereby the high risk of suicide in individuals with BD.

PREDICTING SUICIDAL BEHAVIOUR USING MACHINE LEARNING AND MEDICAL CHARTS

Technological and statistical methods (such as smartphones, wearables, digital phenotyping and machine learning) have been used successfully in other areas of medicine to predict disease risk (e.g., heart conditions and stroke risk scores). Several studies have used machine learning (i.e., use of clinical data to develop algorithms) to try identify who will attempt suicide in the future by creating a 'risk score' using all available data in the medical record (for example, past and current diagnoses, prior suicide attempt history and reasons for admission). While most of these examined model performance with retrospective data (that is, suicidal thought and behaviour status was already known), there is less research on how well these models perform prospectively when assessing new instances of suicidal thoughts and behaviours, which is a particular concern in the case of identifying state-sensitive risk factors for these outcomes. If these risk scores can predict future suicidal behaviours with a sufficient degree of accuracy, they can be added to medical record software and used to inform clinical care. However, thus far, attempts to accurately predict suicide risk have been unsuccessful.

IMMUNE BIOMARKERS IN PATIENTS WITH SUICIDAL BEHAVIOURS

Inflammation is involved in the pathophysiology of several major psychiatric disorders that are also linked to suicidal behaviour, such as mood disorders, schizophrenia and substance use disorders. Previous studies have suggested that immune biomarkers might helpful in guiding diagnosis, predicting clinical outcome and, therefore, improving the understanding of the pathophysiology of mental disorders. Therefore, to evaluate whether biomarkers can differentiate between psychiatric disorders with and without suicidal behaviour history and help to distinguish between these patients and healthy individuals, investigators performed a meta-analysis comparing immune biomarkers in subjects with and without suicide attempt history or death by suicide. They used data from 32 studies, including 2 679 people with suicidal behaviours and 6 839 comparison subjects, and examined four immune-related biomarkers (CRP, IL-6, TNF-α band, IL-1β).

The analyses included three distinct sets of comparisons; i.e., mixed psychiatric populations with and without suicidal behaviour; major depressive disorder with and without suicidal behaviour; and patients with suicidal behaviour compared to healthy controls. Suicidal behaviour is more closely related to suicide attempts or death than ideation.

Higher CRP blood levels were associated with recent but not remote suicidal behaviour, suggesting that it might have potential as a predictor of imminent risk of suicidal behaviour. This was true for patients with major depressive disorder (MDD), bipolar disorder and schizophrenia. Although overall IL-6 blood levels were higher in patients with suicidal behaviour compared with healthy controls, there was no difference in IL-6 levels in patients with MDD with suicidal behaviour compared to those without suicidal behaviour. There was no association between TNF-α band, IL-1β and suicidal behaviour.

SOUTH AFRICA HAS ONE OF THE HIGHEST RATES OF SUICIDE IN THE WORLD

According to the World Health Organization, three countries in Southern Africa, including South Africa, rank in the top ten countries with the highest rates of suicide in the world (Table 1).

Table 1. Ten countries with the highest suicide rates (2021)

Ranking	Country	Suicide rate per 100 000 people
1	Lesotho	72.4
2	Guyana	40.3
3	Eswatini	29.4
4	South Korea	28.6
5	Kiribati	28.3
6	Micronesia	28.2
7	Lithuania	26.1
8	Suriname	25.4
9	Russia	25.1
10	South Africa	23.5

In South Africa, men are five times more likely to die from suicide than women. In 2019, 13 774 people died by suicide in South Africa, of whom 10 861 were men and 2 913 were women, equating to prevalence rates of 37.6 and 9.8 per 100 000 men and women, respectively.

In a recent survey among more than 28 000 students across 17 South African universities, 24% reported suicidal ideation in the past 30 days. This is more than double the reported prevalence in the general population (9%). One in four of these students (6%) said that they had suicidal ideation most or all of the time; one third reported that they were very likely to act on their suicidal ideation, and 29% said they were somewhat likely to act on it. Among this population, factors associated with suicidal ideation were younger age, identifying as female or gender non-conforming, Black African, lower levels of parental education, and sexual minorities.

These figures highlight the urgent need for attention to mental health in South Africa, in particular among men and adolescents. Furthermore, practical suicide prevention interventions are required to effectively support the many South African students who report suicidal ideation,

NEW CONCEPTS OF SUICIDE AND SUICIDAL BEHAVIOURS

One of the reasons for lack of progress in suicide research is that conventional approaches to suicide have been based on the assumption that it is generally a symptom of another mental disorder. The classical concept of suicide (pre-suicidal syndrome, or suicidal crisis), that of “psychic pain” or “cry-for-help”, is a transdiagnostic concept that focuses on the emotional and psychological aspects of suicidal behaviours, regardless of their potential association with mental disorders. It brings attention to the subjective experiences of patients with suicidal behaviour, which needs to be considered when planning effective risk assessment and suicide prevention methods. The Diagnostic and Statistical Manual of Mental Disorder, Fifth Edition (DSM-5) includes suicidal behaviour associated with mental disorders, and also under a specific condition characterised as “Suicidal Behaviour Disorder” (SBD). According to proposed criteria, SBD is defined as a suicide attempt within the past 24 months. The diagnosis is not applied to suicidal ideation or to preparatory acts, and should not be associated with states of delirium or confusion, or political or religious objectives.

Suicide Crisis Syndrome (SCS) is characterised by intense and persistent feelings of hopelessness and entrapment, so that the individual feels trapped in a situation experienced both as intolerable and inescapable. Additional symptoms include (1) Affective disturbance, characterised by unbearable emotional pain, powerful and deep negative (depressive) feelings, extreme anxiety with unusual physical sensations, and acute anhedonia; (2) Loss of cognitive control, including ruminations (repetitive and circular thinking), cognitive rigidity (inability to consider a different perspective), failed thought suppression (unwanted and uncontrolled invasion of negative thoughts into consciousness), and ruminative flooding (loss of control over thoughts accompanied by headaches or head pressure); (3) Hyperarousal, with agitation/restlessness, hypervigilance (an intense and exaggerated responsiveness to sensory inputs), irritability, and insomnia; and (4) Social withdrawal characterised by avoidance of social engagements, contact and conversation with others. Using these criteria, several SCS assessment instruments have been developed which have demonstrated predictive validity for imminent suicidal ideation, preparatory actions and suicidal attempts.

In recent years, two complex and distinct syndromes have been described that may help to improve the accuracy of assessing pre-suicidal psychopathology, thereby helping to predict suicidal behaviour. They are Acute Suicidal Affective Disturbance (ASAD) and Suicide Crisis Syndrome (SCS) (Table 2). Of these two syndromes, the SCS has received the most attention.

Table 2. Proposed brief diagnostic criteria for suicide-specific syndromes

Acute Suicidal Affective Disturbance (ASAD)	Suicide Crisis Syndrome (SCS)
A. A drastic increase in suicidal intent over the course of hours or days, as opposed to weeks or months B. One (or both) of the following: marked social alienation (e.g., social withdrawal, disgust with others, perceptions that one is a liability on others) and/or self-alienation (e.g., self-hatred, perceptions that one's psychological pain is a burden) C. Perceptions that one's suicidality, social alienation, and self-alienation are hopelessly unchangeable (suicide is the only way out) D. Two (or more) manifestations of overarousal (i.e., agitation, irritability, insomnia, nightmares)	A. Persistent or recurring feeling of entrapment and urgency to escape or avoid a perceived inescapable and unavoidable life situation. Although death may appear as the only escape, explicit suicidal ideation need not be (though may be) present B. Affective, behavioural, and cognitive changes associated with the experience of entrapment, including at least 1 item from a to d: a. Affective disturbance b. Loss of cognitive control c. Disturbance in arousal d. Social withdrawal

GENERAL PSYCHIATRIC ASSESSMENT OF SUICIDAL PATIENTS

Yager and Feinstein identified five general aspects that should be considered when assessing suicide risk and councelling people with suicidal ideation. They include the following:

1. Capacity:

(i) To what extent is the patient's judgment impaired by psychiatric or medical conditions?

(ii) Do they understand and fully appreciate their diagnosis, condition, prognosis, and treatment options, and the impact of the decision to take their own life and its consequences on others?

(iii) Even among patients who retain formal "capacity," suffering and cognitive narrowing that accompany mood and psychotic disorders can limit perspectives, often out of awareness.

2. Contingencies:

(i) What circumstances lead this person to want to die at this point in life?

(ii) What occurrences might permit the patient to put off deciding to act on their suicidal ideation?

3. Protective factors:

(i) What reasons might the patient have for continuing to live?

(ii) Research shows that therapeutic attention (e.g., psychologist, life councellor) to strengthening reasons for living may help avert suicide.

4. Resources:

(i) Would the patient benefit from adjunctive referrals to other health professionals, attorneys, spiritual advisors, groups, other patients, or institutions who might be able to help improve some modifiable factors?

5. Legal concerns:

(i) Has the patient created a will, living will, and durable power of attorney?

(ii) Discussing these issues might generate therapeutic possibilities via reflection and reconsideration.

CONCLUSION

Suicide is a major global health concern. In particular, South Africa has one of the highest suicide rates in the world, and suicidal ideation and behaviours in this country require urgent attention. Recent progress in suicide research includes development of novel assessment tools that might be helpful to identify individuals who are at imminent risk. Those people require careful management to address suicidal intent, manage associated mental health concerns, and to improve coping skills.

The South African Depression and Anxiety Group (www.SADAG.org) has a number of 24-hour help lines, including a suicide crisis helpline, and a dedicated helpline for healthcare workers.

References available on request.

Frans Korb is currently in full-time private practice as a Specialist Psychiatrist in Sandton. He is on the Board and has been past Board Chairman of the South African Depression and Anxiety Group (SADAG) since its inception in 1994. Currently he is the editor of 'Mental Health Matters' (Journal for general practitioners on mental health) and on the Editorial Board of 'Neuron SA'.
Correspondence: frans@shrinks.co.za

From Diagnosis to Treatment: Exploring Challenges and Unmet Needs in PTSD in Clinical Practice

Presented by Theshenthree Govender

*This Report was compiled by **Dr David Webb**, based on a presentation at the Dr. Reddy's Psychiatry Academic Weekend meeting held in 2024. The presentation was a feedback session based on presentations at the European College of Neuropsychopharmacology (ECNP) meeting in Barcelona, Spain in August 2024.The meeting, speakers and writing assistance were sponsored by Dr. Reddy's Laboratories Pty. Ltd.* **Correspondence: dawebb@mweb.co.za**

Theshenthree Govender

Trauma is common in South Africa. It is estimated that three in four South Africans experience at least one trauma and half experience more than one trauma. Difficulty in dealing with a traumatic experience is a common reason for people to seek assistance from mental health professionals. In the past few years, KwaZulu Natal specifically has been exposed to public instability, rioting and looting, and extreme weather conditions. During the looting, in the streets there was no escape; and people were exposed to dead bodies that were left in the road for days, because the police were unable to remove them. People were trapped in their homes and afraid to leave. In addition, there have been serious adverse weather conditions, including floods and a tornado. These conditions were inescapable, leaving people with extreme anxiety and a sense of dread. It is unsurprising that people exposed to these conditions should find themselves in a state of sustained and pathological psychological stress and have trouble coping with that.

The management of posttraumatic stress disorder (PTSD) is challenging. It usually requires multiple sessions of psychotherapy with consideration of adjunctive medication; however the effects of both of these approaches may be limited. Furthermore, vicarious trauma through repeated exposure to accounts of patients' experiences of traumatic events can leave the clinician with compassion fatigue, depression, anxiety and struggles with their own mental health.

WHAT CAUSES PTSD?

PTSD is caused by traumatic stress – exposure to an event that has potential to cause significant harm or which threatens the individual's life. Inescapable, unpredictable, repeated and severe life-threatening events are more likely to result in PTSD. Examples include mass violence events, such as war, ethnic cleansing, genocide, terrorism, massacre (e.g., mass shooting), and looting; violent assault, such as military combat, rape, or physical assault; and other traumas, including disaster, serious accident or illness, physical or emotional abuse, or exposure to details of violent or accidental traumatic events.

Studies suggest that PTSD is heritable, and various genes (e.g., FKBP5) that regulate the fear and stress circuitry may mediate risk and resilience for PTSD. Individual risk factors include female sex, younger age, low education, poor social support, early life stress, and previous trauma. Concurrent stressors and psychiatric comorbidities also increase vulnerability to inability to cope after experiencing a traumatic event.

SYMPTOMS OF PTSD

Symptoms of PTSD include intrusive thoughts, hyperarousal, difficulty concentrating, mood disorders, and avoidant behaviours (Table 1).

Table 1. Symptoms of PTSD

Intrusive reliving	Hyperarousal	Cognition and mood	Avoidance
• Distressing memories • Dreams • Flashbacks of places, people and the situation • Psychological distress • Physiological reactivity	• Hypervigilance • Exaggerated startle response • Anger outbursts • Recklessness • Poor concentration • Insomnia	• Negative beliefs and emotions • Blame, shame, and/or guilt • Detachment and/or numbing • Anhedonia • Memory gaps	Effortful avoidance of trauma-related: • Thoughts • Places • People • Situations • Conversations

STEPS IN MANAGEMENT OF PATIENTS WITH PTSD

STEP 1: Identification

Identify the person at risk of, or with PTSD or clinically important symptoms of PTSD. Patients don't always present with typical symptoms, they may have found resilient ways to accommodate for symptoms.

STEP 2: Planning

Planning for the person at risk, determining what model of care is most appropriate, and supporting transitions between services and promoting access to services for people with PTSD.

STEP 3: Patient support

Providing information and support to patients and planning treatment and supporting engagement. Nonadherence is a significant contributor to failure of treatment.

STEP 4: Treatment

Treatment for PTSD must be individualised. Interventions that may be offered include trauma-focused cognitive behavioural therapy (CBT); eye movement desensitisation and reprocessing (EMDR); supported trauma-focused, computerised CBT; CBT for specific symptoms; and drug treatwment.

PSYCHOTHERAPY

Psycho-therapy is always at the center of treatment of PTSD and is recommended first-line by the American Psychiatric Association (APA) and National Institute for Clinical Excellence (NICE). The APA recommends use of CBT, cognitive processing therapy (CPT), cognitive therapy (CT), and prolonged exposure (PE). CBT targets current problems and symptoms by helping the patient make sense of the relationship between thoughts, feelings, and behaviours that may lead to difficulties in functioning. In contrast, because patients often relive the trauma as opposed to acknowledging the memory of the trauma, CT aims to interrupt disturbing thought patterns by modifying pessimistic evaluations and memories of the trauma. CPT helps patients learn how to challenge unhelpful beliefs related to the trauma so that they can change their perspective on the traumatic event. PE teaches patients to gradually approach their trauma-related memories, feelings, and situations with the aim of helping them to stop actively avoiding trauma-related memories and cues. T hese psychological treatments are not mutually exclusive, and patients are often offered a combination of these approaches.

A number of digital technologies can be used to monitor symptoms in patients with PTSD and provide therapeutic intervention. Examples include telehealth, ecological momentary assessment (EMA), virtual reality exposure and internet-based interventions. Especially since the widespread use of digital media for remote communication during the COVID-19 period, telehealth (e.g., consultation via internet video platforms) has become popular. Remote consultation saves time and increases access to therapy. With EMA patients can report their symptoms in real time on apps as opposed to having historic data, which allows treatment to be individualised. However, this approach is dependent on patient compliance with reporting and may be limited by failure of technology.

Despite digital technology, access to psychotherapy and sustained successful engagement with a psychotherapist remain challenges to providing successful intervention for patients with PTSD. There are too few psychotherapists and psychiatrists to meet the demand for treatment, and even in the USA only 42% of patients with PTSD initiate individual psychotherapy within 6 months of receiving their diagnosis. Of those, only 12% complete a sufficient

course of individual psychotherapy. Psychotherapy is time-intensive; effective treatment requires up to 12 to 15 weekly or bi-weekly sessions, so it requires a considerable commitment on the part of the patient. There are also likely to be challenges in terms of funding of these sessions.

PHARMACOTHERAPY

Pharmacotherapy is often provided alongside psychotherapy. Although a range of pharmacological interventions are used for treatment of PTSD, sertraline and paroxetine, are approved by the US Food and Drug Administration (FDA) and European Medicines Agency (Escitalopram and citalopram are both registered in Europe for panic disorder), and their efficacy depends on adequate dosages and duration of treatment for maximum benefit.

However, there are key limitations associated with pharmacological interventions for PTSD. Response rates to pharmacological treatment are poor and rarely exceed 60%. Only 20-30% of patients treated with SSRIs achieve clinical remission. Symptom improvement varies across different populations and/or with trauma types; for example, by gender and between civilian and veteran cohorts. Medication-related adverse effects are common and limit compliance and adherence to therapy. Some of these include sexual dysfunction, weight gain, nausea, vomiting, abdominal pain and dyspepsia, dizziness, agitation, anxiety, insomnia, headache, and tremor. Medication non-adherence is a common observation and is independent of psychiatric and medical comorbidities. Patients forget to take their medication, they may decide to skip medication and overall they are more likely to not take medication as prescribed

Because pharmacotherapy focuses on correcting the imbalances in the neurotransmitters involved in the potentiation of PTSD symptoms and psychotherapy aims to modify the patient's appraisal of the traumatic event and the significance attached to it, it is believed that the combination of the two interventions may further enhance treatment outcomes. However, despite the theoretical promise of combining pharmacotherapy with psychotherapy, there is limited evidence to show that this approach actually does improve outcomes, so the actual effectiveness of this approach remains uncertain.

VICARIOUS TRAUMA AND COMPASSION FATIGUE

There is a wealth of evidence to suggest that significant post-traumatic distress is not limited to the victim alone. Bearing witness to an event, having to listen to explicit accounts of a traumatic event, or even having explicit knowledge of an event, have been shown to cause serious, prolonged anxiety in varying degrees.

Vicarious trauma, also known as secondary traumatic stress, is a phenomenon caused by such indirect exposure to a traumatic event that can profoundly impact mental health. It changes attitudes to day to day activities, changes the way the individual experiences themself and the world around them, and causes the affected individual to behave differently.

DSM-5 criteria acknowledge the effects of experiencing repeat or extreme exposure to aversive details of traumatic events. In addition to direct exposure, diagnostic criteria for PTSD include (i) Witnessing, in person, the event(s) as it occurred to others; (ii) Learning that the traumatic event(s) occurred to a close family member or close friend, and (iii) Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse). Although DSM-5 specifies that this latter criterion does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related (e.g., telehealth management of PTSD patient by a professional), it is important to be aware that some people can have PTSD symptoms, such as nightmares, for years after being exposed to disturbing images in the media, movies or online. There are no specific guidelines or policies dedicated solely to management of individuals with vicarious trauma.

Vicarious trauma can have a significant impact on the mental health of healthcare professionals, including psychiatrists. Potential consequences include emotional exhaustion, increased stress levels, compassion fatigue, and potential burnout. Potential repercussions on patient care include reduced empathy and compassion, compromised treatment outcomes, and challenges in maintaining a therapeutic relationships. In South Africa there are no formal channels to address to impact of vicarious trauma on psychiatrists' health. Talking to colleagues can help, but formal approaches for intervention are urgently needed. Compilation of guidelines for management and fostering a supportive community among psychiatrists is essential for addressing vicarious trauma and compassion fatigue, promoting mental health awareness, and enhancing the well-being of mental health professionals.

References available on request.

Theshenthree Govender is a specialist psychiatrist in private practice since 2009 and runs her specialist practice from Life Entabeni Hospital and Lenmed Ethekwini Hospital and Heart Centre in KwaZulu Natal.
Correspondence: shen@shrink.co.za

SASOP Southern Gauteng hosts psychiatry exam preparation workshop for registrars and medical officers

Yumna Minty

Since early 2023, the South African Society of Psychiatrist's (SASOP) Southern Gauteng subgroup has hosted a clinical examination preparation workshop for doctors preparing for the clinical component of the FCPsych Part 2 examinations. Feedback received has illustrated that the workshop has been invaluable in helping registrars and medical officers navigate the exam more effectively.

The first such workshop was held in 2023, prior to the first semester clinical exam. The premise came about when, after the Covid-19 lockdown period, exam format had changed and thus expectations of candidates attending the exams had also shifted. These changes included a move to having all OSCE (objective structured clinical examination) stations held online, over Zoom, as well as decentralisation of the clinical case exam such that it is held at a centre in each province instead of one site clinically. In addition, examiners for the clinical case may be online or in-person. While the clinical component of the exam has long been accepted as a stressful time for doctors, the changes to the exam format after years of standardised practice was recognised as adding to the anxieties of the exam process, as candidates and examiners alike were largely unfamiliar with the complexities of navigating a new system. As such, both candidates and examiners were learning new ways of managing conducting themselves and troubleshooting unfamiliar territory such as dropped internet connections, Zoom controls and conveying their thoughts and ideas over a screen instead of in-person.

The latest workshop was held virtually on the 26 March and was well-attended by registrars and medical officers, not only from the southern Gauteng region, but from other provinces and regions as well. The workshop was free for all doctors who are members of SASOP, and was presented by Doctors Yumna Minty, Juanita Subrayadoo and Jozef Breedt, all from the University of Witwatersrand's Department of Psychiatry.

The sessions consisted of an introduction to the examination process and what candidates could expect on the day of OSCE and clinical case exam, by Dr Minty. Tips and advice on how to prepare for the day, how to approach stations and answer questions and how to manage time effectively were shared, as well as possible challenges and pitfalls and how to best navigate these. Later on, Dr Breedt, who had just obtained his fellowship from the CMSA in the preceding semester, shared his own experiences, insights and tips on how to manage anxiety and best approach the exam. In addition, candidates had an opportunity to practice 'mock' OSCE stations with Dr Subrayadoo, simulating exam conditions and giving candidates an idea of what to expect from the process.

Workshop sessions such as this assist in clarifying expectations for candidates, provide tips on how to best manage time in the exam and also give candidates the opportunity to practice their clinical and reasoning skills under pressure, as it would be in the actual examination. It enhances practical learning experiences and can boost candidates' confidence and improve their problem-solving skills.

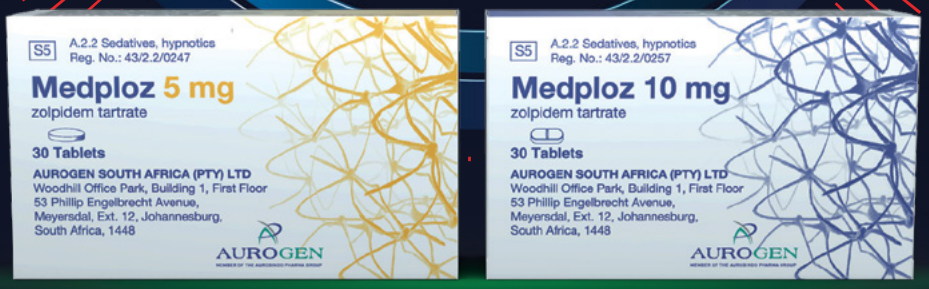
The subgroup will continue its practice of having biannual workshops, by hosting another one prior to the second semester clinical examinations.

Yumna Minty is a psychiatrist in private practice, as well as an honorary lecturer at the Wits School of Clinical Medicine and MBA candidate at Stellenbosch Business School. **Correspondence: yumnaminty@gmail.com**

Goodbye to
INSOMNIA

MedPloz

Zolpidem tartrate 5 mg and 10 mg tablet



USED IN ADULT PATIENTS FOR THE SHORT-TERM TREATMENT OF INSOMNIA.

Only indicated when the disorder is severe or subjecting the patient to extreme distress.

THE ONLY ZOLPIDEM BRAND AVAILABLE IN 5 MG IN SOUTH AFRICA[1]

AUROGEN CNS

Reference: 1. Zolpidem Hemitartrate. Generics dictionary. Available at: https://generic.co.za/frontend/generics?utf8=%E2%9C%93&q%5Bactive_ingredient_name_eq%5D=ZOLPIDEM+HEMITARTRATE. [Accessed 10/09/2024].

SAHPRA approved **MEDPLOZ** professional information. Date of publication: 21 September 2021.
S5 **MEDPLOZ 5 mg** (tablet). Reg. No: 43/2.2/0247. Each film-coated tablet contains 5 mg zolpidem tartrate. Contains sugar: 43.80 mg lactose.
S5 **MEDPLOZ 10 mg** (tablet). Reg. No: 43/2.2/0257. Each film-coated tablet contains 10 mg zolpidem tartrate. Contains sugar: 87.60 mg lactose.
For full prescribing information refer to the professional information approved by the medicines regulatory authority.

HCR: AUROGEN SOUTH AFRICA (PTY) LTD. Woodhill Office Park, Building No. 1, First Floor, 53 Phillip Engelbrecht Avenue, Meyersdal, Ext. 12, 1448, Johannesburg, South Africa. Tel: (011) 867 9100, Fax: (011) 867 9111. https://auro-space.com
ASA.24.09.1193

Making values real in professional relationships

Arnold Smit

Arnold Smit

Professions are known for placing a high premium on values and ethical conduct. In the case of psychiatry, this espoused commitment is as relevant for the therapist-patient relationship as it is for the community of psychiatrists. This community represents a complex ecosystem of colleagues, mentors, supervisors, researchers and collaborators. Upholding shared values in such a community contributes to the meaningfulness of belonging and collaboration among its members, the integrity of its scientific and professional contributions, and even its reputation in society more broadly. While this seems to be stating the obvious, experience tells us that it is easier said than done.

I haven been working on values integration in personal, professional and organisational settings for over a decade. One of my most prominent observations is that our challenge is not in identifying and naming values but in making them real and effective in how we live and relate, communicate and collaborate, and decide and act. Values are not present because we name and discuss them. They are present because of their embeddedness in all our interactions, whether informally or officially, in ordinary conversations or in professional discourse. Their presence is embodied in the expression of our being and *embedded* in the quality of our interactions. If we uphold them, we gain; if we neglect or violate them, we suffer the consequences.

To make this practical, let's ask about making five common values real among an association of psychiatrists.

Considering the value of ***honesty***, one might refer, among other things, to the accurate reporting of research findings, transparent communication of clinical approaches, acknowledging limitations in expertise, and providing constructive and truthful feedback. The opposite would refer to taking undue credit for another's work or misrepresenting data, resulting in the eroding of trust and undermining of mutual support for professional growth.

The value of ***respect*** among psychiatrists could be expressed in the recognition of diverse experiences, perspectives, and expertise that each member brings to the field. Respect involves active listening to colleagues' viewpoints, valuing their contributions and engaging in constructive discourse even amid disagreements. The opposite might be expressed in disrespectful talk to or about others or the belittlement of their contributions.

The value of ***responsibility*** within professional relationships may include taking ownership of one's contributions to collaborative projects, fulfilling mentorship obligations conscientiously, contributing to the collective well-being of the community, and participating in professional peer and organisational review processes. Neglecting these responsibilities can place undue burden on colleagues and weaken the fabric of the profession.

Fairness is always a very sensitive value, irrespective of the context in which it expected to be practiced. In professional interactions it relates to equitable opportunities for collaboration, impartial evaluation of colleagues' work, and just allocation of resources within research teams or academic departments. Favouritism, bias, or discriminatory practices can undermine morale and create divisions within a professional community.

Finally, ***compassion***, while often associated with patient care, also plays a vital role in professional relationships. Psychiatric work is demanding and showing compassion could entail offering support to colleagues facing burnout, personal challenges, or professional setbacks. Compassion fosters a sense of solidarity and mutual care within an association of professionals.

There are five practices which can help an association of professionals to make values real.[1]

The first practice, ***meaning-making***, refers to facilitated discussions that support the defining and unpacking of shared values in educational or workshop settings. Once agreed upon other questions can be deliberated, for example, what does constructive feedback look like and how can we do it respectfully? How can we best deal with coexisting theoretical orientations in a mutually respectful way? How can we ensure the equitable distribution of opportunities and resources in the common interest of the profession as a whole?

The second practice, ***voicing***, deals with agreements and mechanisms for dealing with values conflicts. The more pertinent question to deliberate here is about the safety and confidentiality of dealing with ethical concerns, for example, plagiarism, harassment, unfair treatment, and other transgressions of professional codes or standards.

The practice of ***internalising*** refers to the nurturing of personal capacity for making values real. This could entail self-assessment, the personal mastery of reflection, mentoring focused on building moral strength, or peer support groups where challenges in professional interactions can be discussed. Professionals in supportive roles often overlook the importance of self-care and personal development.

For psychiatrists, the practice of ***integrating*** core values into ethical codes and professional guidelines is to be taken for granted. However, the focus should also be on the promotion of values-driven leadership and the integration of values into professional interactions and organisational processes and structures. These may include academic departments and clinical practices.

The last practice, ***cultivating***, refers to capacity building for making values real in workshops, conferences, and publications. Values become real for us when we share and discuss them in communicative settings. Practical exercises in this regard may, among other things, include meaning-making exercises (such as being referred to earlier), case discussions of values conflicts in collegial relationships, or best practice ideations for ethical collaboration.

I like comparing the realisation of shared values with the working of yeast in the baking of bread. Just as yeast is essential for the transformation of dough, a conscious commitment to shared values is indispensable for the flourishing and ethical advancement of a profession through the quality of relationships among its members. Where members of a professional association model honesty, respect, responsibility, fairness and compassion there are multiple gains to be accomplished. Working the yeast of values into the proverbial dough of professional collaboration may enhance research collaboration, the quality of peer review, the support of trainees, and the meaningfulness and joy of belonging to a vibrant, robust and reputable psychiatric community.

Bibliography

1. Smit A. Making values real: Focus on the yeast effect. Knowres Publishing; 2025.

Arnold Smit is an extraordinary associate professor at Stellenbosch Business School, an associate professor in Management and Leadership at the IEDCBled School of Management, Slovenia, and the owner of WisePraxis (Pty) Ltd. His main interest is in the intersection of leadership, values and ethics, sustainability, and governance in organisations. He furthermore, specialises in values integration in professional and organisational practices. In addition to other qualifications, he holds an Honours in Philosophy, a MPhil in Applied Ethics, and a Doctorate in Theology from Stellenbosch University. **Correspondence: arnold@wisepraxis.com**

Holding on to hope

Volker Hitzeroth

Volker Hitzeroth

Our world is often portrayed as a place filled with pain, hurt and suffering – all leading to feelings of despondency and despair. Hope may be one of very few consolations. The concept of hope has been interrogated since time immemorial. More recently hope theory suggests that being hopeful is not a passive phenomenon, but rather an active process whereby we must meticulously identify and vigorously pursue our goals in a planned and organised manner, resulting not only in improved wellbeing but also in a sanguine disposition and a meaningful life.

This is the second article in the wellbeing series and was also the subject for a keynote presentation at Medical Protection Society's Ethics for All event in October last year.

Despite numerous technological advances, significant progress, and yearned-for improvements in modern healthcare, hope often remains one of the fundamental pillars of the doctor-patient relationship.

The earliest, and most well-known, reference to hope is likely the ancient Greek myth of Pandora and her infamous box. The myth tells the story of how Prometheus stole fire from Mount Olympus and then proceeds to elaborate on the subsequent punishment by an angered Zeus. As a result, Prometheus was chained to a rock to be attacked by an eagle, and the gods created Pandora to punish humankind. All the gods contributed to her creation by gifting her special skills, wonderful talents and endearing qualities. She was named Pandora, meaning the "all-gifted one". Having sent her to earth Zeus gave her a little box of clay with the instruction never to open it. Unfortunately, Pandora could not contain her curiosity and proceeded to open the box. As a result, all the known evils and afflictions (e.g. sickness, greed, hatred, pain, hunger, death, deceit, and strife) that had been stored therein escaped from its confines and scattered into the world. Pandora is therefore often held responsible for introducing various hardships into the world and fulfilling Zeus' punishment of mankind. Fortunately, she was able to quickly close the box again and thus managed to prevent hope from escaping too, which remained trapped inside, under the lid.

Interestingly, the meaning of the myth provides for two interpretations which illustrate the dualistic and ambiguous nature of hope. Firstly, hope is classed together with all the other evils, being merely another curse amongst many, captured in the box and meant to be released to torment humanity. In this interpretation hope can be seen in a negative light. It contributes to, and prolongs, human pain and suffering. Hope is thus a cruel trickster torturing the human psyche with its relentless optimism and "hope", never bringing true relief or solace.

Alternatively, hope is the only comfort left in an evil and wicked world. It is a kind and compassionate gift that allows us to face incredible hardship. Hope is thus a motivator for us to persevere when having to face, and overcome, insurmountable obstacles in a wretched world.

It is thought that the Greeks and Romans believed hope to be on the negative continuum – as per the first interpretation above. More recent thinkers, who might be influenced by modern religious belief systems, see hope in a more positive light as per the second exposition. This dual interpretation illustrates the complexity as well as the paradox of hope, which is further elaborated on in various commentaries, from Plato and Aristoteles to more modern philosophers like Hume and Kant.

Despite numerous attempts to elucidate the concept of hope, and to clarify what hope is, much remains obscure. Any attempts to interrogate hope raises fundamental questions:

- Is hope a virtue, an emotion or a value?
- What is the difference between hope, optimism and wishful thinking?
- Can we only hope for what is possible, or even the impossible?
- Is it good or bad to hope?
- Should we hope only for a positive outcome, or would it be appropriate to hope for a negative outcome?
- Is hope subjective or objective?

- Is hope active or passive?
- When a situation is dire, what is more important: hope or truth?
- Do we become more hopeful when life is hard and less hopeful when life is easy?
- Can we hope only for future events, or also for past events?

Interestingly, 'The Oxford Handbook of Hope' in chapter 22 aligns with the positive interpretation of hope's meaning in that it suggests that "hope is a robust predictor of well-being and consistently predicts higher levels of wellbeing".

DEFINITION OF HOPE

Perusing various dictionary definitions of hope we can see that there are two aspects to its academic definition. Firstly, a desire, wish, feeling, or expectation for an outcome which is accompanied by, secondly, the belief or confidence that this outcome can be achieved or fulfilled. Hope, therefore, is to want something to happen or be true, and to think that it could happen or be true.

A possibly more meaningful definition of hope may be the 1985 definition by Dufault and Martocchio in their contribution regarding compassionate care and the dying experience. They defined hope as "a multidimensional dynamic life force characterized by a confident yet uncertain expectation of achieving a future good which, to the hoping person, is realistically possible and personally significant".

Other authors suggest that hope cannot be simplified into a short and crisp definition. They maintain that the concept of hope is more complex than meets the eye and is an intricate, delicate and finely balanced web consisting of multiple aspects and interactions of various components.

DARREL MOELLENDORF AND "HOPE-MAKERS"

Professor Darrell Moellendorf has opined extensively on the topic of hope, especially in our modern world characterised by climate change, poverty and injustice. His writing is occasionally complicated and difficult to follow but he provides a generally positive and more hopeful view on the world and its future. He refers to hope as "a tonic against resignation and debilitating anxiety" and suggests that hope is an important and active driver, and a necessary motivator, rather than a passive emotion. He argues that hope should mobilise the citizenry (and its social activists) to pressure various authorities into listening and effectuating change to overcome the disheartening current global challenges. Professor Moellendorf emphasises the role of "hope-makers". These are forces, be they individuals or groups, facts or theories, that demonstrate and provide reasons for being hopeful. Hope-makers offer guidance, if not leadership, and affect change, provide solutions and mobilise for collective action.

CHARLES SNYDER AND HOPE THEORY

The study of hope has, more recently, also infused the field of psychology, and specifically the branch of positive psychology. Positive psychology is a newer subspecialty which studies human wellbeing and positive psychological states. It focuses not on the study and treatment of mental illness but rather the positive aspects of human life (e.g. contentment, gratitude, flourishing, happiness, human connections, positive relationships, and the path to finding meaning and purpose). Positive psychology therefore attempts to study, and optimise, human functioning and wellbeing.

In the 1990s, Professor Charles Snyder proposed a new construct in relation to human hope which has been refined throughout the last few decades. His framework is commonly referred to as hope theory. He suggested that there are three components of hope theory, namely goal setting, pathway planning and individual agency. These three aspects generate two types of thinking, namely pathways thinking and agency thinking:

1. Pathways thinking:

Pathways thinking refers to a person's ability to imagine and identify clear goals, and then to generate a set of plausible pathways towards achieving these. Pathways thinking includes the ability to review, refine and adapt the proposed pathway when new information or obstructing barriers call for a change of direction. It may also necessitate changing to an alternative pathway if this becomes necessary.

2. Agency thinking:

Agency thinking refers to goal directedness and the ability to motivate oneself to successfully pursue the chosen pathway. It is the belief in one's capacity to persevere and remain determined to succeed even in the face of significant setbacks or obstacles. Agency thinking is a measure of self-efficacy, confidence and determination and reflects the sense of agency and self-belief to succeed.

HIGH HOPERS

People who have mastered both pathway thinking and agency thinking are often referred to as "high hopers". As a group they tend to be more resilient and optimistic. From a mental wellbeing point of view, high hopers demonstrate higher levels of life satisfaction and reduced symptoms of stress and mental suffering, which leads to better academic achievement and improved mental wellbeing.

RADICAL HOPE / FUNDAMENTAL HOPE

Professor Lars Svendsen, in his book entitled 'A Philosophy of Hope', summarises several viewpoints regarding the role of

hope in a seemingly hopeless situation. Professor Svendsen, and others, postulate that even in dire circumstances, there might remain a type of hope which he refers to as radical or fundamental hope. Such radical hope might occasionally be found when there remains no purpose and no meaning and everything seems utterly hopeless.

This position would imply the existence of two types of hope. The first is specific and event related. It is the type of hope that we refer to in everyday conversation and it is what we mean when we say that we hope for something to occur. It is event-related and specific. Radical hope on the other hand is a deeper and more fundamental hope, akin to an underlying attitude or mental state. It is a type of hope that is event-less and non-specific. It may reflect an underlying, and psychologically hopeful state, occasionally present when all seems to be lost. It is a holding onto the hope that something fundamentally good remains or will happen – even if it is deeply hidden and not obvious in the moment.

Radical hope refers to the ability to see a possibility, and to cling onto the hope however small, that something virtuous will emerge eventually. It is a type of hope that continues to support the belief that ultimate hope has not been extinguished, and that an existential hope exists whereby our mind remains open to the possibility that the end is not nigh and that there remains a likelihood that all is not lost. Radical hope suggests a deeper and fundamental state rather than a specific, and event related, condition. Radical hope is "directed at the larger world and existence as a whole". It means to remain hopeful in an overarching, existential and fundamental way when one's individual specific and event-related hopes are dashed and the world around us has become wretched and forlorn.

HOPE AND THE MEANING OF LIFE

Interestingly, research points to Professor Snyder's high hopers having a clearer sense of direction and purpose in their life. They also find it easier to discover meaning in a world characterised by constant calamity, ongoing uncertainty and dreadful despair. This is confirmed by further evidence that there exists a positive correlation between hope, meaning-of-life and life satisfaction.

Hope is often said to be fickle, baseless and foolish, but it is also said to be commendable, courageous, and inspiring. In our unjust and oppressive world it is, however, the gift that enables us to endure hardship, overcome suffering and persist in our chosen endeavour. Hope is the bridge that connects our past lived experience with the present perilous path and the imagined positive future. Hope empowers us to cope with the painful essence of existence and is the balm that soothes a tortured soul. While the nature of hope remains enigmatic and elusive, it is not far-fetched to conclude that hope sustains us and shows us the way to a meaningful life.

HOPE'S ROLE IN MEDICINE

So why does the concept of hope play such a pivotal role in medicine?

Hope's presence, or absence, will likely influence both the patient's and the practitioner's decision-making process. Ongoing conversations about hope are therefore important to patients and practitioners alike. Hope is not only relevant in the diagnosis, therapeutic response, treatment compliance and prognosis but it infuses the caring connection with kindness, trust, and dignity.

For patients it also adds motivation, resilience, and wellbeing while for practitioners it adds satisfaction, reward and reduced burn out. It may be that the initial hope is for a good treatment response or even a cure. Later, the hope may be for mere symptom relief and a better quality of life. Finally, the hope might be for relief from discomfort, pain, and suffering and ultimately an unburdened and dignified death.

Hope becomes embedded into the therapeutic relationship by honesty, integrity, open communication, and shared decision making. It can only deepen rapport and trust and enhance the therapeutic relationship even further – especially when the clinical facts are stark, the chance of recovery is slim, and the outcome is dire. Hope's presence thus improves clinical care and facilitates the management of therapeutic disappointment and disillusionment.

When the future is unknown and filled with uncertainty and dread, hope may become the greatest ally for both patients and practitioners. It may ultimately be the only remedy available to patients suffering from serious or terminal conditions. It is best to hold on to it, and let it bring relief to those burdened by ailment, pain, and suffering.

Disclaimer:
This article is based on a collation of existing articles, textbooks and internet sources.

REFERENCES

Gallagher, M (ed.) & Lopez, S (ed.) (2018). The Oxford Handbook of Hope. Oxford University Press.

Dufault K, Martocchio BC. (1985) Symposium on compassionate care and the dying experience. Hope: its spheres and dimensions. Nursing Clinics of North America.

Svendsen, L. (2018). A philosophy of hope. Reaktion Books.

van den Heuvel, S. C. (ed.) (2020). Historical and multidisciplinary perspectives on hope. Springer Open.

Volker Hitzeroth is a Medicolegal Consultant at Medical Protection Society.
Correspondence: Volker.Hitzeroth@medicalprotection.or

NOW PATIENTS CAN FALL ASLEEP FASTER[1,2] AND STAY ASLEEP LONGER[1,2]

NEW, DAVIGO® a dual orexin receptor antagonist, that targets the pathway that is thought to regulate wakefulness in the brain.[3,4]

Studies show that on discontinuation:

- no withdrawal signs or symptoms observed[3]
- not associated with rebound insomnia[3]

The way patients begin their mornings may depend on how they slept the night before.

Davigo® is indicated for the treatment of adult patients with insomnia characterised by difficulties with sleeponset and/or sleep maintenance.[3]

References: 1. Rosenberg R, Murphy P, Zammit G, et al. Comparison of Lemborexant With Placebo and Zolpidem Tartrate Extended Release for the Treatment of Older Adults With Insomnia Disorder: A Phase 3 Randomized Clinical Trial. JAMA Netw Open. 2019 Dec 2;2(12):e1918254. **2.** Kärppä M, Yardley J, Pinner K, et al. Long-term efficacy and tolerability of lemborexant compared with placebo in adults with insomnia disorder: results from the phase 3 randomized clinical trial SUNRISE 2. Sleep. 2020 Sep 14;43(9):zsaa123. **3.** Dayvigo® Professional Information. Approval date, 15 August 2023. **4.** Beuckmann CT, Suzuki M, Ueno T, et al. In Vitro and In Silico Characterization of Lemborexant (E2006), a Novel Dual Orexin Receptor Antagonist. J Pharmacol Exp Ther. 2017 Aug;362(2):287-295

S5 DAYVIGO® 5 mg (film-coated tablet): Reg No: 56/2.2/0571. Each tablet contains Lemborexant 5 mg. S5 DAYVIGO® 10 mg (film-coated tablet): Reg No: 56/2.2/0572. Each tablet contains Lemborexant 10 mg. For full prescribing information refer to the SAHPRA approved Professional Information. Further information is available on request. Eisai Pharmaceuticals Africa (Pty) Ltd. Reg. No.: 2022/487902/07. 2nd Floor, Golden Oak House, Ballyoaks Office Park, 35 Ballyclare Drive, Bryanston, Johannesburg, 2191, Gauteng, South Africa. Tel: +27 10 590 4325. www.eisai.co.za. AR-DG-24F-01 Expiry 01/05/2026

Scan QR code for full Professional Information

Eisai

hhc human health care

Trauma and its consequences: an alternate perspective on PTSD – disorder or injury

Christopher P. Szabo and Shaun Read

The ongoing conflicts in Gaza, the Ukraine and most recently in the case of South Africa, the DRC, has once again highlighted the extent to which survivors of such experiences may be traumatised and potentially develop Post Traumatic Stress Disorder (PTSD).

PTSD is defined as a psychiatric condition that may occur in people who have experienced or witnessed a traumatic event, series of events or set of circumstances.[1] An individual may experience this as emotionally or physically harmful and it may affect mental, physical, social, and/or spiritual well-being.

Within the discipline of Psychiatry, PTSD is one of the few mental health disorders where attributing direct causation appears possible. Sufferers of PTSD are responding to a trauma, which has been inflicted on them, as is the case with someone suffering a bodily injury. This view is supported by the definition of PTSD in the most current "Diagnostic and Statistical Manual of Mental Disorders (DSM-5)" published by the APA in 2013, where trauma and stressor related disorders are defined with reference to "… exposure to a traumatic or stressful event" being "actual or threatened death, serious injury, or sexual violence…".[1]

According to the World Health Organisation (WHO) around 70% of people globally will experience a potentially traumatic event during their lifetime, yet only a small minority will go on to develop PTSD.[2] This may be related to the nature of the trauma and whilst PTSD is not limited to survivors of war or conflict it has been documented that "Military veterans are at higher risk for developing PTSD than the general population."[3]

Research shows that only 1 in 4 people with PTSD in low- and middle-income countries report seeking any form of treatment, with some research suggesting that the stigma attached to PTSD may be a significant barrier to those suffering from PTSD seeking assistance.[4] This may in part be because of how PTSD is reflected in popular culture. First diagnosed in soldiers and referred to as "shell shock" during the years of World War I and "combat fatigue" after World War II, movies as The Deer Hunter, Rambo, Apocalypse Now, Platoon and Born on the 4th of July, all depicted negative outcomes of soldiers battling with PTSD.

In recent times, there has been a move to consider the extent to which the name "PTSD", itself may contribute to the resistance in seeking help and whether the condition should be renamed to "Post Traumatic Stress Injury" (PTSI).[5] The critical question is: "why a further name change?", noting how the same condition's name has indeed evolved over time?

Name changes of medical conditions have a long history and are driven by advances in medical science resulting in more accurate naming conventions. For centuries, someone suffering a mental health issue might have

been described as suffering from "hysteria". Over time, a better understanding of the causes of mental illness has allowed for more precise diagnoses within structured diagnostic systems and improved treatment as a result.

The origins of the proposed name change of PTSD are to be found in the US military, related to an increase in the rate of suicide. Persistent lobbying since 2011 to the American Psychiatric Association (APA) to replace the word "disorder" with "injury", has not been successful.[5] This is in part due to the lack of empirical evidence that a name change will indeed encourage sufferers of PTSD to seek treatment. It should be noted however that in Canada, Public Safety Personnel use the term commonly.[6]

In further support of renaming PTSD to PTSI is that it might direct mental health professionals to avoid the temptation to focus primarily on how the causal trauma event manifests in the patient (i.e. the disorder), rather than adequately considering the cause (i.e. the injury). A concern in Psychiatry is that with the advent of a Diagnostic and Statistical Manual (DSM) approach to diagnosis, clinicians are reduced to simply endorsing symptoms in a formulaic manner to reach a diagnosis leading to treatment using an algorithmic approach based on standardised guidelines.

The contention is that the substitution of the word "disorder" with "injury" would capture more graphically what has been experienced beyond the use of the word "event", as noted earlier, in the DSM's diagnostic criteria - for indeed there will have been an injury albeit not physically visible. To support such a contention there is data that support brain changes related to emotional trauma generally, and PTSD specifically i.e. that there is indeed an injury. [7,8]

However, nothing is quite so simple. Specifically, the development of PTSD in a person may require more than experiencing an event or series of events. Factors such as individual vulnerability and resilience as well as social support may protect or contribute to emergence of symptoms required to make a diagnosis. Whilst such factors may determine whether the response to the trauma results in PTSD, the fact remains that the initiating factor in PTSD remains the trauma itself, without which the condition would not manifest in the first place.

Whilst a name change for PTSD might make sense intuitively, an important consideration is how such a name change would impact both clinicians and patients. A research survey in this regard, published in 2023, demonstrated that most respondents believed that not only would a name change reduce stigma but would also increase the likelihood of help seeking. The same survey found that for those with PTSD, they believed it would have a positive impact.[9] It has been noted that a significant aspect of mental health care is use of language and specifically that whilst disorder may be associated with an "inherent deficiency", the term injury is a "no fault or no blame" word.[10]

Although renaming a condition certainly has precedent, it is not a straightforward matter. A sound basis is a first step, followed of course by rigorous debate and supporting evidence for change. Psychiatry has long sought to establish itself as a credible medical discipline, languishing for too long as the poor cousin of other disciplines. This is evidenced by the increasing push for understanding the biological underpinnings of mental illness and thus related treatments. A shift from use of the word "disorder" to "injury" may indeed take the process one step closer.

In this regard renaming "Post Traumatic Stress Disorder" to "Post Traumatic Stress Injury" is certainly worthy of consideration and may contribute to ensuring that this debilitating psychiatric condition is more accurately described, better understood and thus comprehensively treated.

REFERENCES

1 https://www.mdcalc.com/calc/10211/dsm-5-criteria-posttraumatic-stress-disorder

2 https://pmc.ncbi.nlm.nih.gov/articles/PMC5632781/

3 https://www.goldenstepsaba.com/resources/ptsd-statistics

4 https://www.who.int/news-room/fact-sheets/detail/post-traumatic-stress-disorder#:~:text=There%20are%20many%20effective%20treatments%20for%20PTSD%2C,lack%20of%20trained%20mental%20health%20care%20providers.

5 https://jmvh.org/wp-content/uploads/2020/04/PTSD-VS-PTSI.pdf

6 https://www.cipsrt-icrtsp.ca/en/glossary/posttraumatic-stress-injury-ptsi

7 https://www.psychiatriki-journal.gr/index.php?option=com_

8 https://psychiatryonline.org/doi/10.1176/appi.ajp.2018.171111997

9 https://www.cureus.com/articles/134116#!/

10 https://stellamentalhealth.com/resources/10222/ptsd-vs-ptsi-reducing-stigma-and-improving- access-to-care

Christopher Paul Szabo is the current editor-in-chief of South African Psychiatry and a former Academic Head of the Department of Psychiatry, University of the Witwatersrand.
Correspondence: Christopher.szabo@wits.ac.za

Shaun Read is founder and CEO of legal and tax consultancy Read Advisory Services **Correspondence: shaunread@readadvisory.com**

Lessons in Healing, Leading, and Living

Renata Schoeman

The following is an extract from an address at the SAMA Annual Awards in Bloemfontein on Friday 11th April 2025

Twenty-six years ago, I walked into my first hospital ward round as "doctor" – I think my hands must have been trembling, but my heart was full of dreams. What I didn't know was that medicine would teach me far more about life than textbooks ever could. I want to share a few things I've learned over the past 26 years in medicine—as a psychiatrist, a leadership professor, and, more recently, a mental health advocate, but also…just as a human. These are lessons I wish someone had whispered to me back then. Lessons about healing, leading, and living.

LESSON 1: DON'T JUST CHASE EXCELLENCE - DEFINE MEANING

Being the best won't matter if you don't know why you are doing it. When I graduated, I thought success meant being the best. The most efficient. The most capable. The one who stayed latest, knew the most, did the most. (By the way, this wasn't me!) I thought if I just worked hard enough, I could outrun uncertainty.

But here's what I learned: Excellence without meaning is just exhaustion in disguise.

Medicine is a profession that rewards output, but your soul craves impact. I urge you: Don't just ask, "How do I get ahead?" Ask, "What do I want to stand for?" Medicine is performance-driven, and identity-defining. But…you might not always be a doctor. The greatest achievements in your life won't be the ones with certificates. They'll be the ones where you showed up with integrity, purpose, and heart.

LESSON 2: YOUR GREATEST GLASS CEILING MIGHT BE IN YOUR MIND

We often talk about breaking glass ceilings—and they do exist. But over the years, I also noticed something else: many of the barriers I faced weren't above me… they were around my ankles. Self-doubt. Perfectionism. Being a woman. The fear of not being enough.

I believed systems were holding me back – and often they did (the public sector and academic red tape and inefficiencies killed me!). I also learned that sometimes we know by doing – not do by knowing. Even in preparing for tonight, I had that little voice telling me – "why would they want to listen to me"? I am not the biggest academic, or influencer, or "who is who". The thoughts that often pushes me to be a huge procrastinator…the fear of starting something that might not be "perfect". But perhaps, it is not about being the "best psychiatrist" or the media face of healthcare leadership and mental health, or giving you the "best talk"…

Perhaps tonight is about being vulnerable and admitting the imposter syndrome and self-doubt that often raise their heads. And perhaps these (thoughts) are necessary companions to keep us humble, willing to learn, and never willing to stagnate.

In medicine, we're trained to look outward—to fix, to treat, to solve. But you also need to look inward, and ask: What beliefs am I carrying that no longer serve me?

You will meet fierce critics, and some nasty people, on your journey. Don't let them define you. Remember, your mind is a garden, your thoughts are the seeds: you have a choice whether you grow flowers, or whether you grow weeds. Be careful in what you let your mind consume, and who you surround yourself with. Be deliberate in

not allowing people, circumstances, and your own thoughts, to be shackles around your feet. Lift your head, and stand on your toes, and shatter those ceilings. If I didn't, I would not have had anything to share with you tonight.

Something else, make sure that if someone else achieves and inspires, you tell them so, and let their sunshine help you to grow. Do not try to dim their light – you will fade as well.

One of the most hurtful things throughout my career was being judged (usually most harshly) by other women. We are married for 26 years, and blessed, after many, many difficult years and private tears, with a boy who has just turned five (yes, he was born as a 33-week prem during the first week of Covid lockdown). Before his birth, when I achieved something, this was often diminished "oh, you do not have children, that's why"…after his birth… when I travel for work, or achieve something, it is again being diminished as "but what about your child" (as if I am a bad mother). Be kind…always.

LESSON 3: LEADERSHIP IS NOT A TITLE - IT'S A WAY OF BEING

We all lead – by how we show up, listen, and hold space. Early in my career, I thought leadership was about position - about rank. But then I watched a young intern comfort a patient's family with quiet grace, and I realised: that was leadership. You don't need to be the head of a department to change a life. You lead when you listen deeply. When you mentor. When you challenge the status quo. When you bring compassion into a broken system.

The world needs quiet leadership. Leadership which means being present, not dominant. You do not have to be the next Nobel prize laureate. But you want to be the person that will be the voice for the vulnerable.

Medicine needs leaders who are both evidence-informed and emotionally intelligent. I do believe that most curriculums at the medical schools in South Africa do not focus enough on leadership – leading "me" (self-leadership), "we" (a team or your family), "work" (the department/clinic/hospital), and the "world". It is not only about healing the patient in front of you but living a live that heals others by your presence. Be the kind of doctor – and leader – who helps others feel safe to be brave. Share information honestly. Listening attentively. In a world of noise, be the doctor who makes people feel heard. That, too, is healing.

Furthermore, strive to improve value – improving outcomes, while reducing costs. This is more than just patient-centricity. It is about creating value for all stakeholders.

LESSON 4: YOU CAN'T POUR FROM AN EMPTY CUP

Let me be clear: medicine is hard. You will give a lot. But you are not invincible.

There was a time when I thought self-care was selfish. Now I know it's survival. Burnout doesn't just steal your joy—it robs your patients of the best version of you. Taking care of yourself is not an indulgence. It is part of your job. We recently did a study at Tygerberg hospital.

Despite all the awareness drives and education around mental health, and the high prevalence of stress related conditions amongst staff, only 8% of staff accessed mental health care services…

The stigma, and the fallacy of "having to be invincible" remains.

I had a TIA in 2000, a few months after my final exam. I was lucky. In 2002, I initiated my dad's resuscitation (while the sisters went to call the surgeon, who was taking a break after the surgery) (here in Universitas). Unfortunately, it failed, I decided I never wanted to resus anyone again, changed lanes from MFamMed to Psychiatry, and struggled with PTSD. In 2005, a few months before my final psychiatry exam (which I wanted to write earlier), I had a vasculitic stroke with a left hemiplegia. I had to take time of from work to recover…and had to "postpone" my exams to when I was supposed to write them.

In 2007 I was subjected to severe workplace bullying, resigned and left for private practice. I had a major depressive episode with panic attacks. I eventually started therapy. I eventually learned to prioritise selfcare.

And yes, there were more setbacks through the years, a mountain bike accident with a fractured neck (and fusion), a few fractures (trail running) and many weeks of either being in a cast or a moonboot…AND my very first week in my own private practice, an "oom" collapsed and I had to resus him…in my rooms.

depressive episode with panic attacks. I eventually started therapy. I eventually learned to prioritise selfcare.

I firmly belief we cannot preach selfcare and lifestyle changes to our patients if we do not live it ourselves. The acronym I teach my students and patients – and keep myself accountable to, is SEEDSSS: sleep, exercise, educate, diet, socialise, spirituality and screentime hygiene.

I have learned that there are only two glass balls in my life: my health, and my boy. Everything else is rubber balls – they will bounce back. But you can only hold the glass balls firmly, and catch the rubber balls when needed, if you take care of yourself.

Normalise rest. Normalise therapy. Normalise saying, "I'm not okay today." Because when you allow yourself to be human, you give others permission to do the same. Being vulnerable can be a professional strength.

LESSON 5: YOUR CAREER WILL SURPRISE YOU – LET IT

The future is NOT a straight line.

If someone told me 26 years ago that I'd end up having a portfolio career of being in private practice, heading up the MBA in Healthcare Leadership at Stellenbosch Business School, running a Foundation, serving on the Ministerial Advisory Board for Mental Health and the advisory board for the WFADH, being part of a Lancet Commission, being a mental health advocate…oh…and as my schoolfriends will add "RUN", I might've laughed. But medicine (and life) is full of unexpected opportunities.

I am an introvert. I hated being asked a question in class (ok, it didn't help that I honestly couldn't care less, and really didn't know) when Prof Middlecote showed us a "tube" of something (maybe an esophagus, or an aorta, or a colon) on a tray during the anatomical pathology lessons (remind me why did I marry a pathologist?)). I love working one:one with patients – it will remain my profession and vocation. I find the work I do in the Foundation (bringing mental health services to underprivileged children) the most meaningful (my mission). I could not foresee that 20 years later, I find teaching, speaking and writing (whether in person, or via the media) the most fulfilling parts of my career (my passion). I love simplifying huge amounts of information into digestible chunks. I love mentoring and inspiring others.

Maya Angelou said "My mission in life is not merely to survive, but to thrive. And to do so with compassion, humour, and style"

Say yes to the opportunities that scare you. Say yes to the ones that make no sense on paper but feel right in your gut. It is ok not to know exactly where you are going – if your choices are aligned to your values. Be open to reinvention and lifelong learning. Your degree is not a destination—it's a passport. It will take you to places you never dreamed of—if you let it.

Renata Schoeman has been in full-time private practice as a general psychiatrist (child, adolescent, and adult psychiatry) since 2008, currently based in Oude Westhof (Bellville). As a psychiatrist, she has special interests in cognition (i.e., disorders affecting attention, concentration, learning and memory – such as ADHD), eating disorders, mood disorders and anxiety disorders. Renata also holds appointments as associate professor in Leadership (USB), and as head of the Healthcare Leadership MBA specialization stream. She is the convenor of the South African Society of Psychiatrist (SASOP) special interest group for ADHD, and co-founder of the Goldilocks and The Bear Foundation (www.gb4adhd.co.za)
Correspondence: renata@renataschoeman.co.za

Prof Schoeman (first from left, front row) and attendees.

House of Huawei

Koffi Kouakou

House of Huawei

The Secret History of China's Most Powerful Company

By Eva Dou

Publish Date: January 14th, 2025

Publisher: Portfolio, 448 pages

ISBN 9780593544631

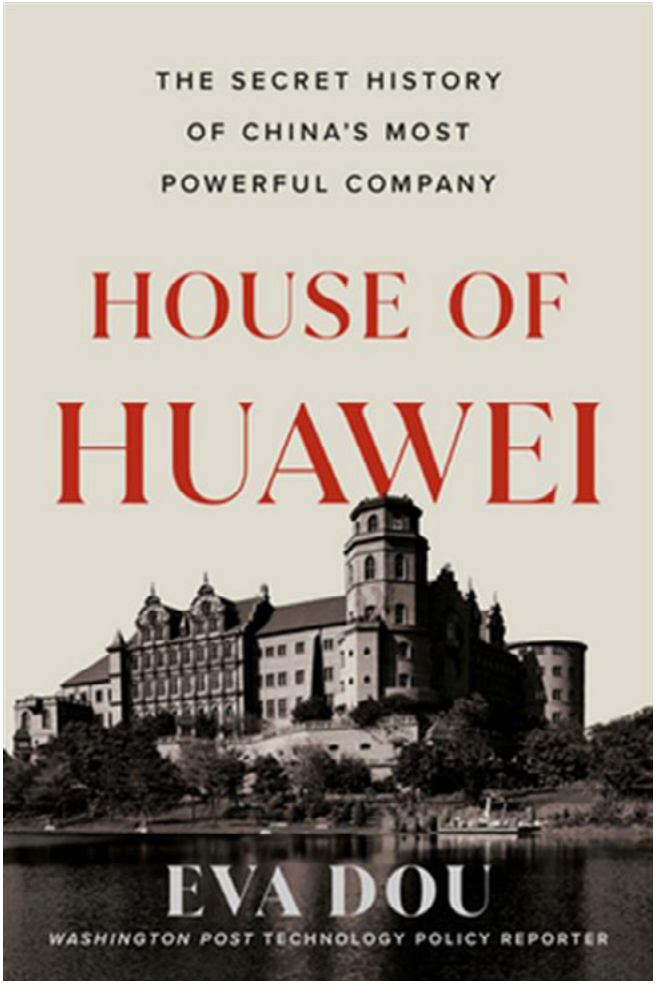
I have a confession to make. This review will be unusual and unfold in a delay spectrum, from aesthetics, form to content.

Many decades ago, I came across a charming old piece of writing titled Confessions of a Book Reviewer by Eric Blair, commonly known as George Orwell. It was about the portrayal of a dreary, joyless life of a professional writer and reviewer overwhelmed by endless mediocre books and tight deadlines, who critiques the publishing industry's demand for constant output, arguing that it drains genuine interest in literature.

I was impressed by the brilliant and lengthy lead of forty-three words that drew me into consuming the writing very fast. I read the whole piece in no time. Ever since, I re-read it at least three times a year as a personal ritual to absorb its style of writing, the deep sarcasm and humour that permeate it about the stressful lives of professional book reviewers.

Indeed, reviewing books can be stressful, especially meeting the numerous required deadlines. Beyond the volume of books to review and the deadline concern, I mainly like non-fiction, biographies, science fiction and occasionally fiction books by reputable writers. Beside intriguing titles, I am fascinated and attracted by beautifully designed and simply illustrated book covers. They hold attention, stimulate, mental alertness, curiosity and intellect.

Although the generic saying attributed to George Eliot goes as "Don't judge a book by its cover," I remain a sucker for great book covers.



Furthermore, great covers quickly send me a signal of engagement with their authors. "The cover of a book is the beginning of a conversation between the author and the reader," so says David Pearson, a writer. Indeed, he makes a powerful point.

As such, when I heard about the House of Huawei, by Eva Dou, I rushed to see if the title of the book and its cover captured the essence of the book. The book was published with two covers.

I must say that I was disappointed with the cover I received from my book buyer.

My feeling of unease was accentuated by the speculation of the drab black background with a shabby white disappearing Helvetica font with a sub-teaser line stuck on a fragmented and choppy red backdrop. Not beautiful at all to me. But perhaps the designer was attempting to convey, with a minimalist design, that sense of secrecy and danger that are attached to the power of Huawei with the very dark black background.

Furthermore, the distressed white font, reminiscent of Helvetica, could reflect surveillance or censorship. The cover's stark black field immediately plunges you into darkness, suggesting the hidden, shadowy realms Huawei operates in. The title's white, almost "eroding" sans-serif lettering feels like static on a spy-cam feed—its rough edges hint at censorship or data loss. Below, the subtitle sits in fragmented red blocks: the colour reads like both China's national hue and an urgent warning light, while the jagged, choppy background evokes broken signals or half-revealed secrets.

Aesthetically, it trades elegance for tension. The designer seems less concerned with beauty than with mood-setting: the oppressive black primes you for an exposé, the distressed type and fractured red underscore themes of surveillance, control, and fragmented truths. So, while it may not please on a purely visual level, it powerfully telegraphs the book's core premise—peering into a corporate empire shrouded in secrecy.

Worse, the selected poorly lit black and white photos within the book look amateurish and misplaced.

I must say that I prefer the other cover.

However, beyond the aesthetics, in House of Huawei, veteran journalist Eva Dou delivers a commanding, meticulously researched account of one of the world's most powerful—and most controversial—technology companies. As such, the biography of Huawei is no ordinary corporate chronicle. It is, rather, a prism through which the global tech race, Chinese state capitalism, and 21st-century geopolitics can be both examined and contested.

Founded in 1987 by Ren Zhengfei, a former engineer with the People's Liberation Army, Huawei's ascent from a small electronics reseller in Shenzhen, in southern China, in Guangdong Province, just north of Hong Kong, to a telecommunications behemoth operating in more than 170 countries is the stuff of corporate legend. But Dou resists the temptation to glorify.

HOUSE OF HUAWEI COVER VERSION 2

Instead, she painstakingly documents Huawei's rise in a style that blends narrative clarity with analytical restraint, letting the facts and the evidence speak more loudly than the media headlines.

Huawei's success, as Dou demonstrates, cannot be understood without considering the founder Ren Zhengfei's unique leadership style. He is portrayed as both visionary and enigmatic—a man who fused military rigour with ruthless ambition. Huawei's culture of hyper-competition and relentless innovation owes much to Ren's belief that technological supremacy was not just an economic goal, but a geopolitical imperative.

In one early quote to a Communist Party leader, Ren stated: "A country without its own program-controlled switches is like one without an army." Such words, seemingly innocuous, frame Huawei as more than a company; they frame it as an extension of statecraft and military discipline.

The book devotes significant attention to Huawei's complex relationship with the Chinese Communist Party (CCP), a relationship that Dou portrays as deeply symbiotic. The CCP provided Huawei with crucial state support, financing, and regulatory shelter in its early years, helping it to scale rapidly across domestic and international markets. By 2007, nearly 20% of Huawei's employees were members of the CCP—triple the national average—a startling detail that underscores just how entangled the company became with state ideology.

Perhaps the most gripping section of House of Huawei is Dou's account of the arrest of Meng Wanzhou, Ren's daughter and the company's CFO, in December 2018. Meng's detention in Canada at the behest of U.S. authorities sparked a diplomatic standoff between the U.S. and China that had global ramifications. Dou reconstructs this episode with precision, navigating a minefield of legal documents, diplomatic cable leaks, and political theatre. Her refusal to inject opinion, opting instead for a fact-heavy and balanced approach, enhances the credibility of her work.

But this book is not only about courtrooms and boardrooms. It is also a chronicle of technology's place in the new global order. Huawei's position at the forefront of 5G development—the wireless standard upon which future innovations in AI, robotics, and autonomous systems will depend—has made it both indispensable and threatening in the eyes of many Western governments. Dou dissects these fears with care. She explores how U.S. and European policymakers have come to see Huawei not merely as a business rival, but as a vector for Chinese state influence. The bans, export controls, and sanctions levied against the firm are contextualised within a larger geopolitical shift: the techno-decoupling of China and the West.

One of the more intellectually rewarding aspects of the book is how it juxtaposes Huawei's role in the "Made in China 2025" initiative and the "Digital Silk Road" with Western efforts to contain its growth. Dou explores how China's grand strategy to become a self-sufficient high-tech superpower is built upon nationalism and national champions like Huawei. This strategic alignment—between a firm's commercial objectives and the state's political ambitions—is arguably the greatest challenge Huawei poses to the current liberal economic order.

Dou also reflects on the moral and ethical compromises that define the company's global expansion. The use of Huawei's surveillance systems in Xinjiang, where they have reportedly supported the mass monitoring of the Uyghur population, is documented with somber neutrality. While Western firms such as Cisco are not absolved of similar complicity, the implications are clear: technology, in the wrong hands, becomes a tool for repression.

Where House of Huawei succeeds most is in mapping the tangled ecosystem in which Huawei operates. It is not just a tale of one firm's rise, but a broader narrative about the fusion of state and enterprise, of ideology and engineering, and of East and West. It asks urgent questions about trust, sovereignty, surveillance, privacy, commerce, socio-economic development and the future of the internet—questions that no single government or corporation can answer alone.

Yet despite its depth and insight, the book misses a critical geopolitical link: Africa. In its detailing of Huawei's global reach with its equipment everywhere on the planet, from the Himalayas to Europe to North America, House of Huawei leaves largely unexamined the company's activities on the African continent. This omission is puzzling, particularly given that Africa is not only a major market for Huawei's infrastructure and cloud services, but also a critical source of the minerals—cobalt, tantalum, and rare earths—essential to the global tech value chain.

The irony is sharp. As Dou expertly documents Huawei's role in reshaping the digital futures of nations, she does not fully explore the very earth beneath those futures—African ground from which the raw materials of that power are extracted. The book's absence of this deeper African dimension is a missed opportunity to trace the fuller contours of the global digital order Huawei is helping to build.

References available on request.

Koffi Kouakou is MD of Stratnum Futures, a foresight consulting and advisory company in Pretoria.
Correspondence: koffizulu@gmail.com

World Psychiatric Association Review

On behalf of the World Psychiatric Association (WPA) President, Prof. Danuta Wasserman

Danuta Wasserman

Dear Colleagues,

As we advance through 2025, I am pleased to share updates on WPA's collective efforts to promote excellence, equity, and global collaboration in psychiatry.

FINAL PREPARATIONS FOR THE WPA WORLD CONGRESS IN PRAGUE OCT 5-8, 2025

The Scientific Committee is finalising the program for the WPA's upcoming World Congress of Psychiatry in Prague, Czech Republic, from October 5-8, 2025.

In the congress, advances of science and their application in clinical practice will be presented and stored on the WPA platform, called the Specialist Corner. The lectures, presented by leading experts will address various psychiatric diagnoses, commented on from the perspectives on prevention, healthy lifestyles, caregiver involvement, digital psychiatry, and ethics.

The Scientific Committee is also finalising the selection of plenary sessions and symposia, guided by the EDIT principles—ensuring Equality across genders, ages, and ethnicities, observing Developmental stages from childhood to adulthood and beyond, Inclusion, and Transcultural awareness and perspectives. We ask submitters to encounter for the EDIT principle in the research field they present in order to increase visibility and raise awareness of current gaps in knowledge and how they influence clinical practices. In the choice of the programme, the scientific merit of the submitted proposals has an overriding priority, coupled with the consideration of geographical spread and over and underrepresented topics. This approach aims to enhance the visibility of diverse voices and gaps in psychiatric research.

STRENGTHENING GLOBAL PARTNERSHIPS

In alignment with my 2023–2026 Action Plan, I have engaged with numerous regional and national psychiatric associations, prioritising my presence in person when several WPA member societies from the same continent are represented, as shown below. These collaborations are vital for harmonising WPA member societies' efforts to improve mental health worldwide.

STRENGTHENING GLOBAL PARTNERSHIPS

In alignment with my 2023–2026 Action Plan, I have engaged with numerous regional and national psychiatric associations, prioritising my presence in person when several WPA member societies from the same continent are represented, as shown below. These collaborations are vital for harmonising WPA member societies' efforts to improve mental health worldwide.

NORTH AND SOUTH AMERICA

I joined the Latin American Psychiatric Association's (APAL) regional congress '¡Navegando hacia la psiquiatría del futuro!' and signed, on behalf of the WPA, the 'Agreement of the Americas'. I further followed up our member societies' activities by attending the American Psychiatric Association (APA) meetings and organising the World Congress of Psychiatry (WCP) in Mexico in November 2024.

EUROPE

The WPA member societies in Europe are gathered each year during the European Psychiatric Association (EPA) congress, which I follow on the regular basis in my roles as the President of the WPA in addition to being the former president of the EPA.

WORLD PSYCHIATRIC ASSOCIATION

ASIA

The work of colleagues on the Asian continent is followed by me with individual member societies of the WPA and recently by joining the Asian World Congress, organised by the Federation of Psychiatric Associations (AFPA) in Indonesia.

AFRICA

My individual links with African member societies of the WPA were reinforced by my attendance at the WPA Regional Congress "Embracing the complexity of mental health: neuroscientific foundations and novel interventions", which took place in Alexandria, Egypt, and organised by the Egyptian Psychiatric Association and the Arab Federation of Psychiatrists.

AUSTRALIA AND NEW ZEALAND

WPA has had intense discussions to organize World Congress or Regional Congress on this continent and hopes to organise one in the future.

LOOKING AHEAD

As we prepare for the 2025 World Congress of Psychiatry in Prague October 5-8th , I invite all members to participate in-person to share their research and also engage in discussions on current events and their influence on how they will shape the future of psychiatry.

Danuta Wasserman

With my best wishes,
Prof. Danuta Wasserman, President, WPA

UPDATES ABOUT COLLABORATION WITH THE WORLD HEALTH ORGANIZATION

The World Psychiatric Association (WPA), as a non-state actor in official relations with the World Health Organization (WHO), continues to support global mental health priorities through active partnership and advocacy. This year, WPA is participating in the 78th World Health Assembly (27 May–1 June 2025), where it is presenting a statement emphasising that neurological and psychiatric disorders now account for more disability-adjusted life years (DALYs) than cancer or cardiovascular diseases combined. These disorders are not only widespread but deeply intertwined, sharing psychosocial risk factors such as poverty, social isolation, and discrimination. WPA urges that the WHO's Global Mental Health and Brain Health initiatives be advanced through a unifying strategy of Integral Brain Health, promoting collaboration across services and disciplines. As part of our engagement, WPA leverages its scientific sections to align with WHO action areas, reinforcing policy implementation at global and regional levels.

UPDATES ABOUT THE G7 SUMMIT MEETING IN CANADA IN JUNE 2025

In preparation for the 2025 G7 Summit the WPA, in collaboration with the World Federation of Neurology (WFN), is contributing to high-level conversations on the growing threat of brain and mental disorders in a world increasingly shaped by automation, demographic shifts, and artificial intelligence. These disorders—particularly depression, anxiety, and dementia—carry massive human and economic costs, with $1.2 trillion in lost income and $1.1 trillion in healthcare spending globally. WPA is advocating for the G7 nations to adopt "Integral Brain Health" as a unifying policy goal that spans prevention, treatment, and social support. This includes endorsing a working definition—"When thinking, feeling, and connecting with others is at its best in a safe, healthy, and supportive environment"—and promoting an Integral Brain Health Index to track progress. With G7 nations facing an acute birth-aging imbalance, WPA emphasises the urgency and capacity for these countries to lead community-level and scalable interventions to build brain capital and mental resilience.

PRESIDENTIAL ACTION – FELLOWSHIP AWARD STRENGTHENS COMMUNICATION ACROSS DIVERSE CULTURAL CONTEXTS

The 2025 WPA Presidential Action Fellowship continues to empower early-career psychiatrists with a passion for global mental health and knowledge sharing. Fellows awarded in 2024 translated a selected part from the WPA newsletters into their local languages, a powerful step that broadened access, increased global reach, and strengthened communication across diverse cultural contexts. These translated newsletters have been disseminated through National Psychiatric Associations, amplifying impact at the grassroots level and fostering inclusivity. Selected fellows receive waived congress registration, a stipend for accommodation, and travel reimbursement, supporting their active participation in the upcoming World Congress of Psychiatry 2025. The new round of applications is now open, inviting candidates who demonstrate excellence and commitment to advancing WPA's mission in their regions through education, translation, and leadership.

Glynnview
MULTI PROFESSIONAL PRACTICE
for a better future

2025 GMPP Symposium

Interface between Medicine & Psychiatry
14th Annual Symposium

19th - 20th July 2025

Radisson Hotel & Conference Centre,
3rd Ave, Bredell AH, Kempton Park

Join us for an exclusive GP & psychiatry multi-professional team collaborative symposium

CPD
HPCSA Accredited

PROGRAMME HIGHLIGHTS

- **Schizophrenia Update**
- **Neuropsychiatry cognitive disorders**
- **Addressing the bio-psycho-social needs in chronic pain patients**
- **The vital role of support groups**
- **The MDT in childhood & adolescent learning & behaviour difficulties**
- **"Sex in your office" - The MDT approach to dealing with intimacy**

PLENARY TOPICS

- Insulin & the brain
- Dermatology & mental health
- Obesity in mind: The growing role of obesity in psychiatry
- Budget 2025: How it affects you & your business
- Diabetes
- Fitness to practice
- The secrets your handwriting holds
- Cancer & mental health
- Social media in the addiction space
- Consent & shared decision-making in geriatric patients
- What should you do when you are reported to the HPCSA - Ethical & legal considerations

Book your spot today:
Don't miss this opportunity to improve your practice's approach to mental healthcare

SCAN HERE TO REGISTER

VELOCITY VISION
Innovators in Event Excellence

Event Organiser
011 894 1278
gmpp@velocityvision.co.za
www.gmpp.co.za

Platinum Sponsor:
Cipla

Call for Abstracts

The deadline for submissions is 20 June 2025

SASOP CONGRESS

17 – 21 September 2025

East London International
Convention Centre
Eastern Cape, South Africa

Re-imagining Mental Health Care Access

Theme: Reimagining Mental Health Care Access

The South African Society of Psychiatrists invites you to submit abstracts for presentation at the upcoming SASOP Congress 2025. This year's theme, Reimagining Mental Health Care Access, challenges us to think boldly and act decisively in addressing one of the most pressing issues in mental health today: equitable, effective access to care.

We are looking for submissions that are innovative, solution-focused, and capable of shaping the future of mental health services. Whether through research, clinical innovation, systems improvement, or policy development, your work can contribute to a Congress that does more than reflect on problems—it offers direction.

Abstracts may align with one of our four thematic tracks:
- Public Mental Health and Leadership
- Lifestyle Psychiatry
- Forensic Psychiatry
- General Psychiatry

We welcome contributions from across disciplines and sectors. Let your work be part of a conversation that redefines what's possible for mental health care in South Africa and beyond.

Join us in reimagining a mental health care system that works for all.

For additional information or assistance, please contact:

Londocor Event Management

Bronwyn Rossiter (Congress Organiser)
bronwyn@londocor.co.za | +27 (0)71 048 2343

Marida Kroukamp (Registration Manager)
marida@londocor.co.za | +27 (0)84 903 5102

Elize Kloosterziel (Abstracts Manager)
elize@londocor.co.za | +27 (0)76 979 9379

Kim Raats (Sponsorship Manager)
kim@londocor.co.za | +27 (0)84 551 1411

Natalie Kreusch (Exhibition Manager)
natalie@londocor.co.za | +27 (0)84 500 0784

Sonja du Plessis (General Enquiries)
sonja@londocor.co.za | +27 (0)82 455 7853

Submit your abstracts here

SOUTH AFRICAN SOCIETY OF PSYCHIATRISTS

NOMINATION AND ELECTION OF SASOP BOARD OF DIRECTOR (2025 – 2027)

Dear SASOP Member,

The current SASOP Board of Directors (2023 – 2025) will complete its term in September 2025. The Board is comprised of the following positions:

- **President**
- **Past-President**
- **President-Elect**
- **Honorary Secretary**
- **Honorary Treasurer**
- **Convenor of the SASOP Public Sector Group**
- **Convenor of the SASOP Private Sector Group**

In accordance with the Memorandum of Incorporation (MOI), all Directors shall be elected during the upcoming Biennial General Meeting, following written nomination and acceptance by the candidates. The next Annual General Meeting (AGM) of SASOP will take place during the SASOP Congress, scheduled for 17 – 21 September 2025 in the Eastern Cape.

While nominations for most Board positions must be submitted to the Company Secretariate at least four weeks prior to the AGM, the election of the President follows a separate procedure.

1. NOMINATIONS AND ELECTIONS FOR THE POSITION OF PRESIDENT

To comply with the MOI, nominations for the position of President must be signed by five SASOP members who have voting rights and are in good standing. These nominations must be received by the Company Secretariate no later than 24h00 on 2 May 2025. Completed nomination forms may be submitted to the Company Secretariate via one of the following methods:

- Email (as a legible scanned document):
  - voting@sasop.co.za
- Deliver by hand:
  - HealthMan
    Unit 16 Northcliff Office Park, 203 Beyers Naude Drive,
    Northcliff, 2195

Nominated candidates will be required to submit a biographical statement and a vision for the Presidency, not exceeding 400 words. The SASOP Company Secretariate will distribute ballot papers and supporting documents to all members. Voting may be conducted via a secret ballot by email, and ballots must be returned within 4 weeks of their distribution. Voting counting will be overseen by an independent auditor appointed by the SASOP Board.

2. NOMINATIONS OF HONORARY SECRETARY, HONORARY TREASURER, AND CONVENORS OF SASOP PUBLIC AND PRIVATE SECTOR GROUPS

Nominations for these positions must be submitted by 24h00 on 22 August 2025, four weeks before the AGM. Nominations must be signed by the candidate and two voting members (a proposer and seconder) and must be accompanied by the candidate's manifesto and CV. Completed nomination forms should be submitted to the Company Secretariate using one of the following methods:

- Email (as a legible scanned document):
  - voting@sasop.co.za
- Deliver by hand:
  - HealthMan
    Unit 16 Northcliff Office Park, 203 Beyers Naude Drive,
    Northcliff, 2195

We encourage all members to actively participate in this election process to ensure a democratically elected SASOP Board of Directors for the 2025 – 2027 term.

Issued by the SASOP Secretariate
On behalf of the SASOP Board of Directors

DIRECTORS:
Dr A Lachman (President),
Dr Thuli Mdaka (Public Sector Convenor)
Dr A Pillay (President-Elect), Dr A Porter (Honorary Secretary)
Dr S Seape (Past-President),
Dr Thupana Seshoka (Honorary Treasurer),
Dr Melane van Zyl (Private Sector Convenor)

NEW APPOINTMENTS TO THE EDITORIAL BOARD OF THE SAJP

The SASOP Board is pleased to introduce to the membership the new appointments to the Editorial Board of the South African Journal of Psychiatry:

Editor – Prof Bonga Chiliza (UKZN)
Deputy Editor – Prof Laila Asmal (SU)
Associate Editors – Prof Jonathan Burns (Exeter University), Prof Saeeda Paruk (UKZN), and Prof Noeline Nakasujja (Makerere University).

We wish to thank Professor Jonathan Burns for his long service as Editor, and extend a warm welcome to Professor Bonga Chiliza who takes over the leadership of the journal.

To Do or Not to Do:
Ethical and Legal Obligations in the Mental Health Care Setting
Forensic Psychiatry Seminar 2025

Wits Faculty of Health Sciences
Department of Psychiatry

WITS UNIVERSITY

University of the Witwatersrand
Department of Psychiatry
Division of Forensic Psychiatry
Date : Friday, 13 June 2025, 9h00 - 12h30
Venue : Sterkfontein Psychiatric Hospital

Registration:
R 200,00 (SASOP members - R 150,00)
Free for Sterkfontein Hospital staff and Wits Department of Psychiatry joint appointees
Kindly RSVP with proof of payment to Mandisa.Chirwa@wits.ac.za.
Banking details:
SASOP Southern Gauteng
First National Bank Account: 54480048635

SA's Premier Specialist Clinic
Riverview Manor

PSYCHIATRIST

Live and work in the tranquil surroundings of KwaZulu Natal Midlands. Riverview Manor Rehabilitation Centre requires a second Psychiatrist to join their team

REQUIREMENT

- Specialist registration with the HPCSA

Contact Tracey on 083 212 6481

SOUTH AFRICAN SOCIETY OF PSYCHIATRISTS
PubSec Vocational Group

MEET YOUR PUBSEC COMMITTEE AND GET INVOLVED

Dear Members,

We are pleased to introduce the current members of the PubSec Committee for 2025.

PubSec Committee Members:

- Dr Nokuthula Mdaka – National Convenor
- Prof Lebogang Phahladira – Western Cape Convenor
- Dr Yanga Thungana – Eastern Cape Convenor
- Dr Juanita Subrayadoo – Southern Gauteng Convenor
- Dr Sizwe Mazibuko – Northern Gauteng Convenor
- Dr Janine Brooker – KZN Convenor
- Dr Salminah Lebotsa – Limpopo Convenor
- Dr Jeanette Piennar – Free State Convenor
- Dr Phil Pitjeng – Mpumalanga Convenor

The PubSec Committee is dedicated to supporting Psychiatrists working in the Public Sector by advocating for professional interests, fostering collaboration, and providing opportunities for education and networking.

Your involvement helps strengthen our community and advance our shared goals.

Please reach out to HealthMan at info@healthman.co.za if you'd like to get involved or have any questions.

We appreciate your engagement and look forward to working together to support Public Sector Psychiatrist.

Sincerely,

Mdaka

Dr Nokuthula Mdaka
SASOP PubSec Convenor

pharma dynamics
EFFECTIVE AFFORDABLE HEALTHCARE

PsychMg

SAVE THE DATE

We are excited to announce that, thanks to the generous support of Pharmadynamics, we will be visiting your region again in 2025 for the annual Roadshow.

Over the past five years, these events have proven to be invaluable opportunities for leadership to engage with you, address practice-related concerns, and facilitate resolutions on a national level.

This year, our focus will be on colleagues in Private Practice (both fulltime and part-time).

Optimising Your Income In Private Practice

- 21 May — Bloemfontein
- 18 June — Southern Gauteng
- 19 June — Northern Gauteng
- June — Nelspruit 20
- August — Durban 6
- September — Cape Town 3
- 15 October — Gqeberha
- 16 October — East London
- 12 November — Southern Cape

Please mark your calendars for the meeting in your region. Venues will be confirmed, and you will need to register once you receive the official invitation via email.

We look forward to seeing you there!

Best regards,
Dr Ian Westmore
(Convenor)

Please note that if you RSVP to attend and do not show up without a valid reason or proper cancellation the Friday prior to the event, you will be billed for your attendance.
We appreciate your understanding and cooperation

FORECAST FOR 2025: UPDATES FOR PSYCHIATRISTS IN PRIVATE PRACTICE

1. POSITION STATEMENT ON PCS

PsychMg will release a Position Statement regarding the use of the PCS in psychiatric practice. This statement will be posted on *In-A-Nutshell* and shared with all Medical Scheme administrators.

Due to concerns about the international compliance of our PCS, PsychMg, in collaboration with SAMA, has developed a new PCS that aligns with CPT standards and provides clear descriptors. This new PCS is published in the SAMA MDCM since 2021, and discussions have been held with administrators to implement it. The new PCS also addresses the process of forensic investigations, removing any uncertainties. Starting January 2025, PsychMg and its members will officially transition to the new PCS as published in the SAMA MDCM 2025, making previous PCS agreements obsolete.

GEMS has ceased payments for new PCS codes, and Medscheme is also no reimbursing all the codes. As of 2025, only Bestmed, CAMAF, Platinum Health, de Beers, and Genesis will be using the new PCS exclusively. For Medical Scheme funders or administrators who do not fully adopt the new PCS, PsychMg members will revert to the last version of the old PCS published in SAMA MDCM 2020.

This means the following codes will be used for psychotherapy:

- 2957 for up to 20 minutes
- 2974 for 21+ minutes
- 2975 for 41+ minutes

2. THIRD-PARTY FORM COMPLETION REMUNERATION

PsychMg has received many queries regarding payment for completing third-party reports on behalf of patients. PsychMg will discuss remuneration with the Association for Savings and Investment South Africa (ASISA).

In the meantime, the following guidelines are recommended:

- Psychiatrists are expected to complete reports as requested by patients, but can charge their own fees for the time spent. Medical schemes cannot be billed for these reports; instead, the patient or insurer is responsible for payment, with fees set by the psychiatrist. The requesting patient has the right to review and approve the report.
- If contracted by an insurer or employer, they remain liable for payment, with fees determined by the Healthcare Provider (HCP). The HCP may refuse to provide a report if payment is not received.
- For independent assessments (e.g., disability, medico-legal), the patient must consent to the report, but normal confidentiality rules do not apply, as the report is requested by a third-party. Patient consent is required under these circumstances.

3. ANNUAL PSYCHMG CONGRESS

The 2025 PsychMg Congress will be held from 21 – 23 November 2025 in Umhlanga, due to the close proximity of the SASOP Congress in September 2025. PsychMg aims to make the event affordable and provide full sponsorship for all attending members. Depending on funding, attendance may be limited, and registration will be first-come, first-served. In 2024, 258 delegates attended the PsychMg Congress.

4. MEDSCHEME AND TMS PROTOCOLS

Medscheme has agreed in principle to fund TMS protocols, though payment details are still under discussion. Initially, Medscheme wanted to allocate sessions from the PMB allocation.

5. OPENING A TMS/ECT/KETAMINE CLINIC OR PURCHASING MEDICAL EQUIPMENT

PsychMg will work with the Interventional Special Interest Group of SASOP to develop guidelines for starting clinics or purchasing new equipment for legal interventional procedures. HealthMan will also create guidelines to assist members with setting up new business ventures.

6. DISCOVERY HEALTH CONSULTATION CODES

Discovery Health has now agreed to pay for consultation codes 016 as tiered consults, which they did not do previously.

The new base rates are:

- 0161: R515.20
- 0162: R756.40
- 0163: R997.50

Doctors contracted to Discovery's Premier A and Premier B plans will receive higher rates, but still based on tiered levels. Discovery Health will send letters to all MHCPs, and PsychMg will provide more detailed information on *In-A-Nutshell.*

7. CARE PATHWAYS GUIDELINES

The Care Pathway for Schizophrenia has been finalised and will be posted on In-A-Nutshell for member feedback and publication in the South African Journal of Psychiatry (SAJP).

8. SGA LAI REJECTIONS BY MEDICAL AIDS

Many members have reported that medical schemes are rejecting SGA LAIs despite their inclusion as first-line treatment in the Schizophrenia PMB guidelines. PsychMg encourages members to have patients file complaints with the CMS. Visit the CMS website or email complaints@medicalschemes.co.za for the formal process. Please also send complaint details to psychquery@healthman.co.za for discussion at PsychMg's CMS meetings, with patient consent.

9. LETTER TO CMS

PsychMg has written to the CMS urging them to regulate and enforce the published PMB guidelines.

SASOP CONGRESS

17 – 21 September 2025

East London International Convention Centre
Eastern Cape, South Africa

Re-imagining Mental Health Care Access

Register Today

The organising committee is delighted to invite you to the 2025 Congress of the South African Society of Psychiatrists, taking place from 17–21 September at the East London International Convention Centre.

Set against the scenic backdrop of the Eastern Cape, this year's theme — "Reimagining mental health access in a diverse society" — sets the stage for engaging discussions, meaningful connections, and the latest in psychiatric developments.

We look forward to welcoming you!

CONGRESS ACCOMMODATION

The Premier Hotel East London ICC and Premier Hotel Regent are just a 15-minute drive from East London Airport and within walking distance of the congress venue. Rooms have been secured at both hotels at a discounted rate for delegates attending the congress. Book your stay now for a seamless congress experience!

view accommodation: https://sasop2025.co.za/accommodation/

FLIGHT SCHEDULES

Flights to and from East London are limited, so we recommend booking well in advance to secure your travel plans. For guidance and assistance, please consult your local travel agent.

view flight schedules: https://sasop2025.co.za/flight-schedule/

CALL FOR ABSTRACTS

If you wish to submit an abstract, please refer to the call for abstracts on the congress website.

call for abstracts:
https://sasop2025.co.za/call-for-abstracts/

For additional information or assistance, please contact:
Londocor Event Management

Bronwyn Rossiter (Congress Organiser)
bronwyn@londocor.co.za | +27 (0)71 048 2343

Marida Kroukamp (Registration Manager)
marida@londocor.co.za | +27 (0)84 903 5102

Elize Kloosterziel (Abstracts Manager)
elize@londocor.co.za | +27 (0)76 979 9379

Kim Raats (Sponsorship Manager)
kim@londocor.co.za | +27 (0)84 551 1411

Natalie Kreusch (Exhibition Manager)
natalie@londocor.co.za | +27 (0)84 500 0784

Sonja du Plessis (General Enquiries)
sonja@londocor.co.za | +27 (0)82 455 7853

www.sasop2025.co.za

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 (including those 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

All submitted content will be subject to review by the editor-in-chief, and where necessary the advisory board. All content should be forwarded to the editor-in-chief, Christopher P. Szabo - **Christopher.szabo@wits.ac.za**

THE SOURCE OF EXCEPTIONAL

Established in 2001, we pride ourselves as specialists, creatively energised to deliver successful results, with efficiency and reliability. As leaders in the field of Meetings, Incentives, Conferences, Events and Exhibitions, The Source is a resourceful hub where inspired ideas transform into perfect solutions with impeccable execution. Tailor-made event solutions from concept to development through to implementation rests you, our client, assured of our ability to deliver on our promise - adopting a sophisticated blend of innovation delivered by our professional and enthusiastic team! We listen to understand your vision and objectives, create, innovate and solve, delivering exceptionally, with impact, every single time.

YOUR ULTIMATE SUCCESS • OUR GREATEST REWARD!

OUR PURPOSE

We see ourselves as an invaluable partner to your company, part of your team, part of your success! Whilst we are that familiar face, the face of order and the face of reassurance, we are the face of possibility, being creative innovators in the MICE and exhibition space. Our intricate familiarity with your business ensures seamless coordination from concept to execution. We are a dependable part of your strategy, solidifying your relationships with Key Customer's and Stakeholders, driving your growth, so that we could celebrate with you your success in achieving your goals.

ENGAGE, EMPOWER, EVOLVE!

THE SOURCE EVENTS · MARKETING
Immersive Multi-Channel Marketing

CONTACT US

+27 (0) 11 469 4591
info@thesourcesolutions.com
www.thesourcesolutions.com

CONNECT

PostNet Suite No. 24
Private Bag X11
Honeydew
2040

SERVICES

EVENT MANAGEMENT:

In-person, Hybrid & Virtual Meetings • Incentives • Conferences • Events • Exhibitions

MARKETING SERVICES:

Digital & Traditional Multi-Media • Graphic Design & Production • Corporate Collateral Publishing • Public Relations • Social Media

ASSOCIATIONS

South African Association for the Conference Industry
A governing body to improve the standards in conference facilities, meeting venues and allied services

Southern Africa Tourism Services Association
A member-driven credibility association that strives to set the highest standards in the Tourism Industry

The PCO ALLIANCE NETWORK
A network of Professional Event Organisers with extremely high professional standards

Event Greening Forum
A non-profit organisation that aims to promote sustainability within the events sector.

Association of African Exhibition Organisers
A collective platform of address and representation for professional exhibition organisers throughout Africa.

Marketing Code Authority
a self-regulatory body which defines ethical rules for the marketing of medicines by its voluntary members.

WEConnect International
Is a global network that connects women-owned businesses to qualified buyers around the world.

Women Owned
An international initiative to create a movement of support for Women Owned businesses.

Women Presidents' Organisation
Formed to improve business conditions for women entrepreneurs, accelerate business growth, enhance competitiveness, and promote economic security

Managing Director: GV Beyers
The Source Public Relations (Pty) Ltd Trading as The Source Events and Marketing
Level 2 B-BBEE | Reg. No. 2018/19583/07 | VAT Reg. No. 4290193772

IN-PERSON, HYBRID & VIRTUAL MEETINGS • INCENTIVES • CONFERENCES • EVENTS • EXHIBITIONS