

SOUTH AFRICAN PSYCHIATRY

ABOUT the discipline **FOR** the discipline

Issue 46 • MARCH 2026

**BURNOUT &
RESILIENCE**

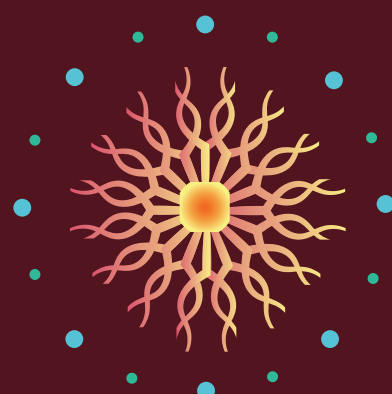
**ETHICS &
TERMINAL CARE**

**NAVIGATING
UNCERTAINTY**

**MATERNAL
MENTAL
HEALTH**

**A D H D ,
PORNOGRAPHY
& ADOLESCENCE**

**A D H D
CONGRESS
2025
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CONTENTS

MARCH 2026

4 FROM **THE EDITOR**

5 **LETTER** TO THE EDITOR

6 DEPARTMENTS OF PSYCHIATRY **NEWS**

8 **SASOP PRESIDENT** UPDATE

10 **BURNING BRIGHT**, **BATTLING BURNOUT** AND **BUILDING RESILIENCE** IN
DIFFICULT TIMES

16 **ADHD AND PORNOGRAPHY IN ADOLESCENCE**

21 **FROM A MOMENT TO A MOVEMENT**: CELEBRATING 10 YEARS OF THE KZN
MENTAL HEALTH ADVOCACY WALK

23 **WHY MATERNAL MENTAL HEALTH** STILL MATTERS

27 **LEGAL AND ETHICAL** CONSIDERATIONS IN **TERMINAL CARE**

31 NAVIGATING THE CROSSROADS: **CULTURE, ETHICS, AND LAW** IN SOUTH
AFRICA'S EVOLVING MENTAL HEALTH LANDSCAPE

33 **NAVIGATING UNCERTAINTY**

37 **OF CHAOS, CONTROL, AND BEING** MET BESIDE THE CHOICE TO LIVE

38 **ADHD CONGRESS** 2025 **REPORTS**

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electronically and as an individual pdf online.

Dear Colleagues

Welcome to the first issue for 2026 – a bumper one of over 100 pages which constitutes a record. This issue marks the beginning of a new era for *South African Psychiatry* insofar as the publication is now only available online which has the advantages of no constraints on page number as well as no reliance on postal services or inaccurate mailing lists.

My thanks to Renata Schoeman for curating the content related to the ADHD Congress 2025 and to Anelet James for the generation of a *Report* on each presentation – a monumental task, albeit assisted by artificial intelligence. As always, we have some interesting *Feature* articles, *Report* content from around the country as well our regular and always thought-provoking *Medico-Legal* Forum and a *Perspective*. In addition – Anersha Pillay as SASOP President provides an update on her activities that ensures we are kept “in the loop”.

This month also sees the launch of a new podcast linked to *South African Psychiatry*. It is entitled *Talking Psychiatry* and will be available on YouTube in the first instance, and potentially Spotify too. My first guests include Anersha Pillay as SASOP President, discussing the issue of leadership, Lennart Eriksson discussing the importance of patient belief systems and Marc Roffey talking about astronomy and mental wellbeing. All have published articles in *South African Psychiatry* and that content provided the basis for the conversations.

On a sad note, the *Departmental News* section features tributes to two well respected and admired colleagues who passed away in recent months – Anelia Machouganska and Dan Stein. I was privileged to have known and worked with them both. They will be missed but not forgotten and obviously heartfelt condolences to their respective families.

Until next time, take care.




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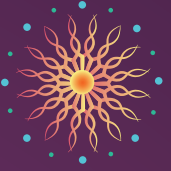
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TALKING PSYCHIATRY

with

CHRISTOPHER PAUL SZABO

WATCH EPISODE 1 HERE



LEADERSHIP IN PSYCHIATRY WITH DR ANERSHA PILLAY & CHRISTOPHER PAUL SZABO

“Talking Psychiatry” is hosted by Christopher Paul Szabo, a psychiatrist and the editor-in-chief of South African Psychiatry. The podcast features conversations with mental health professionals, specifically but not exclusively, related to content published in South African Psychiatry www.southafricanpsychiatry.co.za. Such content will cover issues that have implications for the practice of psychiatry, and related disciplines, as well as society more broadly.

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LETTER TO THE EDITOR

Karishma Lowton

Dear Editor,

Thank you for emphasizing the themes of transparency, trust, accountability and communication between role-players in health, particularly mental health in the “From the editor” content of the November 2025 issue of South African Psychiatry, specifically commenting on an incident reported in the media statement issued by relevant authorities.¹

The media statement stated that “a mental health patient” at a “female psychiatry ward” set fire to her bed. Upon release of the statement and following psychiatry clinical audits, relevant managers were informed of inaccuracies in the statement i.e. it was highlighted that:

1. The patient was not a mental health care user.
2. The event was not in the female psychiatry ward.

The facility regrettably acknowledged the error and challenges culminating in the misinformation with an apology issued to the psychiatry department. However, the lack of media clarification raises concern about investigative processes prior to information distribution and the need for a prompt corrective response when required. This incident has implications for stigma, negative public perception and the misuse of mental illness as a scapegoat in adverse events, which all add to the marginalisation of and discrimination against a vulnerable population.

The current situation of state health care, and certainly at the institution in question, is riddled with challenges ranging from staffing shortages, resource limitations, to the monumental impact of a fire at the hospital. While the resilience of mental health care providers and robustness of service delivery is notable in the face of challenges, it is imperative that all are mindful, and diligent, regarding accuracy when disseminating information. A collaborative effort involving all stakeholders to ensure balanced, clear and truthful communication will ensure effective action in response to such incidents as well as contribute towards public trust in caregivers and institutions.

Kind regards,

Dr Karishma Lowton

SASOP Southern Gauteng chair

Correspondence: Karishma.Lowton@wits.ac.za

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1. <https://www.citizen.co.za/rosebank-killarney-gazette/news-headlines/2025/10/06/charlotte-maxeke-fire-mental-health-patient-starts-fire-no-injuries-reported/>

Mental Health in Pregnancy

a joint webinar hosted by SOOMSA and SASOP

Wednesday, 11 March 2026
19h00 to 20h30 (SAST)



Dr Bavi Vythilingum

Specialist Psychiatrist
Honorary Lecturer: Department of Psychiatry, UCT

Topic: Integrating perinatal mental health into obstetric care



Dr Roland van Rensburg

Specialist Clinical Pharmacologist
Division of Clinical Pharmacology, University of Stellenbosch

Topic: Psychopharmacology in Peripartum Depression – Actionable Data for Clinical Practice

Save the Date

Registration details to follow soon



DEPARTMENTS OF PSYCHIATRY



University of The Witwatersrand

In Loving Memory of Dr. Anelia Valchanova- Matchouganska

29 September 1959 – 10 October 2025

Sandra Fernandes

It is with deep sorrow and gratitude that we celebrate the life of Dr. Anelia Valchanova-Matchouganska, a devoted doctor, compassionate colleague, and cherished friend.

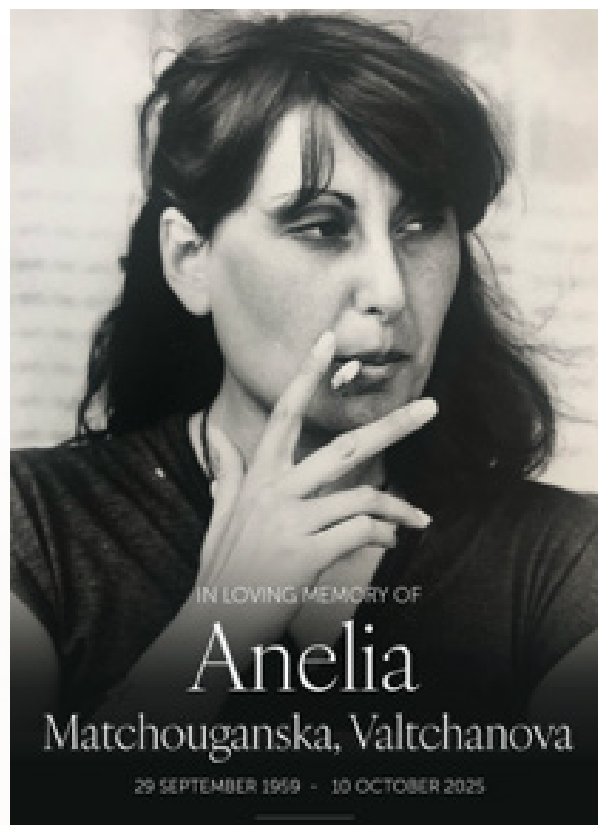
Born in Sofia, Bulgaria, Anelia completed her secondary education there in 1978 and went on to earn her medical qualification from the Medical Academy of Bulgaria in 1985. She began her career as a registrar and lecturer in Internal Medicine and Clinical Pharmacology at the same institution from 1987 to 1990, where she developed a lifelong commitment to clinical excellence and academic inquiry.

After relocating to South Africa, Anelia joined the JG Strijdom Hospital (now Helen Joseph Hospital) as a Medical Officer in Obstetrics and Gynaecology from 1991 to 1993. She then served as a Senior Principal Medical Officer at Leratong Hospital in the Casualty and Polyclinic departments until 1996.

In July 1996, Anelia joined Tara Hospital, where she would dedicate 24 years of her professional life to the care of psychiatric patients and the mentorship of colleagues. During her tenure, she obtained her PhD from the University of Durban-Westville in 2003, and contributed meaningfully to psychiatric research, including participation in the international risperidone trial and several other drug studies conducted at Tara.

Known affectionately by colleagues and patients alike as “Dr. Match,” Anelia embodied kindness, wisdom, and elegance in all she did. Her colleagues fondly remember her as a steady and stylish presence — always impeccably dressed, reminiscent of Edith Piaf or Coco Chanel, and always ready with warm words or sage advice. Whether sharing laughter over tea in the outpatient tearoom or offering mentorship to junior doctors, she left an indelible mark on everyone around her.

Her compassion extended beyond her work. She was a proud and loving mother to Yana and grandmother to Luc, often sharing stories about them with joy and pride. She adored her dogs and



delighted in their antics. Even her well-known fondness for cigarettes became a point of affectionate humour among colleagues — they always knew where to find her when she needed a quiet moment between patients.

After her retirement in 2020, Anelia looked forward to new adventures — moving first to Cape Town to be closer to her daughter and grandson, and later returning to Bulgaria to reconnect with her extended family.

Dr. Anelia Matchouganska was the epitome of grace, intelligence, and compassion — a skilled psychiatrist and a deeply humane person. Her calming presence, dedication to her patients, and unwavering professionalism enriched the lives of all who knew her.

She will be dearly missed by her husband, Nasko, her daughter Yana, her grandson Luc, her extended family, and her many friends and colleagues at Tara and beyond.

Her legacy of kindness and excellence will continue to inspire all who had the privilege of knowing her.

May her memory be a blessing.



University of Cape Town

Departmental Tribute to Prof Dan Stein

Jackie Hoare and John Joska

The Department of Psychiatry and Mental Health at UCT has been sad, mourning an innumerable loss and grieving. At times Dan's too soon departure from us has been overwhelming. We have made spaces to process, hear each others stories of Dan and how we are experiencing his loss. We have let ourselves be vulnerable with each other and seen the true face of our pain. Dan was a visionary and exceptional scientist, whose like will not be seen again. His academic leadership has left an indelible mark on our department and we feel his absence.

Dan J. Stein was the third Chair and Head of the Department of Psychiatry and Mental Health, from 2005, through to 2025. During this time Dan built the premier department of psychiatry in Africa, and close to the top in the global south, something that he was immensely proud of. Dan wanted equity for Psychiatry and was deeply committed to lifting psychiatry out of its "underdog" status among clinical disciplines.

Dan shaped our department in many ways. Firstly, Dan was immovable in his view that service must be led by the best evidence available. One way that he achieved this was through the establishment of several new clinical and academic Divisions, including Neuropsychiatry, Liaison Psychiatry, Addiction Psychiatry, General Adult Psychiatry, Biological Psychiatry and Psychopharmacology. He was exceptionally proud of these Divisions, their leadership and teams. The Divisional structure gave members of the Department academic identity and focus, saw multiple new degree programs registered, and numerous internationally competitive grants funded. He encouraged all levels of research from clinicians auditing their work, to competitive international grant writing. Secondly, Dan had an unmatched ability to mentor and supervise students and colleagues. As a result, the Department has grown exponentially and seen numerous masters, doctoral, postdoctoral and clinical fellows graduate and go on to thrive and develop their own programs. Many are now global leaders in psychiatry and neuroscience. Thirdly, Dan was an academic, writer and collaborator with a level of productivity that is unmatched. His lessons on writing have been left with many of us: write short sentences, start with what is known and clarify what is not known, for example. Dan's networks in and outside of the Department were extensive. He established the MRC unit on stress and anxiety, now the Risk and Resilience unit; he



Prof Dan Stein 1962 – 2025

established the Brain Behaviour Initiative at UCT; and more recently the Centre for Brain and Behaviour.

Dan was an academic giant who despite having offers and opportunities abroad, was delighted and honoured to stay as chair of psychiatry and mental health at UCT. It's no mean feat, for someone of his stature, to be satisfied and happy to remain in what might be perceived to be a lower ranked university than what was possible for him. But it showed his commitment to UCT and to Africa.

Dan was clear in his view that scientific knowledge must not only be accumulated but also communicated. For this reason, it is highly appropriate that we remember Dan at the Annual Departmental Research Day with a lecture named: The Dan J Stein Memorial Lecture. We will also establish, for the next 5 years the Dan J Stein Clinician Scientist Research Award - a once-off award of R150 000 to support clinicians, staff or students to complete their PhD degree.

Dan left the world better because he was here. Despite the heaviness and sadness of the work we do we did find moments of joy and laughed often and much. We will remember that too. May lives have breathed easier because Dan lived.

The departmental newsletter is dedicated to Dan, to honour his memory, legacy and life. You can access it [here](#)

SASOP PRESIDENT UPDATE



**SOUTH AFRICAN SOCIETY OF
PSYCHIATRISTS**

Anersha Pillay

Dear Colleagues

Reflecting on the past four to five months as SASOP president, I am struck by the velocity with which time proceeds. It seems like yesterday when I was just entering my tenure.

The first few weeks of undertaking this responsibility felt like being thrown into the deep end. I had to delve into my inner strength and leadership ability to navigate early challenges I faced. My first board meeting with a few new board members proceeded well. I am privileged to preside over a board whose members are enthusiastic and hard-working; and constitute many who possess a wealth of experience in both SASOP, PsychMg, public sector practice, private practice, academia and leadership. At this juncture, I think it prudent to introduce the new SASOP board (2025-2027)



Anersha Pillay

I recall the wise words of past presidents who advised me not to feel disheartened if all the well-meaning plans of my vision did not attain complete fruition as the tenure is limited to just 2 years.

As such, I decided to focus on the foundations upon which these visions can be built at a later stage if necessary. Herewith is a brief summary on what has been achieved thus far:

SASOP 2.0

The sourcing of a physical collapsible suggestion box to receive correspondence from members at SASOP-related events has proven elusive thus far. This remains a work in progress. Nevertheless, interactions with SASOP members have been meaningful. This was particularly evident at the successful annual PsychMg congress held in Durban in November 2025, where members were particularly engaging and enthusiastic around contributing to the success of the training institute and the expansion of the footprint of Neuropsychiatry. Seems that we are off to a promising start.

SASOP/PSYCHMG TRAINING INSTITUTE

At my first meeting in October 2025 with the Heads of Departments of Psychiatry across the country, I proposed the role that the Training Institute may play in assisting with complimenting and filling the gap particularly in under-resourced areas, for the teaching and training of medical officers, registrars and subspecialist fellows. The overall aim here is to assist with the teaching and training requirements of the Diploma of Mental Health (DMH), Fellowship of Psychiatry (FCPSYCH), Masters of Medicine (MMED) and the registered subspecialties. This is whilst neither usurping nor replacing that which is offered by the individual university departments and the CMSA.

The proposal was well received and a follow-up meeting was held to assess the areas of need in each department. My overall objective was to assist the departments and the college with capacity building of trainers who meet the individual university requirements in order to improve the availability of psychiatric services in under-resourced areas.



*Thupana Seshoka
President-Elect*



*Anusha Lachman
Past President*



*Melane Van Zyl
Psychmg Rep.*



*Nokuthula Mdaka
Pubsec Rep.*



*Adila Aboobaker-Naicker
Hon. Treasurer*



*Wisani Makhomisani
Hon. Secretary*

Following on from these meetings, I enlisted various SASOP board members some of whom have already been actively coordinating supportive registrar and medical officer training, to form a working group with the aim of developing a structural framework from which the Training Institute will function. We had our first meeting on the 20 January this year to propose a business plan for the institute. A parallel process will be to also begin, aimed at developing a CPD program for qualified psychiatrists who are both early in their careers as well as those who are established.

The formal development and consolidation of the SASOP/PSYCHMG Training Institute as exciting as it may be is a work in progress. I am confident that we will, at the very least, have planted the seedlings for an initiative which was conceived by a few SASOP presidents more than 10 years ago

EXPANDING THE FOOTPRINT OF NEUROPSYCHIATRY

Currently, under the umbrella of the Southern Gauteng subgroup of SASOP, two Johannesburg-based Neuropsychiatrists run a virtual neuropsychiatry workshop annually. This is in addition to assisting registrars with a separate neuropsychiatry exam preparation session.

In considering expanding the footprint of neuropsychiatry across the country, such workshops can be expanded further to reach a wider membership and audience. However, this will require the assistance of and collaboration with interested registered neuropsychiatrists across South Africa in order to disseminate the workload. With this in mind I believe it vital to pledge my and the training institute's support for the expansion of this important initiative. To this end, I will be reaching out to the Southern Gauteng subgroup to offer the board's support and collaboration.

Upon receiving requests from a few psychiatrists in established practices who are unable to relocate to accredited Neuropsychiatry training sites but are interested in pursuing neuropsychiatry subspecialist training, I engaged with the President of the CMSA to confirm whether subspecialist training can be done on a part-time basis. There is, fortunately, already a forum under which training can occur, provided a suitable university department has the capacity to provide neuropsychiatry subspecialist training and that the on-site requirements are met by the candidate. With this provision, the ideal goal of having at least one registered Neuropsychiatrist in each province seems more attainable.

I have also begun to expand the international footprint of South African Neuropsychiatry by engaging with a member of the International Neuropsychiatry Association to hopefully foster a more structured and sustainable network that may lead to future research and collaborations. This is in addition to the already established presence and participation of some South African Neuropsychiatrists in the Global Neuropsychiatry Group (GNG), which is endorsed by the INA.

I will also be travelling to the European Congress of Psychiatry in March, together with President-Elect, Thupana Seshoka and SASOP Board consultant and a Past President, Mvuyiso Tatatala. We aim to meet with the EPA President to forge collaborative relationships in general and particularly in the field of Neuropsychiatry.

Colleagues, I trust that the update on my and the SASOP Board's endeavours thus far will leave you inspired to correspond with me and participate in some of these initiatives. I look forward to hearing from you. Until next time, be safe and well as 2026 descends upon us all its vigor and momentum.

Before I sign off, I would be remiss in not paying tribute to Professor Dan Stein. As you are all no doubt aware, December 2025 brought the sad news of the passing of Professor Stein, a giant in the national and international world of Psychiatry, lost too soon. SASOP salutes his immeasurable contributions and mourns his loss.

Take care all,
Anersha

Correspondence: anersha@sasop.co.za



"A hungry **White-collared Barbet** saying to Mom – Feed me NOW or I am leaving!!!" Mom says... "Here is your breakfast. Please stay!"



Dr Lennart Eriksson is a psychiatrist living and practising in Pennington KZN

Correspondence: lennarte@iafrica.com

BURNING BRIGHT, BATTLING BURNOUT AND BUILDING RESILIENCE IN DIFFICULT TIMES

Kerry-Ann Louw

Based on a webinar presentation hosted by the Education Committee of the Colleges of Medicine of South Africa, 9th October 2025



Kerry-Ann Louw

BURNING BRIGHT- THE COMPLEXITY OF MEDICINE IN CURRENT TIMES

We live in difficult and complicated times, facing overwhelming global challenges including climate change, fresh water and food insecurity, war and conflict, global health crises, economic instability with increased costs of living, and widespread poverty and inequality¹. In healthcare, we are racing to keep up with technological advancement including the developments made possible through artificial intelligence, while still fighting to meet people's basic health needs². In addition, as health workers we face daily stressors including physical and verbal aggression from patients and relatives; exposure to disease, suffering and death; working with traumatised patients; time pressured work environments with high workloads; responsibility for high-risk decision making; organisational stressors; social expectations of health workers and moral injury³⁻⁵. Moral injury occurs when resource constraints or competing obligations force or fail to prevent actions that do not align with our moral beliefs.⁶ As a profession, medicine has a set of expectations and norms that add to the pressures and demands of the work. For many, being a doctor is not only a job, but an identity. The profession is marked by myths of invulnerability, and "good doctors" are doctors who always put others first, who sacrifice at all costs and who are constantly available⁷. Overworking and sacrifice become the norm, while many sit battling imposter syndrome⁸. The narrative of the "healthcare hero" puts incredible pressure on health workers and frames accessing help for stress, burnout or mental illness as a weakness^{9,10}. The consequences of the

multiple stressors placed on health workers include burnout and stress related mental health disorders such as depression, post-traumatic stress disorder and substance use disorders.¹¹ Physicians are also at higher risk of death by suicide.¹²

BATTLING BURNOUT

Burnout is most often defined as having three key dimensions: overwhelming exhaustion, depersonalization and diminished feelings of accomplishment^{13,14}. Exhaustion can include physical symptoms such as a low energy and sleep disturbance as well as psychological symptoms such as irritability, difficulty concentrating or making decisions, anger or low mood. Depersonalisation includes experiences such as detachment, negativism, impersonal feelings, and the inability to experience and express empathy or grief. Diminished feelings of accomplishment include feelings of inefficiency, inadequacy, and lack of productivity or value. Brindley identifies the 4 Cs of burnout: Callousness, Cutting corners, Cynicism and Contempt⁷. ICD-11 includes burnout as an "occupational phenomenon" and not a medical condition. Burnout is defined in ICD-11 as a "syndrome conceptualized as resulting from chronic workplace stress that has not been adequately managed" with the same three key dimensions, namely feelings of energy depletion, increased mental distance from one's job and reduced professional efficacy¹⁵. Burnout often has a slow and insidious development. Freudenberger described 11 phases of burnout^{7,16}:

1. Compulsion to prove oneself
2. Efforts to work harder
3. Neglect of one's own needs
4. Displaced conflict
5. Alteration of values
6. Denial of emerging problems
7. Withdrawal
8. Depersonalization
9. Inner emptiness
10. Depression
11. Frank burnout

It is interesting that in the early phases of burnout one tries to prove oneself by working even harder.

Burnout research includes different definitions, methodologies and study populations, making it hard to compare findings across studies. A 2018 systematic review of burnout among physicians found prevalence estimates of overall burnout of 67.0% and the subcomponents of emotional exhaustion of 72.0%, depersonalization of 68.1% and low personal accomplishment of 63.2%¹⁷. A South African review of burnout in doctors before, during and after the COVID-19 pandemic included 22 studies and found rates of burnout in doctors prior to COVID ranging from 4% to 84% and rates during and post COVID of 58.9% to 78%¹⁸. The factors associated with burnout were not consistent across these studies. Factors that were identified in some studies included younger age; female gender; being an intern, community service doctor or registrar; working in the public health sector; internal and emergency medicine work; depression and anxiety; substance use; greater workload and poor work life balance; moral injury; low job support; and low job satisfaction¹⁸. A global systematic review and meta-analysis of the occupational risk factors for burnout in health workers found strong associations with burnout and workplace bullying, job stress and poor communication¹⁹.

Burnout develops when there is an imbalance or disconnect between the individual and their work environment²⁰. This imbalance needs to consider workload, sense of control, level of reward, community fairness and values²⁰. When the demands of the job outweigh the job resources, burnout develops. Work related drivers of burnout include excessive workloads, inefficient work processes, low organisational commitment with poor organisational culture, high clerical burden including electronic health records, lack of autonomy and control in the workplace, conflict with superiors and colleagues, and work-home conflicts^{21,22}.

BUILDING RESILIENCE

Resilience can be defined as the maintenance or rapid recovery of psychological well-being and mental health after exposure to stress or trauma³. Resilience is no longer viewed as a simple trait that individuals may or may not possess, but rather as a complex outcome that develops as part of a dynamic process between an individual and their environment²³⁻²⁵. Beyond resilience, is the concept of post-traumatic growth, which is defined as not only returning levels of homeostasis but rather increasing levels of functioning and finding meaning, and even benefit, after a traumatic experience²⁶.

Several psychosocial factors have been associated with resilience. These include finding meaning or purpose in life, having a sense of coherence in one's personal narrative, positive emotions, hardiness, self-esteem and self-efficacy, active coping strategies, having optimism and a sense of hope, higher levels of social support, cognitive flexibility, respect and esteem for others, having a sense of control over one's life, spirituality, and hobbies or creative pursuits^{25,27}.

The literature around resiliency training is complicated by the lack of an accepted, empirically validated framework for the mode of action of resiliency interventions²⁸.

There is little consensus about the components needed for training programmes, with diverse theoretical assumptions, methodology and psychotherapeutic methods being implemented^{3,28,29}. A Cochrane review of the psychological mechanisms to foster

resilience in health professionals included randomised controlled trials in adults employed as health professionals, comparing any form of psychological intervention to foster resilience or posttraumatic growth to no intervention, wait list or care as usual³. The primary outcomes were resilience, anxiety, depression, stress, wellbeing and quality of life. Of the 44 studies included, 36 were conducted in high income countries. Most studies investigated group and face to face interventions. Of the studies, 19 compared resilience training based on combined theoretical foundations, for example, cognitive behaviour therapy and mindfulness versus unspecific comparators such as waitlist. There was low certainty evidence that compared to controls, resiliency training may result in higher levels of resilience, lower levels of depression, stress or stress perception and higher levels of certain resilience factors. There was little evidence to support any effect on anxiety, quality of life, or well-being. The authors conclude that while these findings suggest a positive effect of resilience training, the evidence is uncertain and there is a lack of long-term studies with a reduced geographical distribution. Ultimately, there is a need for high-quality replication and improved study design.

MANAGEMENT APPROACHES- PROTECTING, PREVENTING AND FINDING PERSPECTIVE

Burnout interventions must address structural and organisational deficiencies. Providing individual resiliency training without addressing toxic workplace cultures is not going to address the problem³⁰. Workplace interventions include workload reduction, modifying work processes, supporting flexible work schedules, promoting a non-punitive culture that promotes social contact and help-seeking behaviour, increasing control and participation in decision making, having defined work roles and processes, improving the physical environment of the workplace, strengthening workplace communication and peer networks, team building, increasing supervisory and peer support, and leadership training with a visible and supportive leadership^{7,18,31,32}.

Individual level prevention and treatment strategies for burnout must be individualised, considering each person's personality, resources, career path, support structures and home circumstances. An individualised care plan may include counselling, psychotherapy, coaching or mentorship. Doctors shouldn't self-treat or self-prescribe when managing burnout and depression, and should rather be open to accessing help from healthcare providers.

Self-care practices need to be sustainable and individualised. Self-care practices include taking care of basic needs such as drinking enough water, eating healthy food, and taking regular rest and bathroom breaks during the workday³³. Many people neglect these basic needs. Exercise is important for physical and mental health and the prevention and management of burnout³⁴⁻³⁶. Recommendations are for 150 minutes of moderate intensity exercise per week³⁷. Exercise goals should be tailored to suit the individual rather than setting unrealistic goals that only lead to disappointment. Other self-care practices include spending time in nature,

mindfulness, engaging in creative pursuits, ensuring adequate sleep, unplugging from technology, and taking leave and being on leave.^{38–42}

There are several organizations and resources to reach out to when experiencing mental distress and burnout, these include:

Healthcare Workers Care Network

<https://www.healthcareworkerscarenetwork.org.za>
24-hour helpline:
0800 21 21 21 SMS 43001

South African Depression and Anxiety Group

<https://www.sadag.org/>
Suicide Crisis Helpline:
0800 567 567

Mental Health Information Centre

<https://mentalhealthsa.org.za/>
021 938 9229

Finally, remember to be flexible, we need to adapt to our ever-changing world. Be kind to yourself and your peers, things are hard. Be curious and find the meaning and passion in your work and your world again. Be boundaried, know your limits and be honest with yourself and those around you. Be excited, do more of the things that bring you love and joy. Be committed, any interventions to boost resilience and prevent burnout take practice. Be connected, find and build your community. Be brave, get help when you need it. It takes a brave and strong person to reach out for the help they need.

Thank you for the work you do!

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ADHD AND PORNOGRAPHY IN ADOLESCENCE

Linda Kelly

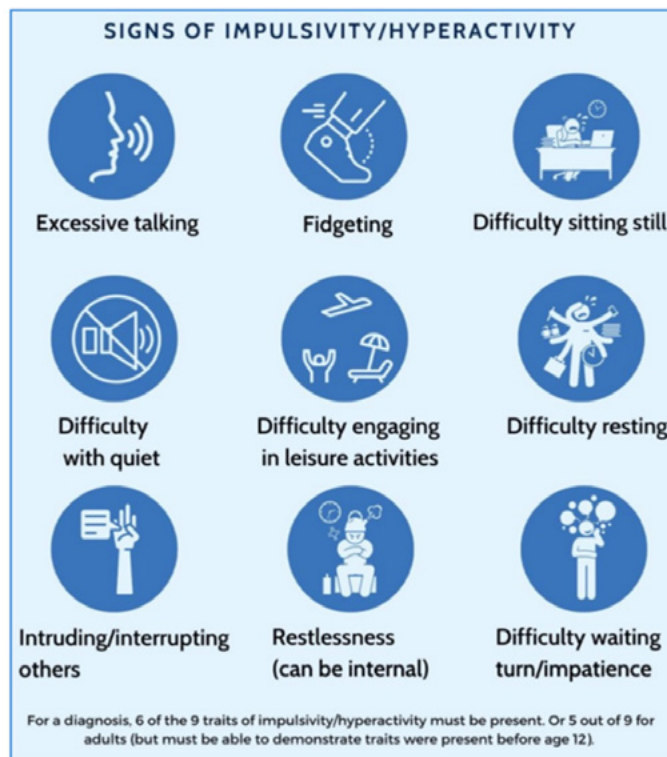
This article is based on a presentation at the 5th Southern African Multidisciplinary ADHD Congress 2024

ADHD is a neurodevelopmental condition with core symptoms encompassing inattention, hyperactivity, and impulsivity. The symptoms impact daily life including academic and professional life, as well as interpersonal relationships. This may include lower relational satisfaction, impaired quality of romantic relationships, higher rates of separation or divorce, and an increased risk of intimate partner violence.

Pornography refers to sexually explicit materials such as videos, photographs, or writings whose purpose is to elicit sexual arousal. Researchers in this field have not reached a consensus on a definition (Dworkin, 1981; McElroy, 1997).

Research regarding the relationship between ADHD and sexual development has not found a significant difference between age of onset of puberty in children with and without a diagnosis of ADHD (Greenfield et al., 2014). There is no association between delayed or impaired sexual maturation and ADHD (Wery et al., 2016). Although ADHD has no direct influence on individual development and sexual maturation, there is evidence that psychological development of sexual identity and functions is affected by ADHD (Niazof et al., 2019).

There are various frequently occurring comorbidities in ADHD, including hypersexuality (Reid et al., 2013). The association between inattention, impulsivity and hypersexuality may be related to sensation seeking or difficulty tolerating boredom (Blankenship et al., 2004; Kafka & Prentky, 1999). There is also a suggestion that sexual activities may serve as mood altering “self-medication” processes in individuals with ADHD (Blum et al., 2008). The proposed mechanism is thought to be the reward deficiency that is typical of ADHD and related to addictive, impulsive, compulsive and risky sexual behaviour.



Source: <https://neurodivergentinsights.com/dsm-5-criteria-for-adhd-explained-in-pictures/?srsltid=AfmBOoq56yTat2Pljqs1DUkV-EnCt9VkcYWd60O8PUWvnJVQdEaJxMnZ>

The diagnosis of Hypersexual Disorder was considered for the DSM-5 but ultimately rejected due to lack of empirical evidence. It is conceptualized as a sexual desire disorder characterized by increasing frequency and intensity of sexually motivated fantasies, arousal urges and enacted behaviour.

Compulsive Sexual Behaviour Disorder (CSBD) is proposed in ICD-11 as an impulse control disorder with resulting distress or impairment in functioning. There is debate as to whether CSBD can be considered a behavioural addiction like substance addiction, gambling or gaming and has therefore been included in impulsive control disorders rather than addictive disorders.

A highly prevalent form of CSBD in ADHD is Problematic Pornography Use (PPU). Emotional dysregulation, sensation seeking, impulsivity and reduced self-control capacity in ADHD predisposes individuals to impairments in intimate relationships, and risky sexual behaviours (Kooij, 2018; Nigg, 2013). Academic impairment, family stress and conflict, decreased parental involvement, as well as low involvement at school can all increase the likelihood of exposure to negative peer groups and risky situations (Schoenfelder & Kollins, 2016). Some studies show individuals with ADHD report increased sexual desire, higher masturbation frequency and lower sexual satisfaction (Canu & Carlson, 2003).

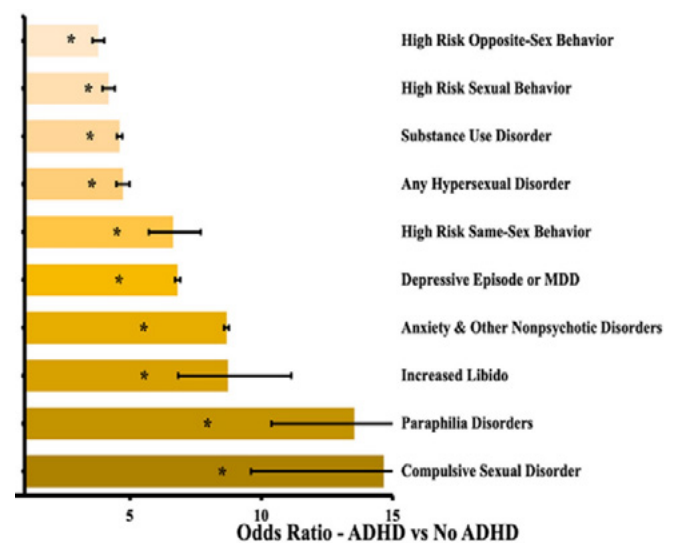
Across studies, the association between ADHD and hypersexuality is between 2,4 and 12% (Bijlenga *et al.*, 2018). However, in recent reviews of the association between ADHD, hypersexuality and paraphilias, the pooled data did not clearly show more hypersexuality in the ADHD population (Soldati *et al.*, 2021). Explanations factor in the lack of distress or dysfunction connected to the behaviours and that they are rather viewed as sexual coping strategies.

There has been a significant increase in online pornography consumption by pre-adolescent children and adolescents in recent years due to unlimited, portable, and often unmonitored access to sexually explicit material on the internet (Grubbs *et al.*, 2019; Lewczuk *et al.*, 2019; Owens *et al.*, 2012; Rissel *et al.*, 2016).

The development of sexual identity is a major process of transition mainly established during adolescence. It relates to physiological, anatomical and behavioural changes leading to the development of sexual fantasies and activities. It is a complex process influenced by internal neuropathological, social and environmental conditions. It is possible that many young people learn about sex from the internet and internet pornography frequently distorts normal sexual boundaries, body image, and sexual engagement including idealized, dehumanized, sadistic and masochistic imagery amongst others (Music, 2019).

A 2022 study by Hale *et al.* focused on patients under 21 years of age with ADHD, controlled with those without ADHD, and investigated a number of variables. The results revealed that those with ADHD had a rate of nearly 5 times higher of any hypersexual disorder, and conclusions emphasized the need for mental health practitioners to be aware and screen their patients in order to address problematic behaviours before they become more severe with detrimental consequences.

There are some significant impacts of internet pornography exposure in adolescents. Firstly, sexual attitudes and beliefs may become uncertain, with conflicts between family beliefs and those developed through pornography consumption. Unrealistic or misleading attitudes toward sex and intimate relationships may develop, such



Odds ratio by outcome between patients without ADHD and with ADHD. Confidence bars represent 95% interval. Asterisk (*) data labels indicate significant difference ($P < 0.05$). Source: Hale, El & Murphy, M & Thompson, K. (2022). *H is for hypersexual: Sexuality in youths with ADHD*. *Frontiers in Child and Adolescent Psychiatry*. 1. 10.3389/frcha.2022.1048732.

as casual and physical as opposed to affectionate and relational. Sexually explicit material may lead to sexual objectification of women and unrealistic ideals of body type or sexual performance. Sexual behaviour is also impacted with acceptance of sexually permissive and high-risk sexual behaviour as well as earlier experience of first sexual encounter (Braun-Courville & Rojas, 2009; Kraus & Russel, 2008). There is an increase in sexual aggression with exposure to sexually explicit material (SEM) in predisposed individuals (Ybarra *et al.*, 2011). There is also an inverse relationship between social interaction and bonding with the consumption of SEM (Mesch, 2008). There is also an increase in delinquency, depressive symptoms and emotional maladjustment (Ybarra *et al.*, 2005).

Neurobiological implications are also relevant. Pathological compulsive behaviours including pornography consumption share similar neural processes to addiction. The dopaminergic neurons of the reward circuitry involving the Ventral Tegmental Area (VTA) and Nucleus Accumbens (NAcc) are affected, and this dysfunction is associated with impulsive and risk-taking behaviour.

Common reward-seeking behaviours in adolescence promote growth and learning, but excessive tendencies may be associated with an increased risk of development of high-risk behaviours. Chronic internet pornography use activates the reward system, which in turn activates the circuit of addiction and induces neuroplasticity in the reward circuitry.

An MRI study by Kühn *et al.* (2014) revealed longer exposure in hours per week to internet pornography correlated with lower grey matter volume of the right caudate nucleus, and longer use in years showed lower activity in the left putamen in response to sexual images. In other fMRI studies, putamen activation occurred during sexual arousal, and it is proposed that the decreased activation seen represents a tolerance brought about by desensitization.

Adolescents lack maturation of the frontal circuitry to exert adequate cognitive control to suppress sexual thoughts as a result of exposure to SEM (Owens *et al.*, 2012). Dysfunction in the prefrontal top-down control over the subcortical limbic system may cause activation of the ventral striatal motivational circuit (Galvan *et al.*, 2006).

CLINICAL ASSESSMENT

Detailed psychiatric history, mental status examination and physical examination should be completed to identify psychiatric and medical comorbidities. Detailed clinical interviews should include the pattern, extent, consequences and impairments related to pornography use. In terms of the diagnosis of Compulsive Sexual Behaviour Disorder as defined by the ICD-11, there are various rating scales that can be used. These include the Internet Sex Screening Test – Adolescent (Delmonico & Miller, 2003), Sexual Addiction Screening Test (SAST; Carnes, 1989), Problematic Pornography Consumption Scale (PPCS; Böthe, 2018) and Problematic Internet Use Questionnaire.

Interventions include normalizing the sensitivity of pornography to minimize shame, non-judgmental attitudes of clinicians, supportive guidance to establish sexual boundaries, safety and trust, psychoeducation, keeping religious, cultural or traditional norms in mind, inclusion of family/guardians in treatment via education around filtering or blocking device usage time, and rules for internet time management (Delmonico *et al.*, 2008)

NON-PHARMACOLOGICAL TREATMENT

- Individual Cognitive Behavioural Therapy (CBT) including looking at triggers, distorted perceptions and beliefs, as well as recognizing consequences of behaviour (Delmonico *et al.*, 2008)
- Multimodal school-based CBT including student groups, psychoeducation for teachers, group cognitive behavioural parent training
- Motivational Interviewing similar to that used in substance abuse disorders/addictions (Orzack, 2006)
- Reality Therapy, which states that the key to changing behaviour lies in choosing to change acts and thinking (Pezoa-Jares *et al.*, 2012)
- Multimodal Psychotherapy including combinations of individual, parental and group therapies (Pezoa-Jares *et al.*, 2012)

PHARMACOLOGICAL TREATMENT

There is sparse literature for pharmacological treatment of excessive or addictive pornography consumption. Treating the ADHD is the first line in the comorbid condition. Some research focusing on internet addiction and the efficacy of Escitalopram, Naltrexone and Quetiapine may be a consideration (Pezoa-Jares *et al.*, 2012).

PREVENTATIVE STRATEGIES

There is sparse literature for pharmacological treatment of excessive or addictive pornography consumption. Treating the ADHD is the first line in the comorbid condition. Some research focusing on internet addiction and the efficacy of Escitalopram, Naltrexone and Quetiapine may be a consideration (Pezoa-Jares *et al.*, 2012).

PREVENTATIVE STRATEGIES

Prevention strategies are vital and include open communication between parents and adolescents regarding internet use and sexual behaviour, promotion of school and family-based programs for education and prevention, filtering or blocking of devices by parents, and changes in governmental policies and laws regarding internet pornography (Roy, 2020).

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FROM A MOMENT TO A MOVEMENT: CELEBRATING 10 YEARS OF THE KZN MENTAL HEALTH ADVOCACY WALK

Suntosh R. Pillay



Organizing committee

Suntosh Pillay, Lynne Richards, Suvira Ramlall, and Rivendri Govender

On a cold Saturday morning, 2 July 2016, a few hundred people gathered on Durban's Bay of Plenty promenade to participate in a mental health walk. Picture the scene: gusty winds, banners and pamphlets secured by rocks, and dark clouds threatening to dampen the spirit of a small but determined group of activists hanging on to their hats and jackets. In hindsight, the weather was prophetic – the winds of change were upon us. Nothing could dampen the crowd's spirits. A decade later, that small gathering of passionate healthcare workers, service providers, and people with lived experience, has evolved into South Africa's largest, free, mental health walk and wellness fair – attracting over 1600 people and 50 organisations at our tenth annual event, hosted on October 5th, 2025.

In her welcome address to the crowd, Professor Suvira Ramlall joked that “this was an anniversary reminder for us” because the same windy conditions and imminent rain gave us flashbacks of our first walk ten years ago. It is encouraging that the weather no longer deters attendance, which has consistently grown each year.



All photos taken by Vijay Ramballie

Braving the variations of the outer climate is a good metaphor for the inner resilience needed to navigate the journey of life. The anticipation – especially on social media – is palpable. We are now more than a walk; we have become a movement.

When Prof Ramlall and I organised the event in 2016, with the help of our colleagues from King Dinuzulu Hospital Complex (Specialised Psychiatry Unit), we wondered whether a simple walk could become a rallying point for mental health activism.

After all, walks are a dime-a-dozen and mental health is often stigmatized or conflated with mental illness. Many good causes have a walk in their name. Mental health, however, does not mobilise public activism or funding in the same way. Quite often, discussions about depression, anxiety, substance abuse, dementia, or schizophrenia, still exist only in whispers behind closed doors, or in academic settings.

Stigma, negative perceptions, misinformation, and prejudice endure on the ground.

Fortunately, the narrative is changing – and the prognosis for mental health advocacy is improving. A younger generation of TikTok and Insta savvy users speak easily and openly about their psychosocial struggles and are less concerned about social stigma. The rise of positive hashtags like #ItsOkayToNotBeOkay or #MondayMotivations have given rise to online spaces where conversations about emotional difficulties are openly discussed. The semicolon tattoo, for example, provides young people with the confidence to embrace their imperfections and traumas as reminders that their story continues, even after suicide attempts or psychiatric admissions.

However, turning online enthusiasm into offline participation requires effort. It is relatively easy to ‘like’ a status, repost a message, or share a meme. It takes real commitment to show up, in person, to a live event – especially in a post-COVID world where cyberspace has become a safe retreat (and, if you know anything about Durbanites, a single cloud in the sky is enough for them to predict a thunderstorm, cancel attendance, and settle for a Netflix series instead!). KZN has consistently stepped out in force and spoken with their feet. The attendance from a diversity of sectors and positive feedback from attendees about the impact of the event (beyond just a morning of fun in the sun by the sea) indicate that this annual event is a calendar highlight in KZN.

Although hosted ahead of World Mental Health Day, observed internationally on October 10, Prof Ramlall urged people “to remember that every day is mental health day. We take care of our bodies, we clothe ourselves, we take photos of our outer appearance every day, but we must also tend to the inside, our emotional and spiritual needs, with as much commitment and fervour.”

As a specialist psychiatrist, she has been spreading the philosophy of holistic care for decades, comprehensively covered in her book *Inpowerment: Building mental and emotional resilience*. One of her eight “building blocks” for resilience is movement. She writes that “the human body is designed for movement... Voluntary exercise is the single best thing one can do to slow the cognitive decline that accompanies normal ageing” (p.83). Neurobiological evidence is clear: sedentary behaviours are correlated with a host of adverse physical, psychological, and even interpersonal problems, increasing the risk of morbidity and early mortality.

For this reason, the walk deliberately includes diverse (free) pre- and post-walk activities, including yoga, stretching, a (Bollywood) dance class, aerobics, and Zumba. The concept of movement is built into the agenda of the event so that participants appreciate that there is a diversity of simple, non-expensive and fun ways to maintain (mental) health. Our oldest walkers were 85-years old this year, and 78-years old in 2024. People participate with their infants in prams, and even being unable to walk is not a deterrent: we have regular wheelchair participants. Four-legged fur babies, guardians of their owners’ mental health, join too. During the COVID-19 pandemic, when the walk could not be hosted in-person, the public posted photos of their physical activities onto social media under the hashtag #Move4MentalHealth. Our regular hashtag has remained #StepUpKZN and, in 2025, we opted for #StepUp4MentalHealth. Hashtags allow online community-building as participants post selfies, slogans, and create hype – it is possible to mobilise and connect communities by harnessing the power of social media.

Being a volunteer-led event and hosted under the auspices of a small informal but organised network, the KwaZulu-Natal Mental

Health Advocacy Group (MHAG), has relied heavily on the generosity of sponsors and benefactors to host an event of this magnitude.

The private sector helps enormously: Mondia Health, Healing Hills Hospital, iTheku, Austell Pharmaceuticals, Pharma Dynamics, Akeso, Life St Joseph’s Hospital, Joint Medical Holdings, Polar Ice-Cream, BodyFit Gym, Discovery, the Islamic Medical Association, and Sparkport Pharmacy are just a few of the organisations who’ve supported the cause over the years. The event has remained firmly non-profit, with no entrance fee, and a free wellness fair where almost 50 non-profit organisations set up stalls and showcase their services to the public. These include the Department of Health, the Department of Basic Education, the South African Depression and Anxiety Group, the Bessie Makathini Foundation, TransHope, and the Happy Lawyers Project. Free health screenings serve to highlight the intrinsic interconnection of physical and mental health.

The MHAG’s two stellar project managers, Lynne Richards and Rivendri Govender, began as student volunteers several years ago, and are now qualified clinical- and educational psychologists, respectively. Their attention to detail and ability to lead the mostly-student cohort of volunteers helps turn our annual vision into a pragmatic reality (no small feat when dealing with the endless bureaucracy of municipal regulations!). A mix of passion, dedication, and boundless optimism is needed for our small but agile team to remain sane! From its inception the MHAG has been volunteer driven, with our core events – our annual symposium and this walk – coordinated by volunteers. The act of volunteerism is grounded by the principle of social activism and research shows that volunteering has many psychosocial benefits for both the giver and receiver.

What are the outcomes of this walk? Why do we keep doing it? Does it make a difference? We have been reflecting on these questions as we take stock at this milestone event. A moment for pause, indeed, and critical reflection on how to remain relevant, continue to inspire hope and community activism, and build social solidarities across intersectional and intersectoral communities. We also see and recognise the other walks across the country who share in this collective vision to make mental health everybody’s business, such as the Love to Live Campaign in Pietermaritzburg and the Recovery Walk in Cape Town. We encourage more individuals and organisations to step up, step out and add their voices to build the mental health movement....just as MHAG has grown from humble beginnings, with no formal funding and driven by voluntarism, join us in making mental health go viral.

Suntosh R. Pillay is the chief clinical psychologist in eThekwin in the KZN Department of Health. Written with contributions from the MHAG Executive Committee: Prof Suvira Ramlall (psychiatrist and MHAG co-founder), Lynne Richards (clinical psychologist), and Rivendri Govender (educational psychologist). Follow the KZN Mental Health Advocacy Group on social media (Facebook and Instagram) for regular updates

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WHY MATERNAL MENTAL HEALTH STILL MATTERS

Lavinia Lumu

Maternal mental health remains a critical yet persistently ignored component of global health care. Despite advances in obstetric medicine and increasing awareness of women's health, psychiatric morbidity during pregnancy and the postpartum period continues to carry significant personal, familial, and societal consequences. In South Africa, where structural inequality, limited mental health resources, and a high burden of disease intersect, the neglect of perinatal mental health represents a substantial gap in comprehensive maternal care



Lavinia Lumu

ETHICAL CONSIDERATIONS

The history of psychiatry includes periods of profound ethical failure. During the early twentieth century, several countries enacted eugenic policies that targeted individuals with psychiatric and neurological disorders. In Nazi Germany, the 1933 "Law for the Prevention of Hereditarily Diseased Offspring" authorised compulsory sterilisation of individuals diagnosed with conditions such as schizophrenia, epilepsy, and intellectual disability. These practices were justified under the guise of genetic purity and public health, resulted in widespread human rights violations, and laid the groundwork for

later atrocities, including the so-called "euthanasia" programmes that caused the deaths of thousands of vulnerable individuals¹.

Although these events are historically distant, their legacy continues to influence attitudes toward psychiatric illness, reproduction, and treatment during pregnancy. Psychiatry's evolution since that era has been marked by significant scientific and ethical progress, including the development of effective psychopharmacological and psychotherapeutic interventions, rigorous ethical frameworks, and an emphasis on patient autonomy. However, stigma and fear are still influencing psychiatric treatment during pregnancy.

MENTAL HEALTH AND PREGNANCY

Globally, women comprise a substantial proportion of the psychiatric patient population, especially during their reproductive years. It would therefore be reasonable to expect that research in psychiatry and clinical guidelines would prioritise the unique needs of women of child-bearing age, including the peripartum period; yet this is not the case.

Descriptions of distinct mental conditions associated with childbirth date back more than a century. Dr. Louis-Victor Marcé's 1858 "Traité de la folie des femmes enceintes, des nouvelles accouchées et des nourrices" (Treatise on mental illness in pregnant women, postpartum women, and nursing mothers) provided one of the earliest systematic accounts of mental illness associated with pregnancy and the postpartum period². Despite such early documented accounts, perinatal psychiatry remained a neglected field for much of the twentieth century.

A common assumption in clinical practice in the past, was that pregnancy exerted a protective effect against psychiatric illness. This belief, coupled with concerns about foetal exposure to psychotropic medication, often resulted in the routine discontinuation of psychiatric treatment once pregnancy was confirmed. Such practices were frequently driven less by evidence and more by fear, medicolegal anxiety, and stigma surrounding both mental illness and psychotropic medication.

PSYCHOTROPICS AND PREGNANCY

The perception that all psychiatric medication is inherently teratogenic has had lasting consequences. While certain medications are associated with specific risks, the blanket approach by cessation of psychotropic treatment has been shown to expose women and their infants to significant harm. Importantly, much of the early data on the safety of psychotropic medication in pregnancy emerged from observational studies of women who conceived while taking medication and continued treatment inadvertently³.

Over the past three decades, a growing body of evidence has demonstrated that many commonly prescribed psychotropic medications, particularly selective serotonin reuptake inhibitors (SSRIs), are associated with relatively low absolute risks during pregnancy⁴. In contrast, untreated maternal mental illness has been linked to adverse outcomes, including poor antenatal care compliance, substance use, obstetric complications, preterm birth, low birth weight, and impaired bonding and attachment⁵.

Severe perinatal mental conditions, such as bipolar disorder and postpartum psychosis, carry additional risks, including suicide and infanticide, underscoring the need for timely diagnosis and treatment⁶. The ethics of prescribing in pregnancy now focuses on shifted balancing potential medication risks against the harm of untreated illness.

PERINATAL PSYCHIATRY

Recognition of these complexities led to the formal development of perinatal psychiatry as a subspecialty. In 1982, a group of clinicians and researchers convened with the shared aim of advancing evidence-based care for women during pregnancy and the postpartum period. This meeting resulted in the establishment of what is now known as the International Marcé Society for Perinatal Mental Health, named in honour of Dr Louis-Victor Marcé⁷.

The Society has played a pivotal role in promoting research, education, and international collaboration in perinatal mental health. This has led to the development of clinical guidelines, best practices, and advocacy for specialised services, including mother–baby units.

PREVALENCE OF DISORDERS

Perinatal mental health disorders are highly prevalent worldwide and even higher in low- and middle-income countries (LMICs). Meta-analyses suggest that rates of perinatal depression in LMICs range

between 30% and 40%, compared with approximately 10%–20% in high-income countries⁸. South African studies have reported prevalence rates of antenatal depression of approximately 30%, with postpartum depression rates reaching 40% in some communities⁹. These rates are influenced by multiple psychosocial factors, including poverty, food insecurity, gender-based violence, HIV and limited social support.

Despite the high prevalence rates of mental illness in South Africa, mental health services remain severely under-resourced. There is a chronic shortage of mental health professionals, particularly in the public sector, and perinatal mental health services are rarely integrated into routine maternal care¹⁰. As a result, many women remain undiagnosed and untreated during the peripartum.

PUBLIC HEALTH

In several high-income countries, perinatal mental health has become a recognised public health priority. The United Kingdom and Australia are examples of governments investing in specialised maternal mental health services, including multidisciplinary perinatal mental health teams, dedicated outpatient clinics, and inpatient mother–baby units¹¹.

Research advancements in perinatal mental health in LMICs like India through institutions such as the National Institute of Mental Health and Neurosciences (NIMHANS) has led to the development of training programmes for healthcare workers, and collaborations with government to establish mother–baby units and community-based interventions¹².

EVIDENCE

There is now robust evidence supporting the efficacy of antidepressants and other psychotropic medications in the perinatal period, with favourable risk–benefit profiles when appropriately prescribed⁴. Psychosocial interventions, including cognitive behavioural therapy and interpersonal therapy, have also demonstrated effectiveness and are particularly valuable in settings where medication access may be limited.

Despite this the body of research available, clinician reluctance to prescribe during pregnancy still persists. This hesitation is often driven by stigma, fear of litigation, and inadequate training in perinatal psychopharmacology. Stigma operates at multiple levels:

Societal stigma surrounding mental illness, professional stigma within healthcare systems, and internalised stigma experienced by patients themselves. These factors create significant barriers to care.

PERINATAL MENTAL HEALTH AND MALES

Perinatal mental health has traditionally focused almost exclusively on women, yet emerging evidence highlights the importance of paternal mental health and male fertility considerations. Certain psychotropic medications may affect sperm quality and fertility, necessitating thoughtful prescribing for men planning to conceive¹³. Moreover, paternal mental illness during the perinatal period has been associated with adverse developmental outcomes in children.

Men play a crucial role in supporting maternal mental health, yet they are frequently excluded from perinatal mental health frameworks. A more inclusive, family-centred approach is required to address the mental health needs of both parents.

CONCLUSION

Organisations such as the International Marcé Society for Perinatal Mental Health continue to advocate for research, policy development, and the implementation of evidence-based services worldwide.

Women's mental health lies at the core of perinatal mental health. Its influence extends beyond pregnancy and childbirth, shaping infant attachment, early childhood development, and long-term psychological outcomes.

Maternal mental health still matters because its neglect carries dire consequences for women, children, families, and societies. In South Africa, the high prevalence of perinatal psychiatric disorders, coupled with limited mental health services, underscores the urgency of integrating mental health into maternal care. Advances in research and treatment have provided the tools necessary to deliver safe, effective, and ethical care during the perinatal period. The challenge is overcoming stigma and expanding mental health services. Mental health must be recognised as an essential part of global maternal health strategies.

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An honorary lecturer at the University of the Witwatersrand, Department of Psychiatry, Faculty of Health Sciences and is an executive board member of the South African Society of Psychiatrists - Women's Mental Health Special Interest Group. Dr Lumu is the current president of the International Marcé Society for Perinatal Mental Health.

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LEGAL AND ETHICAL CONSIDERATIONS IN TERMINAL CARE

Miriam Close

This article is based on an online presentation hosted by Dr Reddy's Oncology, 30th October 2025.



Miriam Close

Technological advances and improvements in healthcare have considerably extended human life expectancy, yet these developments have simultaneously intensified ethical dilemmas concerning the end of life. Terminally ill patients may endure profound and persistent suffering despite optimal medical, psychological, and palliative interventions. This reality has fuelled global debate regarding whether physician-assisted suicide (PAS) and physician-assisted euthanasia (PAE) should be regarded as ethically and legally permissible under specific circumstances.

DEFINITIONS

The concept of euthanasia, derived from the term meaning “good death,” refers to the conscious and deliberate termination of a person’s life due to terminal or incurable illness.¹ Passive or indirect euthanasia involves withholding or withdrawing medical treatment, or removing life-sustaining interventions, with the intention of allowing a patient to die naturally.² In contrast, active or direct euthanasia constitutes the intentional act of causing a patient’s death through direct intervention in order to relieve suffering.²

When performed by a physician, this would be defined as physician-assisted euthanasia (PAE). Active euthanasia may be voluntary, in which explicit consent is provided by the patient; non-voluntary, when the patient is unable to communicate or is in a vegetative or unconscious state without having expressed prior

wishes; or involuntary, when performed against the patient's will or without their knowledge, even if they have expressed a desire to continue living. In such cases, the practice is often referred to as “mercy killing,” as it is intended to end the patient’s suffering.² Physician-assisted suicide (PAS) involves the doctor providing the means for death, which are then self-administered by the patient.¹ Assisted suicide more generally refers to any situation in which another person provides the means or assistance for an individual to end their own life.³ Medical Assistance in Dying (MAiD) encompasses both clinician-administered and self-administered medical assistance in dying.⁴

The World Health Organisation (WHO) defines palliative care as an approach that enhances the quality of life of patients and their families facing life-threatening illness through the prevention and relief of suffering, enabled by early identification and impeccable assessment and treatment of pain as well as other physical, psychosocial, and spiritual problems.⁵ Palliative sedation refers to the monitored, proportionate administration of medications intended to reduce consciousness in order to relieve refractory suffering in patients with life-limiting conditions.⁶ The principle of double effect recognises that administering medication in dosages meant to alleviate suffering may foreseeably hasten death, with such death regarded as a secondary and unintended consequence of palliative care.⁷

Within the legal context, murder consists of the unlawful and intentional killing of another human being. Attempted murder involves the unlawful commission of an act with the intention of killing but without resulting in death, and culpable homicide involves the unlawful and negligent causing of death.

REQUIREMENTS

As of 2021, euthanasia is legally permitted in ten states in the USA, the Province of Victoria in Australia, Canada,

and the Netherlands.⁹ Eligibility requirements generally include the presence of a terminal-stage disease, the absence of any possibility of full recovery, and unbearable pain or a burdensome life directly attributable to the disease. The patient must voluntarily and continuously request death while being capable of making judgments, and it must be impossible for the patient to terminate their life without assistance.⁹ Consultations and prescriptions related to assisted death are limited to medical institutions, and medical professionals must verify that the patient is an adult with decision-making capacity and that their decision is voluntary and made of free will. Detailed explanations, including those related to palliative care, must be provided and appropriately documented. Two or more medical professionals must confirm and sign the request, and the patient must be given the opportunity to withdraw it at any time.⁹

Common substantive requirements for both assisted suicide and euthanasia include the need for a voluntary, thoroughly considered, and sustained request. The individual must have a serious and incurable condition resulting from illness or accident, and in jurisdictions such as the USA, Colombia, and Victoria, they must also be expected to die imminently. Unbearable physical or psychological suffering that cannot be alleviated is often required, although this criterion does not apply to PAS in the USA. Physicians must fully inform patients of their medical condition and treatment options, and both physician and patient must agree that no reasonable likelihood of improvement exists.¹⁰ Procedural safeguards typically include consultation with a second independent physician, mandatory waiting periods in the USA and Canada, and the requirement that euthanasia cases be reported to a multidisciplinary review committee, with some jurisdictions such as Colombia mandating reporting prior to the act.¹⁰

JURISDICTIONS

Jurisdictions that permit both PAS and PAE include the Netherlands, Belgium, Luxembourg, Canada (under MAiD), Colombia, Victoria and Western Australia, and New Zealand. Jurisdictions permitting only PAS include Switzerland, several USA states such as Oregon and Washington, the District of Columbia, and others, as well as Germany. PAE alone is permitted in Quebec.^{10 11}

CASE LAW DEVELOPMENTS

South African case law has engaged with euthanasia primarily through judicial decisions such as *Clarke v Hurst*, which addressed voluntary passive euthanasia, including actions such as removing life support, discontinuing medical procedures or treatments, withdrawing medication, removing nutrition and hydration, or withholding CPR.¹² Other significant South African cases include *S v Hartmann*, *S v Grotjohn*, *S v De Bellocq*, *R v Davidow*, *S v McBride*, and *S v Smorenburg*. The commonality in these cases is that the court displayed leniency with regards to circumstances related to euthanasia.^{12,13}

With respect to voluntary active euthanasia or physician assisted suicide, the case of *Stransham-Ford v Minister of Justice and Correctional Services* is central.² The High Court had granted an order that a medical practitioner would be lawfully authorised to

administer a lethal injection to Mr Stransham-Ford, to end his suffering due to terminal cancer. This order was granted two hours following his death. The order was overruled and set aside by the Supreme Court of Appeal for various considerations. These included that with Mr Stransham-Ford's demise, the cause of action was moot and due to the urgency of the application, insufficient consideration of the law and facts occurred. The overarching conclusion is that Parliament, the national legislature, is the authority to develop legislation related to euthanasia and assisted suicide.¹²

PAS remains unlawful in South Africa, and the court in the collaborative case of Dr Suzanne Walter and Diethelm Harck reaffirmed that both PAS and PAE constitute "unprofessional conduct."² Historically, international cases such as that of Dr Jack Kevorkian, convicted of murder in 1999, further illustrate the contentious global landscape.²

FUNDAMENTAL HUMAN RIGHTS

From a human rights perspective, the right to life is closely linked to quality of life, while the right to dignity reflects the inherent value of all persons. In *Stransham-Ford*, Fabricius J held that dignity is compromised when an individual is unable to maintain personal hygiene, must die in a hospital or hospice away from home, or dies in a dissociative state without awareness of loved ones. The right to freedom and security of the person includes autonomy and control over one's body.¹³

The concepts of autonomy and dignity are central to debates on assisted dying. Some individuals may be more vulnerable to external pressures, such as financial burden or guilt, which may undermine truly autonomous decision-making. Supporting a patient's wish to die may unintentionally reinforce feelings of worthlessness.¹⁴ Nonetheless, self-determination is widely regarded as foundational to human dignity and supersedes familial consent or notions of duty of care.¹ Autonomy requires access to accurate information and the capacity to provide informed consent in accordance with ethical and legal standards.⁵

PROS AND CONS CONSIDERATIONS

Arguments for and against PAS and PAE involve complex ethical considerations.¹⁵ Proponents emphasise autonomy, the right to die, relief of unbearable suffering, compassion, human dignity, patient's best interests, quality of life, reduced healthcare costs, legal transparency, and procedural clarity. Opponents highlight concerns regarding competence, the inviolability and sanctity of human life, the prohibition on killing within medical ethics, risks of abuse, slippery slope effects, the adequacy of palliative care as an alternative, the physician's moral role, and the vulnerability of patients who may be subject to social pressure.

The slippery slope argument is frequently invoked.¹⁶ In the Netherlands, euthanasia was legalised in 2002 under strict criteria, however, the Groningen Protocol of 2004 expanded the practice to include non-voluntary infant euthanasia and, later, cases involving dementia and mental illness. Belgium legalised euthanasia in 2004 and extended it to minors in 2014. In Canada, MAiD was introduced in 2016, expanded in 2021 to include incurable conditions without foreseeable death, and further extended in 2024 to include mental illness. The bill to extend the exclusion of eligibility for the sole criterion of mental illness was extended to 17 March 2027. This provides further time and opportunity for training and implementation of appropriate health systems and regulations.¹⁷

A central ethical question concerns whether death may be beneficial for certain patients.¹⁸ Supporters argue that some patients may indeed benefit from death, that quality of life may outweigh quantity, and that certain forms of suffering will only cease after death. Opponents assert that the benefit of death is medically unknowable; for death to be beneficial, being dead would have to be better than being alive, yet neither medicine nor the patient has empirical knowledge about the state of being dead or any possible afterlife. Additionally, early death may prevent opportunities for relational or spiritual resolution.

Another significant debate concerns whether PAS or euthanasia is morally equivalent to withholding or withdrawing life-sustaining treatment (WWLST).¹⁸ Supporters argue that there is no ethically meaningful distinction, as both involve respecting patient values and may shorten life to improve its quality, by limiting suffering that is endured. Both aim primarily at comfort, and physicians hold similar moral agency in actions that foreseeably lead to death. Opponents counter that PAS and WWLST differ in both intent and mechanism: WWLST does not aim to cause death, even though death may be foreseen, and its therapeutic goals may be achieved regardless of whether death ensues, whereas PAS and PAE achieve their aims only through the patient's death.

The moral permissibility of intentionally causing death is another contentious issue.¹⁸ Supporters maintain that intentional life-ending may sometimes be acceptable, distinguishing PAS/E from murder based on consent and compassionate intent. They argue that if passive life-shortening measures such as WWLST are allowed, active measures should also be permissible, especially when suffering is significant and death is inevitable. Opponents emphasise the intrinsic and incalculable value of human life, arguing that respect for persons prohibits ending life intentionally and that endorsing a patient's preference for death undermines the very foundation for respecting their preferences.

The issue of conscientious objection raises further challenges.¹⁸ In a reciprocal relationship between the patient and the physician, the physician's moral agency is also considered. This implies that when there is conflict in the matter of conscience, the patient's does not automatically trump the physician's. Although PAS/E may be permitted, physicians may be unwilling to participate despite the patient's request. A consensus exists that conscientious objections should be accommodated so long as they do not unduly obstruct a patient's lawful access to relief of suffering. Physicians must discuss

all legitimate treatment options and distinguish between refraining from personally participating in PAS/E and directly obstructing access. Transferring care to another physician at the patient's request does not constitute a referral nor imply moral culpability if PAS/E subsequently occurs.¹⁹

FAMILY PARTICIPATION

Family participation is another significant dimension. Physicians recognise that death affects multiple relatives—typically between five and nine—and that professional support can mitigate bereavement complications by providing information, empathy, and emotional support. Relatives generally appreciate such support, though they often assume a more peripheral role. The emphasis of physician engagement is primarily before death, with limited aftercare typically required.¹⁹

Family perspectives influence approaches to assisted suicide in various ways, including views on patient autonomy, personal beliefs about assisted dying, the nature of family relationships, interactions with right-to-die associations, and experiences with healthcare professionals.²⁰ Although relatives have no formal decision-making authority, physicians in the Netherlands frequently involve them in the PAS/E process. This involvement is considered important, as relatives must live with the consequences and may require further support. Physicians aim to ensure harmony among all parties, though relatives' opinions are not decisive in determining whether PAS/E proceeds.²¹

CONCLUSION

The ethical, legal, and clinical debates surrounding physician-assisted suicide and euthanasia continue to evolve across jurisdictions. While some nations have adopted progressive legislation to accommodate patient autonomy and relief of suffering, others maintain strong prohibitions grounded in concerns about sanctity of life, moral responsibility, and social vulnerability. The complexity of these issues underscores the need for carefully developed safeguards, equitable access to high-quality palliative care, and ongoing ethical reflection. As societal values shift and end-of-life care becomes increasingly central to healthcare policy, a balanced approach that protects individual rights while preventing abuse remains essential.

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NAVIGATING THE CROSSROADS: CULTURE, ETHICS, AND LAW IN SOUTH AFRICA'S EVOLVING MENTAL HEALTH LANDSCAPE

Rooksaar Amod

This year marked the inaugural Psychology Ethics Conference hosted by the Wits Division of Psychology. The one-day event, entitled “*Navigating the Crossroads: Culture, Ethics, and Law in South Africa's Evolving Mental Health Landscape*”, was held on 22 October 2025 at Tara H. Moross Hospital. Established as the first in what is intended to become an annual series, the conference represents the Division's commitment to fostering ethical reflection, dialogue, and collaboration within mental healthcare. Attendees included clinical psychologists and psychiatrists at varying stages of training within the Wits Training Circuit, as well as training staff from partner universities.

The conference aimed to examine how culture, ethics, and law intersect and shape clinical practice. The morning opened with a reflective address delivered by the conference chairperson, inviting attendees to consider how the seemingly ordinary rituals of daily life convey profound cultural nuances and meaning.

As mental healthcare is guided by legal frameworks that strive for fairness and equality, yet may at times overlook socio-cultural nuance, a central ethical question emerged: how do clinicians hold the tension between ethical care, culture, and the law? This dilemma formed the core focus of the conference and was explored by speakers throughout the day.

The keynote address was delivered by Nokulunga Nene-Mokgale, senior clinical psychologist at Chris Hani Baragwanath Academic Hospital and chairperson of the South African Psychoanalytic Initiative (SAPI). Her address highlighted how differences in emotional expression, discipline, understandings of illness aetiology, and sexuality across cultural contexts complicate clinical decision-making, particularly at the intersection of law, culture, and care. The presentations that followed offered pragmatic illustrations of how these tensions emerge in clinical practice.



From left to right: Lungile Mangena, Nokulunga Nene-Mokgale, Boitumelo Maimane, Feroza Kaldine, and Rooksaar Amod

Rooksaar Amod, senior clinical psychologist at Charlotte Maxeke Johannesburg Academic Hospital, presented *The Mental Healthcare Act in Practice*. This presentation examined the “trap of certainty” that may arise when legislation, such as the Mental Healthcare Act 17 of 2002, is applied in dichotomous, expedient, or emotionally defended ways. Drawing on clinical examples, the presentation illustrated how unexamined cultural assumptions can shape clinical decisions with significant ethical consequences.

Lungile Mangena, senior clinical psychologist at Chris Hani Baragwanath Academic Hospital's Child and Family Unit, examined the nuances of *Navigating Cultural Practices in Parenting, Children's Rights, and Mental Health*. Through case material, she demonstrated how the Children's Act 38 of 2005 provides an ethical framework for clinical decision-making when tensions arise between cultural parenting practices and children's rights.

Feroza Kaldine, senior psychologist at Helen Joseph Hospital, adopted a psychosocial lens in her presentation *Mental Health and Marginalization: A Theoretical and Conceptual Framework towards a Liberatory Psychology in South Africa*. This presentation explored ethical dilemmas arising from structural inequality and socio-historical marginalization. The National Mental Health Policy Framework and Strategic Plan 2023-2030 was positioned as a guiding policy through which a more liberatory psychology, one that considers individuals within their cultural and historical contexts, may be advanced in the South African context.

In the final presentation, *Understanding and Applying the Cultural Formulation Interview*, Boitumelo Maimane, clinical psychologist at Tara H. Moross Hospital, introduced a structured tool aimed at promoting cultural humility and collaboration in clinical work. Through video footage of a simulated clinical interaction, these principles were clearly illustrated within a clinical context.

Across presentations, the guiding framework that emerged was one of cultural humility. Speakers emphasized ongoing self-reflection regarding clinicians' own cultural positioning, assumptions, and taken-for-granted truths that may unconsciously foreclose alternative perspectives. As attendees were reminded, the stance of reflective humility requires active, and often sustained, engagement on the part of clinicians as they engage with patients, colleagues, the broader socio-political context, and themselves.

Several speakers noted that such reflective openness can be a difficult stance to achieve, particularly given the pervasiveness of ethnocentrism and its tendency to operate outside conscious awareness. This complexity was further highlighted during the conference plenary, where attendees were invited to share questions, concerns, tensions, and shifts toward more black-and-white responses that had been evoked across the day's presentations. Reflections brought forward helped underscore the difficulties that arise in practice when personal biases, systemic biases and rigid applications of legal frameworks intersect, and when mechanisms intended to protect patients may inadvertently silence, marginalize, or contribute to harm.

Throughout the day, attendees were encouraged to reflect not only to the content of the presentations but also to their own internal responses as they emerged – an opportunity to practice cultural humility as they vicariously engaged with the practical dilemmas shared by speakers. Feelings of resonance, discomfort, or a pull toward certainty were framed as opportunities for reflection rather than obstacles to clinical work. Overall, the conference sought to move beyond abstract discussions of culture, ethics, and law toward a deeper engagement with self-knowledge in clinical practice, supporting clinicians in navigating the complex crossroads encountered in contemporary mental healthcare in South Africa.

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NAVIGATING UNCERTAINTY

Volker Hitzeroth

Life is characterised by uncertainty. In our personal lives and on the global stage we are often confronted by events that are unclear, unpredictable and uncertain. Our instinctive response may be one of withdrawal and avoidance, yet current evidence suggests that we should face our fears and embrace life's uncertainty with courage and compassion. By pausing, reflecting and acting in a manner that enhances our morality, we are usually able to act wisely and exercise good judgement. Such an approach may also facilitate personal growth and enable us to be more authentic and better aligned to our deeper values.



Volker Hitzeroth

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

All of us, at some time, had to face challenging situations and difficult scenarios that made us feel uncertain about the future. This would probably have caused fear, dread and occasionally even alarm or panic. While some of us may have been able to navigate such a perilous journey with little distress, many may have felt not only anxiety, but also doubt or anger at the precariousness of life. This is, at least partly, because many of us have not mastered successfully navigating life's uncertainty. We often do not know how to approach life's changeability and fickleness.

This is not a new concern. Humans have always recognised that life is uncertain. The ancient Greeks believed in the three Fates: Clotho, Lachesis and Atropos, who assigned and controlled a person's destiny. The Romans also recognised the random, capricious nature of fate and good fortune and hence worshipped a goddess, called Fortuna, who was dedicated to luck, fortune, and chance.

THE WORLD AS WE KNOW IT

Our world is filled with stress and uncertainty. On a personal level, we may be experiencing difficulties in our relationships, our work might be stressful, our health could be fragile and failing, and our finances might be stretched – all contributing to life's uncertainty. On a global level there is also much uncertainty. This all contributes to feelings of indecision and doubt, fear and worry. With traditional sources of security and comfort, like family, faith and community, playing a less central role in our lives, we can be left feeling adrift

and rudderless in an unfriendly and hostile world with none of the usual anchors providing steadiness. Profound emptiness, meaninglessness and deep uncertainty – especially for high achievers – can follow.

MEDICINE AND UNCERTAINTY

Medicine is one of very few professions that must deal with significant uncertainty daily. Much of what we diagnose and treat is based on vague symptomatology, imprecise information, and unclear reporting. Our decision-making must not only consider such uncertainty in our clinical formulations but must also incorporate this into the various risks and benefits of any subsequent finding and proposed therapy. It is however not only the everyday medical decision-making in our consultation rooms that is infused with uncertainty. Our patients are not mere signs and symptoms; they are people living their lives in difficult psychosocial circumstances, with their own worries and fears. Therefore, it is not uncommon for many patients to allude to veiled or deeper concerns, be it their self-image or self-worth, their relationships with loved ones, their working environment, or their deeper fears and desires – adding to the patient's, and our, uncertainty. In such scenarios our decisions regarding a patient, their care, or their family would have to consider aspects of judgement, morality and value.

DIFFERENT PHILOSOPHICAL APPROACHES TO UNCERTAINTY

Many famous philosophers and scholars have wrestled with life's vagaries and have attempted to find certainty. In doing so they have tried to determine the best philosophy for life.

Classical philosophies like epicureanism, have advocated for the pursuit of restrained pleasure – preferably pleasure like tranquillity, moderation, friendship and intellectual pursuits – above physical pleasures, and moral philosophies such as utilitarianism have focused on the greatest good for the greatest number.

More contemporary philosophies like existentialism have contended that there is no inherent meaning in life and the world's religions each have their own teachings on finding a peaceful co-existence with the world around us.

Yet we know that life is complicated and its slings and arrows are unforeseeable. This raises the question of whether a single philosophy can provide the necessary direction and comfort when dealing with life's multitude of uncertainties:

- Can a single philosophy sufficiently address life's complexity?
- Can there be (only) one philosophy that provides for all of life's precariousness, difficulties and decisions?
- Does life not require us to be more flexible and adaptable as we face its challenges?
- Do we not possibly require multiple different strategies?
- Do we not need to carve out our own personal philosophy to navigate life's uncertainty?

THE CONTEMPORARY APPROACH TO UNCERTAINTY

Several recent commentators have opined on life's inherent uncertainty and the associated challenges in our modern world.

It is understood that significant and ongoing uncertainty diminishes life's quality and limits its experiential scope. The most useful approach seems to recommend an acceptance that unpredictability and its associated anxiety is part of life. It is not a sign of weakness, a fault or a mistake on anyone's part. Therefore, instead of our instinctual avoidance, uncertainty should be faced, dealt with, and embraced with courage, curiosity and compassion, thereby creating an opportunity for growth.

Professor Russo-Netzer has, with other authors, published research related to life's uncertainty and how to manage this. Specifically, she recommends that to live life to its fullest we should engage with its uncertainty actively and meaningfully, with openness and authenticity.

Her research seems to indicate that periods of uncertainty, marked by emotional intensity and disruption, could serve as a catalyst for reflection and re-evaluation, prompting us to re-assess our priorities and values.

She maintains that it is during the most uncertain, painful and disruptive times that we are most likely to find clarity and alignment regarding the things that are important to us. It is at such challenging times that we can learn to see ourselves as who we truly are and who we want to become.

She writes: "... many participants in our study described a kind of existential "reset"— a moment when life suddenly took on new urgency and depth. These inner shifts often translated into outward changes: leaving unfulfilling jobs, rebuilding relationships, or reimagining long-held goals." Furthermore, she adds: "Uncertainty holds the potential to expand individuals' perspectives and illuminate pathways to authenticity and meaning."

By investigating the wellbeing of unhappy people with a behavioural stretch intervention, she established that going outside their comfort zone, even slightly, led to improvements in their wellbeing. She found that: "it wasn't the novelty of the action that mattered

most, but the meaning behind it. When participants chose discomfort in the service of their values—whether connection, courage, contribution, or authenticity—the stretch became a source of affirmation rather than threat."

Finally, she concluded that those who challenge themselves to go beyond their comfort zone and strive to face the uncertainty in their lives may "create conditions for something new to emerge: a more integrated self, a restored sense of agency, and deeper alignment with what truly matters."

Thus, current research advises us to be open and engage with life's uncertainty. Despite initial fear and hesitancy, we should do so with intentionality and meaning, guided by our deeper values and underlying moral principles. This will lead to greater authenticity, deeper connections, and assist in revealing the purpose and meaning of life.

HOW SHOULD WE MANAGE UNCERTAINTY

When we are uncertain, worried, or despairing we should remind ourselves that such thoughts are part of a normal life experience. They are a natural manifestation of the ongoing conflict between certainty and uncertainty. We should therefore not become avoidant or evasive. Instead, we should pause, attempt to hold the uncertainty and the related tension for a while, and then carefully respond, rather than impulsively react.

Guided by decisions that morally enhance us, we should face the challenge thereby facilitating growth, resilience and deeper authenticity. Life is not about seeking or finding certainty. It is, instead, about managing uncertainty. By making decisions that morally enhance us, our further actions are likely to align with our deeper values and our authentic self, leading to more clarity and meaning.

UNDERLYING HUMANITY

Uncertainty is ubiquitous and affects us all. Everyone will occasionally feel uncertain. By recognising this we embrace the human condition as it is and not as we wish it to be. We also signal that, despite our superficial differences, we are part of an underlying global community and a shared humanity, with similar fears and hopes, worries and dreams – all having to manage and navigate uncertainty. To acknowledge and face our uncertainty with courage and compassion, despite our dread and hesitation, will enable us to pause and subsequently make decisions that morally enhance us, facilitate growth, and enable us to live a full and authentic life.

Disclaimer:

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

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27

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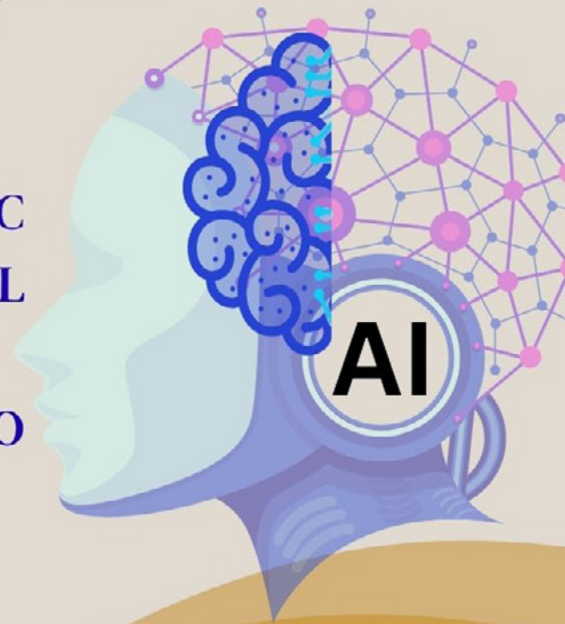


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OF CHAOS, CONTROL, AND BEING MET BESIDE THE CHOICE TO LIVE

Claudia Campbell

Chaos! That's what happened a long, long time ago – almost a lifetime. My current therapist asked me to reflect on the topic of 'control' and it became the unlikely trigger to reflect deeply on the road travelled.



Claudia Campbell

It's been a long time since my first South African Psychiatry 'Perspective' column was published and I took a moment to consider if I'm any different today to the woman from then, recalling that I wrote that piece sitting in the frenzied waiting room of an overworked clinician.

Before a 2008 car accident, I felt my life was in control. Career-wise, socially, maritally – everything seemed headed in the right direction. And then, within months, nothing was under control. My mind failed me. My body failed me. Each day brought rip tides of inexplicable terror. I bled—literally and figuratively. Still, I was determined to claw my way back. Somehow. I didn't know how. For years, I lost more than I ever knew I had to begin with.

It was people who saved my life. The loyalty and patience of my husband was remarkable. Our friends never walked away. My grandparents remained an enduring presence. A team of clinicians walked the long road beside me.

Over time, I realised I could no longer approach control or success in the ways I once had. That only led to failure and disappointment. My career was gone, and my body had suffered extensive damage that couldn't be easily undone—if ever.

I was determined not to languish in a sullen affair with my own collapse. Very slowly, control began to re-enter my life through knowledge and understanding. Without them, I found it almost impossible to face the hurricanes inside me.

A sense of curiosity became essential - adventure in the smallest things, creativity in whatever form was possible. I had always turned to music and cooking to lift my soul, but now they became lifelines.

Beginning my academic journey marked a turning point. I wanted to understand what was happening inside me. Why were certain treatments chosen? What stories could history tell about the lived experiences of other survivors—or victims? And so, I registered to do some certificates in counselling, then a degree, and then another degree.

When I discovered that my brain could still engage with academic material—and perform at a summa cum laude level—it was liberating. The grades themselves meant little. What mattered was proof that my mind was intact enough to achieve them.

My body, on the other hand, was not so kind. It hurled volleys of pain and paradoxes at me—and continues to do so. Even so, I've learned ways to use its functional parts to add to life, rather than letting them chip it away. My relationship with this unreliable vessel remains fractious, but I can acknowledge that it has carried me through moments of real beauty.

I've learned that I can live with a sense of control when I exist within the bounds of my limitations, rather than fighting them. Glacial progress is still progress. Though smaller, this approach allows me to experience micro-successes and fleeting moments of control—an antidote to the dramatic spirals and crashes that once defined me.

Of course, I wish I could live a larger life—to participate more, be spontaneous, trust my body. But I try not to dwell on that. It only leads to disappointment and feelings of worthlessness.

Living in such an unreliable body can create a profound sense of loss of control. I'm not sure I've regained mastery over it, but I've stopped fighting and judging it as fiercely. I'm learning to move toward an it-is-what-it-is place. I try to roll with the punches and then leave them be. I haven't perfected this. I still get frustrated, often feel trapped, and frequently want to escape my own skin. But awareness and a plan help—often. The times of not feeling overwhelmed last longer now. Perhaps control, in the end, comes in the form of comfort with this approach.

Without doubt, many of these small steps of progress are directly linked to intentionally treating the whole of me, not siloed parts of me. Treatment integration shifted everything. My body, my mind, all the dissociated fragments—they are recognised and treated by the entire team as parts of one whole. That approach has been more healing than I ever could have predicted.

I suppose, in the end, I'm a patient—or client—who refuses to remain broken. I chose to live. I am immensely fortunate, and deeply grateful, to have clinicians who meet me exactly there—beside the choice to live. Not above, not below, but beside.

That, I think, is the closest I've come to understanding control.

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

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ADHD

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6th Southern African Multidisciplinary ADHD Congress



Anelet James

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WHAT CLINICIANS NEED TO KNOW ABOUT ADHD GENETICS, SUBCLINICAL CASES AND MEDICATION TITRATION

Presented by Aaron Winkler

This Report was compiled by Anelet James and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025

INTRODUCTION

Adult ADHD assessment is complex: comorbidities, variable recall of childhood symptoms, and supply/regulatory issues around stimulants all complicate care. Dr Aaron Winkler outlined a pragmatic approach that combines careful history taking, comprehensive and dynamic assessment, and a structured pre-treatment symptom-tracking protocol (CAST ADHD) to improve diagnostic clarity, readiness for medication, and long-term adherence.

UNDERSTANDING THE LIVED EXPERIENCE

Winkler emphasises the lived experience of ADHD as fluctuating 'attachment' to tasks, conversations, and bodily cues. Patients often lose the thread, change topics rapidly, miss self-care signals (e.g., forgetting to void), or walk into obstacles. He cautions against relying solely on modular cognitive tests; rich, recent examples in naturalistic contexts are more revealing.

A PROCESS-BASED WORKFLOW FOR ADULT ADHD

Winkler's workflow avoids first-visit prescribing and builds evidence and insight over two contacts:

1. Comprehensive intake and medical review: rule out medical conditions which mimic ADHD (sleep apnea, anaemia/low iron, thyroid disease) and stabilise severe mood/anxiety states or substance use.
2. Establish onset in childhood: use concrete probes when parental recall is limited (e.g., repeated loss of keys/water bottles, habitual lock-outs, workarounds for missed deadlines).
3. Dynamic assessment: observe how patients tolerate sustained presence; distinguish anxiety from trauma-linked freezing/dissociation.
4. CAST ADHD symptom tracking: A 7–10-day real-world, free-text log of lapses across work/home prior to any medication. Review together before deciding to start treatment.

CAST ADHD: CALIFORNIA ADHD SYMPTOM TRACKING

CAST ADHD (California ADHD Symptom Tracking) is a clinician-mediated tool (available to clinicians after orientation via castadhd.org). Patients complete tracking after diagnosis but before starting medication. Ten days are requested to capture ~7 days of usable data, including a weekend. Outputs: (i) patient insight, (ii) an engagement test predicting adherence, (iii) contemporaneous

documentation of pre-medication dysfunction, and (iv) clearer shared decisions. An anonymised single-day example is shown in Figure 1; such logs often reveal lapses occurring many times per hour rather than per day.

DYNAMIC ASSESSMENT, TRAUMA, AND TITRATION READINESS

Approximately a quarter of adults show trauma-linked responses when asked to stay present (freezing, dissociation, somatic anxiety). For these patients, stimulants may initially feel like 'side-effects' rather than benefit. Recommendation: stabilise in trauma-focused therapy and grounding skills before starting a single ADHD medication; somatic sensations typically settle and benefits emerge.

MEDICATION PATH AFTER CAST

After reviewing CAST, start one long-acting stimulant (or non-stimulant if indicated) and titrate to effect, monitoring function, vitals, and tolerability. Avoid polypharmacy at initiation; arrange therapy supports when trauma responses were evident. CAST can be repeated to reconfirm dysfunction if patients remain ambivalent.

CLINICAL IMPLICATIONS

- Don't prescribe at first visit: use the time until the next consultation for evidence, insight, and readiness.
- Replace global complaints with concrete, recent episodes.
- Use CAST to simplify decisions and document baseline.
- Screen for trauma/medical mimics to prevent misattributed 'side-effects'.
- Plan transition to maintenance once stable

CONCLUSION

Winkler reframes adult ADHD care as a sequence of teachable processes rather than a one-visit verdict. CAST operationalises insight and readiness, reducing indecision about medication and supporting safer, more durable outcomes.

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References available on request.

Aaron Winkler is a psychiatrist and psychotherapist in California who specializes in the assessment and treatment of adults with ADHD. He founded and directed the Adult ADHD Clinic at Stanford University, writes and publishes peer-reviewed and award-winning work in psychiatry and neuroscience, and regularly presents new work at major academic conferences internationally. He serves on the APSARD National Guidelines Taskforce working to create guidelines for the diagnosis and treatment of ADHD in adults in the United States, and has developed real-world, freely available clinical tools to improve the diagnostic process and treatment outcomes for adults with ADHD. His approach utilizes psychodynamics, enhancing patient insight prior to starting medication, and fully mentalizing the life experience of someone who has struggled with executive function since childhood.

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A NOVEL APPROACH TO DIAGNOSING AND TREATING ADHD IN ADULTS

Presented by Roger Paterson

This Report was compiled by Anelet James and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

INTRODUCTION

Attention-Deficit/Hyperactivity Disorder (ADHD) has moved firmly into mainstream clinical practice, yet day-to-day questions at the coalface remain: How should genetics inform care? What do we do with ‘almost-there’ (subthreshold) cases? And how do we titrate medication well rather than just prescribe it? In this clinically focused report, Dr Roger Paterson distilled practical answers grounded in decades of adolescent and adult ADHD work, contemporary guidelines, and real-world titration experience.

ADHD GENETICS: WHAT HELPS THE CLINICIAN

ADHD is highly heritable—roughly on par with height (~70–80%). In families, the baseline childhood risk of ~1 in 20 increases to ~1 in 5 when one parent has ADHD and to ~1 in 2 when both parents are affected. The genetic architecture is polygenic: there are no single “major-effect” ADHD genes akin to Mendelian disorders. Polygenic risk scores aggregate many small-effect variants and may eventually help predict persistence and treatment response, but they are not yet ready for routine individual decision-making. Crucially, gene–environment interplay matters: epigenetic and environmental factors (e.g., prenatal exposures, very preterm birth, very low birth weight, maternal smoking or obesity, nutrient deficiencies such as low ferritin, PUFAs and vitamin D, toxicants such as lead or organophosphates, and psychosocial adversity, stress, trauma and neglect) can modulate expression of genetic vulnerability.

PHARMACOGENETICS: CURRENT LIMITS IN ADHD CARE

Pharmacogenetic testing is not routinely useful for ADHD medications in current practice. For atomoxetine, CYP2D6 metaboliser status can influence kinetics, but associations with clinical response and tolerability are inconsistent. For dexamfetamine/lisdexamfetamine and methylphenidate (primarily CES1A), the clinical utility of testing is even weaker. Bottom line: careful clinical titration remains superior to genotype-guided selection here.

SUBCLINICAL / THRESHOLD-NEAR PRESENTATIONS

Many patients are impaired but do not clearly meet adult DSM-5/ICD-11 thresholds (e.g., fewer than 5 symptoms, uncertain onset before 12, not obviously pervasive across settings). Evidence suggests that subthreshold ADHD can carry morbidity comparable to full-threshold presentations. Adult-onset presentations remain debated; however, clinicians should recognise that clinically significant impairment may emerge or become evident later (e.g., around hormonal transitions, changing role demands). Practical care includes structured psychoeducation, environmental modification, skills-based psychological therapy, and—where impairment is clear—thoughtful, consented off-

MEDICATION TITRATION: FROM 'ANY DOSE' TO 'JUST RIGHT'

Practical rules of thumb:

- Start low, aim for noticeable benefit without early side-effects, and adjust in days—not months—for stimulants.
- Choose either methylphenidate or dexamfetamine class first—there is no universally superior first choice. Use long-acting formulations if diversion risk is a concern or to smooth wear-off.
- Maintain a very low threshold to switch class or formulation if response is suboptimal or adverse effects emerge; a bad reaction to one agent does not predict failure with another.
- Watch for early-onset dysphoria/anxiety at peak (reduce dose or switch to longer-acting) and late-day rebound when doses wear off (add small late dose or use longer-acting coverage).
- Monitor BP/HR/weight and function; use brief rating scales (e.g., ASRS, SNAP-IV, DASS, WFIRS) at follow-up.
- Be cautious with ASD/anxiety/depression comorbidities—start lower and go steadier. Combination therapy can be appropriate in experienced hands.
- Non-stimulants (atomoxetine, guanfacine; clonidine in some settings) and selected antidepressants (e.g., bupropion, vortioxetine) can augment or substitute, tailored to symptom profile and tolerability.
- Practical upper bounds (product info varies; clinician discretion applies): lisdexamfetamine ~70 mg/day (~dexamphetamine 30 mg/day), dexamphetamine typically up to ~40 mg/day in youth and ~60 mg/day in adults, methylphenidate ~60 mg/day in youth and ~80 mg/day in adults. Where a higher dose is considered, step-up carefully and reassess for tolerance or the need for dose holidays rather than perpetual escalation.

KEY PRACTICE POINTS

- ADHD is polygenic; heritability is high, but clinical care is still led by history, impairment and response to titration.
- Don't dismiss subthreshold cases with clear impairment—treat the person in front of you, with careful documentation and consent.
- Pick a stimulant class and start; switch quickly if the first attempt isn't 'just right'.
- Use long-acting coverage to reduce rebound and diversion; add small short-acting boosters when necessary.
- Side-effects are usually manageable and often transient—anticipate and adjust.

- Follow-up early and often during titration; measure what matters (function, safety, satisfaction).

CONCLUSION

ADHD is 'easy to treat, hard to treat well'. Genetics explains risk, not destiny; subthreshold impairment deserves care; and meticulous titration—plus openness to switch or combine—delivers the durable gains patients and families need.

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Full reference list available on request

Roger Paterson graduated in medicine from the University of WA, and subsequently trained in child and adult psychiatry in London and Perth. He worked extensively in both the public and private sectors in general child, adolescent and adult psychiatry from 1989, moving to full-time private practice in 1996. He was the founding director of the Hollywood Private Hospital Eating Disorder Programme from 1997 to 2011, and remains engaged in managing binge eating disorders (bulimia nervosa and binge eating disorder), particularly in the field of pharmacotherapy. His solo private psychiatric practice now in central Perth specialises mostly in adolescents and adults with ADHD, a field where he has been active as a clinician, researcher and community advocate. Since 1994, he has supported the charity ADHD WA, both on the Professional Advisory Body and on the management committee. In 1999, he led a private/public team which published the 1st ever trial of dexamphetamine usage in adult ADHD. In July 2017, he joined the inaugural board of the national Australian ADHD Professionals Association and remains an active member. In September 2022, he was awarded the Meritorious Service Award by the Royal Australian and New Zealand College of Psychiatrists WA Branch. The award was for his 'outstanding contribution to psychiatry in recognition of his many years of tireless service as a leader in the field of ADHD'.

THE EMOTIONAL AND SOCIAL PROS AND CONS OF SCREENTIME

Presented by Hugo Theron

This Report was compiled by Anelet James and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

INTRODUCTION

Digital media is woven into daily life. Dr Hugo Theron argued that the question is not whether screens are good or bad, but how, why and with what they are used. Overuse—especially unstructured, late-night, fast-paced content—tracks with anxiety, depression, emotional dysregulation and reduced empathy; yet online spaces can also foster identity development, extend social support, and deliver mental-health information when services are scarce. The clinical task is to reduce harms while leveraging benefits through person-centered, context-aware plans.

HOW MUCH TIME DO PEOPLE SPEND ON SCREENS?

Across datasets cited by Theron, teens average about 8.7 hours of daily screen use, and adults 65+ average ~6 hours 38 minutes. While these figures include school and work, they underscore the scale of exposure and the need to distinguish

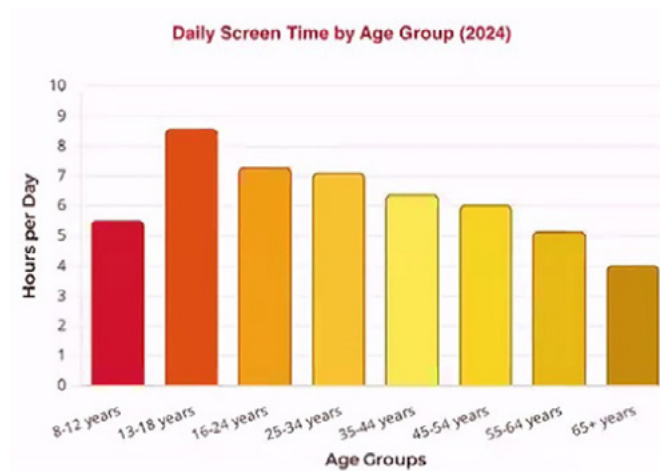


Figure 1. Daily screen time by age group (2024–2025). Compiled from Backlinko Screen Time Statistics 2025, DataReportal Digital 2024 Global Overview, and Common Sense Media 2024; slide adapted from Theron's talk.

purposeful engagement from passive consumption (see Figure 1).

EMOTIONAL COSTS OF HEAVY, UNSTRUCTURED USE

Evidence from large cohorts and longitudinal studies links excessive screen use with higher rates of anxiety and depression. Mechanisms include sleep disruption (blue-light suppression of melatonin), attention overload from rapid, emotionally salient content, upward social comparison that undermines self-esteem, and displacement of mood-regulating activities. Clinically, Theron observes irritability, emotional volatility and poorer offline self-regulation when screens crowd out restorative routines.

SOCIAL DEVELOPMENT AND DISPLACEMENTS

Heavy screen time can replace face-to-face interactions that train non-verbal skills (micro-expressions, tone), conflict negotiation and empathy. Theron drew attention to early-childhood data showing smaller vocabularies with fewer human interactions. The 'loneliness paradox'—feeling

isolated despite constant connection—often reflects passive, comparison-laden scrolling and avoidance of difficult emotions.

EMOTIONAL AND SOCIAL BENEFITS WHEN USE IS INTENTIONAL

Digital tools can support identity exploration and self-expression, particularly for youths who lack offline support. Online communities provide psychoeducation and peer validation; surveys report that roughly a third of teens obtain mental-health information via social media. Strong social connections—offline and digital—are associated with better health outcomes. Thoughtful online friendships can extend offline relationships and reduce isolation (see Figure 2).

Figure 2 summarises benefits reported for online friendships and communities.

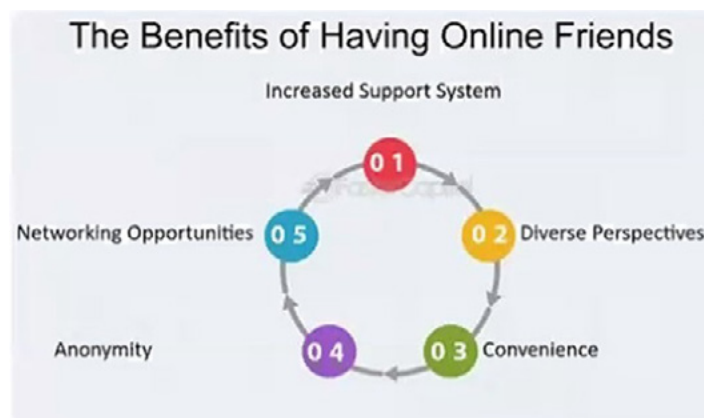


Figure 2. Potential benefits of having online friends—support, diverse perspectives, convenience, anonymity, and networking—when engagement is intentional.

QUALITY OVER QUANTITY: THE KEY FRAMING

Theron proposed moving beyond simple time caps to focus on what is being consumed, why, and what it displaces. Thirty minutes of educational content or meaningful connection can be more valuable than hours of passive feed-scrolling. Age, temperament and context matter: the same content can be calming for one adolescent and dysregulating for another.

PRACTICAL RECOMMENDATIONS FOR CLINICIANS, PARENTS AND SCHOOLS

Ask about content, context and purpose, not time alone; document sleep patterns. Preserve supportive digital networks (especially for marginalised youths) while reducing passive use. Teach intentional use and avoid ‘doom-scrolling’ before bed. Balance with offline pillars (activity, unstructured play, in-person time). Use a simple 5-step implementation framework to assess patterns, identify benefits/harms, optimise, reduce, and monitor (see Figure 3).

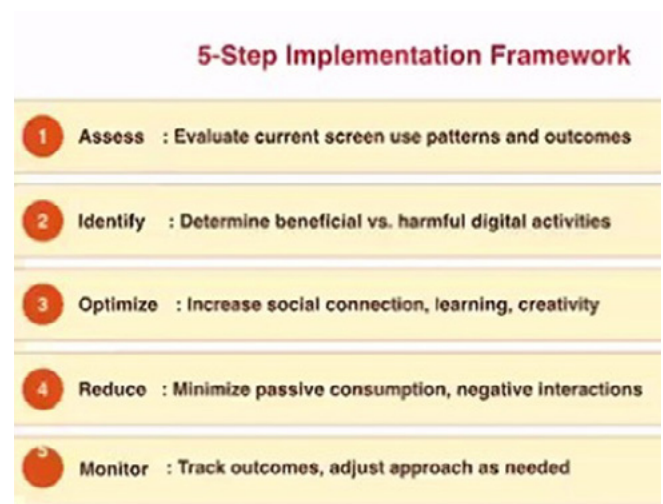


Figure 3. Five-step implementation framework for healthier screen use: Assess, Identify, Optimise, Reduce, Monitor.

CONCLUSION

Screens are powerful tools whose impact depends on design and use. A balanced, personalised approach—grounded in sleep hygiene, intentional content choices and preservation of real-world connections—can mitigate risks and amplify benefits.

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References available on request.

Hugo Theron has been a registered clinical psychologist since the late 90s. He studied clinical psychology at Stellenbosch University, and medical and health psychology at Leiden University. He obtained his PhD in Child Psychology from the University of the Free State. He has worked with children, adolescents, and adults in South Africa, the Netherlands and the United Kingdom. His fields of interest are varied, covering anxiety and mood disorders, as well as behavioural and neurodevelopmental problems across the developmental range from childhood, through adolescence, into adulthood. He did his PhD research on the use of information and communication technology (including social media) and the impact it has on children and adolescents.

THE UTILITY AND VALIDITY OF PHARMACOGENETICS

Presented Brendan Belsham

This Report was compiled by Anelet James and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

INTRODUCTION

Pharmacogenetics, the study of how genetic variation influences drug response, has become an increasingly important focus in psychiatry. Within the field of attention-deficit/hyperactivity disorder (ADHD), interest in pharmacogenetics stems from the broader concept of precision medicine—an approach that seeks to tailor treatments based on individual biological markers.

Precision medicine has shown remarkable success in oncology, where genotyping informs targeted therapies for cancers such as breast and lung malignancies. Psychiatry, however, faces greater challenges due to the heterogeneity of neurodevelopmental and psychiatric conditions, particularly ADHD. Dr. Brendan Belsham's presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress explored the current evidence and clinical implications of pharmacogenetics in ADHD treatment, with a particular focus on atomoxetine and the cytochrome P450 2D6 (CYP2D6) enzyme system.

PHARMACOGENETICS IN ADHD

ADHD is a polygenic condition with hundreds of genetic variants each exerting small but cumulative effects. This complexity complicates the identification of reliable biomarkers. Research has investigated a wide range of potential biomarkers, from neuroimaging and neurocognitive profiles to metabolomics and neurophysiology. One widely discussed marker, the theta/beta ratio (TBR) on EEG, initially received FDA approval to assist diagnosis but has since lost much of its clinical credibility due to inconsistent results. Against this backdrop, pharmacogenetics offers a more tangible path to personalization by examining how genetic differences affect drug metabolism and therapeutic response (Bousman & Hopwood, 2016).

CLINICAL APPLICATION: ATOMOXETINE AND CYP2D6

The most clinically relevant pharmacogenetic findings in ADHD involve atomoxetine, a selective noradrenaline reuptake inhibitor metabolized primarily by CYP2D6. Genetic variability in CYP2D6 leads to marked inter-individual differences in drug plasma levels, therapeutic response, and side-effect profiles. Individuals can be classified as ultra-rapid, normal, intermediate, or poor metabolizers based on their CYP2D6 genotype. Poor metabolizers exhibit higher plasma concentrations of atomoxetine, increasing both therapeutic effects and the likelihood of adverse events such as appetite suppression, sleep disturbance, and mood changes. Conversely, ultra-rapid metabolizers may show insufficient response at standard doses (Brown et al., 2019; Hicks et al., 2015).

The Clinical Pharmacogenetics Implementation Consortium (CPIC) provides dosing guidelines for atomoxetine based on CYP2D6 metabolizer status (Hicks et al., 2015). These guidelines recommend starting poor metabolizers at lower doses and considering dose escalation for ultra-rapid metabolizers. However, these recommendations rely on plasma concentration monitoring, which is not currently feasible in South Africa. Additionally, common co-prescribed medications, such as fluoxetine, paroxetine, or bupropion, act as CYP2D6 inhibitors and can convert normal metabolizers phenotypically into poor metabolizers, further complicating clinical decision-making (Ramsey et al., 2021).

LIMITATIONS AND PRACTICAL BARRIERS

Despite its promise, pharmacogenetic testing in ADHD remains limited in scope and application. Commercially available panels, such as MedCheck, often bundle multiple gene tests, making it impossible to order only a specific enzyme genotype such as CYP2D6. The cost, estimated at approximately R3,000–3,400, restricts access for many patients in South Africa. Moreover, these tests typically screen only for known variants, defaulting undetected alleles to a 'wild-type' result, which may be misleading in genetically diverse populations. Rare variants, de novo mutations, and population-specific alleles may therefore be overlooked (Zhou *et al.*, 2021).

CASE ILLUSTRATION

Dr. Belsham illustrated these challenges with the case of an 11-year-old girl with severe combined-type ADHD, comorbid oppositional defiant symptoms, and anxiety. She demonstrated non-response and significant side effects to methylphenidate. A pharmacogenetic report suggested limited atomoxetine efficacy and predicted poor response to lisdexamfetamine due to low COMT activity. In practice, atomoxetine yielded partial improvement, while lisdexamfetamine later produced a robust response with minimal side effects. This case highlights the fallibility of pharmacogenetic predictions and underscores the necessity of individualised clinical evaluation.

CONCLUSION

Pharmacogenetics represents a promising step toward precision psychiatry, offering insights into drug metabolism and potential treatment response. Current evidence supports the clinical relevance of CYP2D6 variability in atomoxetine metabolism, but limitations in cost, availability, and predictive accuracy restrict its routine use in ADHD care. Practice guidelines consistently emphasize that pharmacogenetic testing should not replace comprehensive clinical assessment, which remains the cornerstone of ADHD management (Bolea-Alamanac *et al.*, 2014; South African ADHD Guidelines, 2022). Ongoing research may strengthen the role of pharmacogenetics, but for now it serves as an adjunct rather than a determinant in treatment selection.

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Brendan Belsham is a Child and Adolescent Psychiatrist in private practice in Johannesburg. He has been a visiting consultant at the Johannesburg Parent and Child Counseling Centre for more than 15 years and serves on the advisory board of Living and Loving magazine. Between 2001 and 2003, he held a consultant post at the University of the Witwatersrand, contributing to postgraduate child psychiatry training and pioneering a clinic in Orange Farm. Dr. Belsham has received multiple academic awards, published widely, and presented to diverse professional and community audiences. His special interests include early parenting, attachment, ADHD, childhood bipolar disorder, autism, and anxiety disorders. He is the author of *What's the Fuss About ADHD?*

ADHD HEALTHCARE INTELLIGENCE: CAN ARTIFICIAL INTELLIGENCE TRULY SUPPORT ADHD CARE?

Presented by Antonio Pesqueira

This Report was compiled by Anelet James and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

INTRODUCTION

Can artificial intelligence truly support ADHD care, and can these advanced technologies really bring valuable benefits to patients and clinicians? Antonio Pesqueira, a researcher at the intersection of healthcare and data science, opened the congress with a compelling exploration of how big data and AI are creating powerful solutions across the entire spectrum of ADHD care—from screening and diagnosis to treatment and monitoring. His presentation balanced technological enthusiasm with critical caution, acknowledging both the unprecedented opportunities and the substantial risks inherent in AI-driven mental healthcare. This was not a simplistic endorsement of automation, but rather a nuanced argument for "hybrid intelligence"—systems designed to augment, not replace, human clinical expertise.

THE FUNDAMENTAL SHIFT: FROM SUBJECTIVE ASSESSMENT TO DATA-RICH PROFILING

Healthcare is experiencing a fundamental data-driven transformation that is completely reshaping how we approach complex conditions like ADHD. This shift involves integrating big data and AI to transform the entire patient journey, moving from subjective questionnaires to building detailed, data-rich profiles using validated instruments.

Critical clarification: This is not about letting machines or large language models run without control and quality assurance. The concrete applications being developed and tested operate within controlled environments, under guidelines and processes for data protection, privacy, and security. These include frameworks such as the General Data Protection Regulation (GDPR) in Europe and the Health Insurance Portability and Accountability Act (HIPAA) in the United States.

Traditional ADHD assessment relies heavily on rating scales such as:

- **Intelligence and Development Scales (IDS):** Comprehensive assessment of cognitive and developmental functioning
- **Behaviour Rating Inventory of Executive Function (BRIEF):** Clinical tool assessing executive function in everyday contexts
- **Conners Rating Scales:** Widely used instruments for evaluating ADHD symptoms and related problems

AI-driven approaches aim to supplement these validated instruments with continuous, objective data streams from digital platforms, wearable devices, and multimodal assessments. However, this transformation requires careful integration and brings critical risks that must be validated before any patient usage

DIGITAL THERAPEUTICS: EVIDENCE-BASED MEDICAL INTERVENTIONS, NOT WELLNESS APPS

A key component of AI-enabled ADHD care is the concept of **digital therapeutics (DTx)**. It is crucial to understand that these are not simply wellness applications. Digital therapeutics are **evidence-based medical interventions requiring prescription and regulatory agency approvals**. The key difference from traditional medicine is that they are based on digital solutions rather than pharmaceutical molecules.

AI becomes the core engine of digital therapeutics.

AI within DTx detects patterns, makes real-time adaptive adjustments, and provides the intelligence that makes therapeutic interventions truly digital and personalized. This approach is particularly compelling for ADHD because research shows that the most effective interventions for children and adults with this condition are highly motivating and provide immediate, meaningful feedback.

When observing a child using a well-designed therapeutic game, one is witnessing them practice critical executive functions—planning, strategic thinking, and adaptive behaviour—within a safe and engaging environment. AI operating in the background continuously adjusts difficulty, provides feedback, and links performance to clinical assessment tools.

CASE STUDIES: AI-DRIVEN DIGITAL THERAPEUTICS IN ACTIONS

Pesqueira presented several case studies from ongoing research demonstrating how these concepts translate into practical interventions:

Case Study 1: Emotional regulation training (Germany)

A system currently being developed in Germany aims to build emotional regulation skills using a smartwatch to measure heart rate and other biometric signals. These physiological data have direct influence on a therapeutic game interface. In the background, AI collects biometric data and feeds it into the BRIEF assessment, a clinical tool used to evaluate executive function.

Key innovation: This allows for continuous, objective measurement of a child's emotional state, linking real-world physiological responses to clinical assessment. The system moves beyond episodic clinical evaluation to provide ongoing monitoring of emotional regulation capacity.

Case Study 2: Attention monitoring platform (United States)

A platform Pesqueira's team is testing in the US focuses on attention monitoring using devices such as smart rings, watches, or armbands to provide direct feedback on whether the user is paying attention during tasks. AI connects performance data to the Intelligence and Development Scales (IDS) assessment to build a detailed profile of a child's cognitive and social-emotional skills.

Advanced features include:

- Personal executive function coach that customizes plans based on collected data
- Virtual reality modules allowing practice in realistic scenarios
- AI-powered coaches operating in child-friendly environments (such as Minecraft-style interfaces)
- Strategy gaming elements that help children transfer learned skills to daily life situations

Critical consideration: The project incorporates multiple layers of data security, privacy protection mechanisms, and compliance with regulations like GDPR, recognizing that mental health data is among the most sensitive categories of personal information.

THE CURRENT REALITY: PROMISING BUT EARLY-STAGE

Pharmacogenetics Despite the innovation demonstrated in these case studies, Pesqueira emphasized a crucial point: **the application of AI in ADHD management is still very much in its beginning stages**. Across multiple years of research, findings consistently show that without full involvement of technical, medical, legal, and regulatory teams, these projects tend to fail in a "grey area" where risks have not been fully validated. However—and this is the essential point—the research shows we are at a turning point.

The integration of large language models and AI agents is genuinely moving the field toward several different scenarios that can improve ADHD care:

- **Enhanced treatment options:** Personalized, adaptive interventions based on continuous data
- **Early detection of symptoms:** Identification of at-risk individuals through behavioural pattern analysis
- **Increased trust and transparency:** Objective scoring results that parents, teachers, and clinicians can discuss
- **Medical education and training:** AI-assisted learning for healthcare professionals
- **Truly personalized care:** Treatment plans tailored to individual profiles rather than population averages

This represents a significant shift toward a data-driven approach, but it also forces the development of new frameworks needed for the ethical and effective integration of technology with clinical processes involving psychiatrists, general practitioners, parents, teachers, and many other stakeholders.

TRADITIONAL FOUNDATIONS VERSUS EMERGING INNOVATIONS

Traditional treatments (foundational, human-centred)

- **Medication:** Stimulants and non-stimulants with decades of evidence
- **Cognitive Behavioural Therapy (CBT):** Structured therapeutic approach addressing thinking patterns and behaviours
- **Psychoeducation:** Education for patients, families, and teachers about ADHD
- **Standard of care guidance:** DSM-5 diagnostic criteria and treatment guidelines

These approaches are effective, well-validated, and have solid empirical support. They remain the foundation of ADHD care.

Emerging AI-enabled therapies

- **Therapeutic video games:** Gamified interventions targeting executive function
- **Virtual and Augmented Reality (VR/AR):** Immersive environments for skills practice
- **AI agents for comprehensive assessment:** Systems that analyse DSM-5 criteria alongside real-time publications from databases like PubMed
- **Real-time regulatory tracking:** AI systems that monitor evolving regulations and key opinion leader publications within seconds
- **Large dataset analysis:** Capacity to detect trends, patterns, and non-obvious relationships across millions of data points

One particularly promising application: Pesqueira's team has been testing AI agents that perform constant data monitoring across specific information sources, tracking real-time changes in mental health regulations and newly released medical content. This allows clinicians to access newly discovered knowledge within seconds of publication—a capacity impossible through traditional literature review methods.

SIGNIFICANT RISKS AND CHALLENGES

The new AI toolkit is not without substantial risks. Pesqueira highlighted several critical concerns:

Clinical and behavioural risks

- **Over-reliance and hyperfocus:** Especially concerning with gaming-based interventions that may inadvertently reinforce problematic engagement patterns
- **Hallucinating models:** AI systems that generate plausible but incorrect or entirely fabricated information
- **Skill transfer validation:** Ensuring that skills learned in digital environments actually transfer to real-world contexts—a question requiring rigorous pretesting before patient usage

Broader digital health concerns

- **Excessive screen time:** Impact on anxiety, sleep, and overall well-being
- **Social isolation:** Remote digital interventions may reduce face-to-face human contact
- **Cyberbullying and online risks:** Digital platforms create new vulnerabilities
- **Misinformation spread:** Particularly concerning in mental health contexts where inaccurate information can be harmful
- **Data breaches:** Constant threat to sensitive mental health information
- **Cost and accessibility:** Risk of widening health disparities if advanced technologies are available only to privileged populations

Critical consideration: The project incorporates multiple layers of data security, privacy protection mechanisms, and compliance with regulations like GDPR, recognizing that mental health data is among the most sensitive categories of personal information.

Emerging opportunities despite challenges

Despite these concerns, technology presents opportunities to support underserved areas such as workplace mental health—an area that deserves more attention, especially with increasing knowledge about neurodiversity and recognition of mental health conditions in occupational settings.

Tools like telehealth and internet-based cognitive therapy are improving accessibility. Digital platforms offer resources for preventive education, guiding employees to appropriate levels of care. The challenge is implementing these technologies with robust safeguards and equity considerations.

FIVE KEY AREAS WHERE AI IS MAKING SUBSTANTIAL IMPACT

Pesqueira outlined five domains where AI is demonstrating genuine value in ADHD care:

1. Diagnosis and screening

Instead of relying only on specific data points collected at discrete clinical encounters, AI can integrate large and previously disconnected datasets—from electronic health records to genomics to behavioural patterns captured through digital platforms—to identify patterns and create more objective assessments. This moves beyond the limitations of single-informant, single-timepoint evaluation.

2. Treatment and management

AI enables truly personalized treatment plans by predicting how individual patients might respond to different modalities and crafting cognitive training programs tailored to specific needs. This represents a fundamental shift from the "one-size-fits-all" model that has dominated ADHD treatment.

Advanced development: Pesqueira noted significant activity with **digital twins and synthetic data**—AI agents modelled on datasets that are synthetic representations of patients without real individual identification. This allows training and testing of AI systems while remaining compliant with data privacy regulations like GDPR. Digital twins create full representations of patient characteristics and treatment responses without exposing actual patient data.

3. Psychological profiling

Advanced AI, particularly multimodal large language models, can analyse diverse data streams—from social network activity to voice patterns—to assist with early detection of behavioural issues. This capability moves screening from episodic clinical encounters to continuous, passive monitoring (with appropriate consent and oversight).

4. Continuous monitoring and workplace applications

AI can power platforms that monitor treatment progress and, critically, identify employees experiencing burnout or elevated stress before crisis points. Intelligent adaptive AI chatbots with full data protection (addressing HR and legal compliance concerns) can provide immediate support.

Implementation challenges: The pace of innovation in technological solutions often outstrips the capacity of organizations to validate these models from ethical, compliance, and legal perspectives. This tension between innovation speed and validation thoroughness requires ongoing dialogue among stakeholders.

5. Psychometric testing enhancement

AI can enhance the accuracy and objectivity of psychometric assessments, enabling analysis of large datasets for pattern recognition and even predicting functional outcomes such as job performance. This moves assessment beyond subjective interpretation toward more standardized, data-driven evaluation.

CRITICAL LIMITATIONS: THE DATA QUALITY IMPERATIVE

AI is only as good as the data it learns from. If data is incomplete, biased, or contains errors, the AI model will amplify those flaws, leading to significant bias and serious issues in data processing and clinical judgments.

Pesqueira emphasized three fundamental challenges:

Challenge 1: Data quality and completeness

Current systems often struggle with incomplete or incompatible data from diverse sources. Electronic medical records combined with lifestyle monitoring apps could provide enormous advantages, but integrating these disparate systems and data warehouses is extremely complex—currently beyond efficient human capacity without AI assistance.

The paradox: We need AI to help manage data quality, but AI performance depends on high-quality data. This creates a need for increased human data validation even as we deploy intelligence reasoning systems. The vision is a future where we can place greater trust in data presented from different integrated sources, but reaching that future requires intensive human oversight during development and implementation phases.

Challenge 2: Data privacy and security

Healthcare data, particularly mental health information, represents some of the most sensitive personal information. Upholding regulations like GDPR in Europe and HIPAA in the United States is not merely a legal requirement—it is the absolute foundation of patient trust. Without robust safeguards against data breaches, the entire AI-driven healthcare future begins to fail.

Technical requirements include:

- Encryption of data at rest and in transit
- Access management with layered permissions
- Audit trails documenting all data access rigorous pretesting before patient usage
- De-identification and anonymization protocols
- Secure data storage in compliance with jurisdictional requirements

Challenge 3: The "black box" problem and hallucinations

Many complex AI models arrive at conclusions without revealing their reasoning processes. Clinicians cannot act on recommendations if they don't understand how they were generated. Over-reliance on opaque systems compromises trust between doctor, patient, and technology itself.

Hallucinations—instances where AI systems generate plausible but entirely incorrect information—represent a particularly dangerous failure mode in clinical contexts. A clinician acting on hallucinated diagnostic suggestions or treatment recommendations could cause serious harm.

THE PATH FORWARD: ADDRESSING CHALLENGES THROUGH COLLABORATION

Moving forward requires:

1. **Data quality-first approach:** Establishing standardized protocols for data acquisition, cleaning, and validation before training AI systems
2. **Interdisciplinary collaboration:** Computer scientists, medical professionals, legal experts, ethicists, and patients must work together throughout development
3. **Transparency requirements:** AI systems must explain their reasoning in clinically interpretable ways
4. **Bias mitigation:** Active efforts to identify and correct biases in training data and model outputs
5. **Continuous validation:** Ongoing assessment of AI system performance in real-world clinical contexts

By creating robust protocols and maintaining rigorous oversight, we can build a future for AI that is not only powerful but also fair, transparent, and trustworthy.

MULTIMODAL LARGE LANGUAGE MODELS: THE CUTTING EDGE

The most advanced AI systems currently being developed for ADHD care are **multimodal large language models (MLLMs)**—systems capable of processing and integrating diverse data types including text, images, video, audio, and numerical data simultaneously.

Pesqueira presented findings from an ongoing research study conducted with mental health professionals across seven European countries. This study surveyed 121 clinicians about their experiences with and perceptions of AI in ADHD care.

Where clinicians see AI providing most value:

- **Diagnostic accuracy: 37%** – Leading concern and greatest perceived benefit
- **Early detection: 28%** – Identifying at-risk individuals before full symptom emergence
- **Personalized treatment plans: 17%** – Tailoring interventions to individual profiles
- **Continuous monitoring: 13%** – Ongoing assessment rather than episodic evaluation
- **Efficiency and scalability: 9%** – Reduced administrative burden, increased capacity

Important note: These percentages represent increases in perceived value after certain AI models were implemented and demonstrated in clinical settings. For example, the "continuous monitoring" category showed a 9% increase in perceived value after clinicians experienced AI-enabled monitoring systems.

Key technological concepts:

Multi-Agent Systems (MAS): One of the most promising areas involves specialized AI programs (agents) collaborating to solve complex problems. One agent might analyse text from clinical notes, another might perform analysis on behavioural data captured through digital platforms, and a third might analyse brain imaging—all communicating with each other to build a comprehensive diagnostic picture.

Hybrid Intelligence Systems: The ultimate goal is integrating AI analytical capabilities with human intelligence. AI provides data analysis, pattern recognition, and evidence synthesis; clinicians provide context, empathy, ethical judgment, and final decision-making authority.

Core properties being built into AI agents:

- **Autonomy:** Capacity to operate independently within defined parameters
- **Robustness:** Reliable performance across diverse clinical scenarios
- **Social ability:** Capacity to interact effectively with human clinicians and patients

These properties make AI agents effective partners for clinicians rather than replacement systems.

EXPERT CONSENSUS ON AI'S MOST IMPACTFUL CAPABILITIES

The European study revealed strong consensus on where AI delivers greatest value:

- **93% of experts agree:** AI's greatest strength is analysing vast and diverse datasets, integrating everything from electronic health records and genomic data to physiological signals from tracking devices. This is the foundational capability enabling all other applications.
- **82% of clinicians recognize:** AI significantly aids in screening and early detection by collecting behavioural data from digital platforms, identifying individuals at elevated risk, and allowing more proactive and timely interventions.
- **69% of experts highlight:** AI's power to predict ADHD progression and classify subtypes based on neuroimaging analysis and longitudinal data. This moves beyond static diagnosis toward dynamic understanding of individual patient trajectories.
- **54% agree:** All of this culminates in ability to create highly personalized, tailored treatment plans. By understanding deep patient data, we move closer to true precision medicine.

The clear takeaway: AI's fundamental contribution is its capacity to automate analysis of complex data in real-time, streamline clinical and administrative workflows, and provide deeper insights than possible through traditional methods alone.

THE EVOLUTION OF AI IN ADHD CARE: PAST, PRESENT, AND FUTURE

Phase 1: Inception (Early 2000s – Mid-2010s)

Initial adoption of "AI of Medical Things" (AIoMT) focused on using early wearable technology to monitor general markers like stress levels. Systems were simpler, data was less detailed, and applications were primarily exploratory.

Phase 2: Advanced Integration (Current State)

This is where current research is actively shaping AI's role. AI is addressing core ADHD care challenges:

- **Enhanced screening accuracy:** Checking behavioural data and patterns for diagnostic indicators
- **Earlier and more objective diagnosis:** Analysis of neuroimaging and multimodal data streams
- **Streamlined personalized treatment plans:** Based on genetics, lifestyle factors, treatment response patterns, and continuous monitoring data

We are currently in a phase of rapid capability expansion with growing but still limited clinical implementation.

Phase 3: Seamless Integration (Next 5 Years)

AI is expected to become an integral component of mental health diagnostics. This future includes:

- **Advanced multimodal large language models:** Holistic assessments integrating all available data types
- **Immersive therapies:** VR and AR applications improving concentration, executive function, and social skills
- **Bioprinting applications:** Creating patient-specific neural models to test treatments before clinical administration
- **Seamless daily life integration:** AI systems that operate unobtrusively within patients' everyday routines
- **Robust ethical frameworks:** Governing all applications to ensure safety, privacy, and equity

Step 1: Initial Data Collection (Foundation)

The system aggregates diverse datasets including electronic healthcare records, patient demographics, genomic data, and behavioural data from digital platforms. This identifies individuals at elevated risk and establishes baseline profiles.

Step 2: AI Diagnostic Analysis (Medium Impact)

AI models analyse data to identify subtle patterns potentially missed by human observation. Systems analyse brain imaging, behavioural inputs, speech patterns, and longitudinal data to create objective, precise diagnoses and identify specific ADHD subtypes.

Step 3: Personalized Treatment Plan Generation

Based on precise diagnosis, AI tailored interventions—recommending specific medications, cognitive training protocols, therapeutic approaches, or digital therapeutics. Systems predict likely responses to different therapies based on patient profiles and similar cases in training data.

Step 4: Continuous Real-Time Monitoring (High Impact)

Using data from wearables and mobile apps, AI provides continuous feedback, tracks symptoms and treatment adherence over time, and enables confidence-based adjustment of care plans. This represents a fundamental shift from episodic to continuous care.

Step 5: Predictive Modelling (Highest Long-Term Impact)

Systems forecast likelihood of developing comorbid conditions (anxiety, depression, substance use disorders), identify psychosocial risks, and enable truly proactive, preventive long-term management. This is the journey from static initial assessment to dynamic, predictive, deeply personalized care.

CONTINUOUS BEHAVIOURAL MONITORING: THE MULTI-AGENT SYSTEM IN ACTION

Moving beyond static assessments, advanced AI systems enable continuous behavioural monitoring through integration of multiple data streams:

Primary data stream: Wearable devices and mobile applications continuously monitor symptoms, treatment adherence, and physiological signals through digital phenotyping—the moment-by-moment quantification of individual behaviour patterns using data from personal digital devices.

Enrichment streams integrated in parallel:

- **Natural language processing (NLP) and machine learning:** Analysing speech patterns and linguistic nuances from patient interactions, adding diagnostic precision
- **Historical context:** Electronic healthcare records and genomic data providing longitudinal perspective
- **Psychometric assessments:** Tools like BRIEF and Conners scales with AI-enabled objective scoring, conducted at regular intervals (e.g., baseline, 3-5 months, repeated intervals) to track changes over time

Core AI actions integrating all inputs:

- **AI-driven diagnostic support and risk stratification:** Multimodal large language models interpret diverse data types (images, sounds, text, documents) simultaneously
- **Predictive analytics:** Sophisticated risk assessment systems forecasting likely trajectories and complications

Ultimate goal: Leveraging AI capabilities to ensure objective, efficient, comprehensive assessment of patient executive functions and core ADHD symptoms on an ongoing basis, moving far beyond the limitations of periodic clinical evaluations

AGENTIC AI: THE INTELLIGENT PARTNER FOR PATIENTS AND PROFESSIONALS

The next evolution of AI in ADHD care is **agentic AI**—systems designed to function as intelligent partners providing support for both patients and healthcare professionals. These systems are powered by large language models (LLMs) capable of analysing multimodal data: text, images, video, and sound.

Benefits for patients:

1. **Personalized treatment plans and continuous monitoring:** Agentic AI systems provide tailored educational support adapted to individual learning styles and needs. A prime example from Pesqueira's research is relational AI chatbots acting as digital assistants, helping patients learn and practice executive skills.
2. **Research evidence:** These chatbot interventions have been shown to improve mood and increase treatment adherence by providing consistent, non-judgmental support and skill-building opportunities.
3. **Enhanced engagement:** Technology provides immersive and user-friendly platforms where AI promotes understanding and empowers individuals to take more active roles in their own care.

Benefits for healthcare professionals:

Continuous access to latest evidence: Agentic AI systems are invaluable for clinicians because they can continuously provide the most up-to-date information on ADHD research, latest treatment guidelines, and best practices. This effectively supports clinical decision-making, ensuring recommendations are always grounded in current evidence.

Key advantage: While individual clinicians cannot possibly keep pace with the exponential growth of medical literature (estimated at 2-3 million new articles published annually across all medical fields), AI systems can continuously monitor, synthesize, and surface relevant new findings within seconds of publication.

Synergistic loop: Agentic AI creates a mutually reinforcing system—empowering patients with tools for self-management while equipping clinicians with data-driven insights needed to provide optimal care. This is the essence of hybrid intelligence in action.

THE PATH FORWARD: HYBRID INTELLIGENCE, NOT REPLACEMENT

After exploring the substantial potential and critical risks of AI in ADHD care, Pesqueira concluded with the most important principle for moving forward: **The future is not a choice between technology and tradition.**

The answer is a hybrid approach where AI and big data supplement rather than replace clinical expertise. Advanced technology must be integrated with established clinical knowledge and judgment. This integration defines new collaborative roles in patient care rather than eliminating human involvement.

Clear role definition:

AI system role:

- Analyse large amounts of behavioural and neurological data
- Identify patterns across populations and within individuals
- Generate evidence-based recommendations to support decision-making
- Automate routine administrative and data processing tasks
- Continuously monitor treatment responses and flag concerning changes

Clinician role: As Pesqueira emphasized, **the final decision-making responsibility always rests with human clinicians.** Healthcare professionals bring unique empathy, contextual understanding, and ethical judgment to every decision. The technology provides data and analysis; clinicians provide wisdom, nuance, and human connection.

Core principle: We must adopt a hybrid model where AI tools streamline analysis and offer insights, but human clinicians remain at the centre of care. The goal is to **augment our abilities, not automate relationships with patients.**

The path forward is synergistic—leveraging the best of both worlds to create a more effective, compassionate, and accessible mental healthcare system for everyone.

CONCLUSION

Throughout this opening session, Pesqueira demonstrated that digital therapeutics, AI, and big data are genuinely shaping a new era of ADHD care, offering unprecedented opportunities for personalized and effective interventions. However, he consistently emphasized the essential need for ethical oversight, robust data governance, and a balanced hybrid approach that always prioritizes the human element in healthcare.

The future is not about technology replacing clinicians. It is about creating synergistic partnerships that amplify the ability of clinicians, healthcare professionals, and technical experts to provide compassionate and impactful care. AI offers extraordinary analytical power, but human judgment, empathy, and ethical reasoning remain irreplaceable.

The message for clinicians: Engage thoughtfully with these emerging technologies. Demand transparency, robust validation, and ethical oversight. Use AI as a powerful tool to enhance—not replace—your

clinical expertise and therapeutic relationships. The roadmap is clear: careful integration, continuous validation, unwavering attention to data quality and privacy, and steadfast commitment to keeping human clinicians and patient relationships at the centre of care. This balanced approach offers the best path toward realizing AI's potential while mitigating its risks.

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MYCOLOGY AND ADHD

Presented by Renata Schoeman

This Report was compiled by Anelet James and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

Interest in ‘mushrooms for the mind’ has surged—driven by wellness trends, dietary advice, and early psychedelic trials—but psychiatry must separate marketing from medicine. In this talk, Prof Renata Schoeman surveyed the landscape: what is known (nutrition and oncology signals), what is uncertain (functional mushrooms for mental health), and what is unsupported for ADHD right now. Her bottom line: enjoy culinary mushrooms for nutrition, but remain sceptical of therapeutic claims for attention, concentration, and executive dysfunction until robust ADHD trials exist.

THE FUNDAMENTAL SHIFT: FROM SUBJECTIVE ASSESSMENT TO DATA-RICH PROFILING

Psilocybin is a serotonergic psychedelic under investigation for major depressive disorder and treatment-resistant depression. Early programmes reported positive outcomes in specialist settings with psychotherapy support. However, there is no clinical evidence for the treatment of ADHD. Microdosing studies in adults (including self-blinding designs) have shown no objective cognitive benefits and strong expectancy effects. Legal status varies by jurisdiction and typically restricts use to tightly controlled research; risks include anxiety, transient blood pressure/ heart rate increases, and possible precipitation of psychosis/mania in vulnerable individuals, alongside drug–drug interaction concerns.

FUNCTIONAL MUSHROOMS: WHAT THE SCIENCE SUGGESTS (SO FAR)

Across edible and so-called ‘functional’ species, non-psychedelic mushrooms have been ascribed antioxidant, anti-inflammatory, immunomodulatory and neurotrophic properties. These signals derive largely from cell and animal work and a patchwork of small human studies—most in oncology or general wellness populations rather than ADHD. At present, the clinical literature does not demonstrate efficacy for core ADHD symptoms; claims should therefore be framed as nutritional or experimental rather than therapeutic.

KEY CONTROVERSIES AND CAUTIONS

derives from cell systems or animal models at exposures that do not map cleanly onto human products. Even when human studies exist, formulations, doses and bioavailability vary so widely that findings are hard to generalise. Against this backdrop, marketing has leapt ahead of evidence, and expectancy effects—particularly in open-label wellness contexts—are substantial.

Quality and safety are additional concerns. Independent audits have identified mislabelling and species substitution, as well

as heavy-metal or pesticide contamination in poorly regulated supply chains. Products derived from mycelium rather than fruiting bodies can differ in active compound profiles, yet labelling is not always clear. Regulatory frameworks for supplements remain inconsistent, and pharmacovigilance is limited compared with medicines. For clinicians, these uncertainties argue for cautious counselling and careful documentation when patients choose to use such products.

PRACTICAL GUIDANCE FOR CLINICIANS

In routine ADHD consultations, it is prudent to ask proactively about non-prescribed products, including ‘functional’ mushrooms. Patients seldom volunteer this information, yet it can affect safety, expectations and adherence. Where interest exists, the discussion should foreground nutrition: culinary mushrooms remain valuable for fibre and micronutrients—especially vitamin D when UV-exposed—but they have not been shown to treat inattention, impulsivity or executive dysfunction. Expectation-setting is central. Patients should hear clearly that high-quality ADHD-specific trials are currently lacking and that any perceived benefits are likely non-specific or related to comorbid domains such as sleep or fatigue in other populations. For those intent on self-experimentation, a brief risk screen is essential—history of psychosis or bipolar spectrum illness, potential interactions with SSRIs/SNRIs, anticoagulants or immunotherapies, pregnancy and lactation, and the local legal context for psychedelic species. Shared-decision documentation and a plan to monitor function and adverse effects can reduce harm. Finally, clinicians can encourage participation in well-designed trials to help build an ADHD-relevant evidence base.

CONCLUSION

Prof Schoeman’s appraisal is clear: mushrooms have intriguing biology and nutritional value, but they are not evidence-based treatments for ADHD. Until rigorous, ADHD-focused trials are done, clinicians should guide patients to established ADHD care and discuss supplements with a critical eye.

References available on request.

Renata Schoeman has been in full-time private practice as a general psychiatrist (child, adolescent, and adult psychiatry) since 2008. As a psychiatrist, she has special interests in ADHD, eating disorders, mood disorders and anxiety disorders. Renata also holds appointments as associate professor in Leadership, and as head of the MBA in Healthcare Leadership at the Stellenbosch Business School. 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 serves on the advisory boards of various pharmaceutical companies and is a past director of the Psychiatric Management Group (PsychMG). She is the convener 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). She is a well-published academic, and respected thought leader and mental health advocate who has received many awards during her career.



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TREATING ADHD REFRACTORY CASES

Presented by Samuele Cortese

This Report was compiled by Anelet James and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

INTRODUCTION

What do we do when ‘the usual’ stimulant pathway underdelivers? Prof Samuele Cortese unpacked a pragmatic roadmap drawn from the 2021 CNS Drugs paper by Cortese, Newcorn and Coghill, integrating trial evidence with seasoned clinical judgement. He first cautioned that ‘refractory’ is used inconsistently in the literature—from no benefit at all to partial response with persisting impairment—and called for consensus definitions. He also highlighted the gap between trial samples and real-world practice: adults and patients with comorbidities are often excluded from RCTs, inflating response estimates compared with clinic populations.

HOW COMMON IS ‘REFRACTORY’ ADHD—AND WHY DEFINITIONS MATTER

In practice, truly medication-refractory ADHD appears uncommon when stimulants are adequately titrated and both classes are tried, yet a sizeable minority **of patients** remain only partially improved, particularly for non-core domains such as emotional dysregulation. Hence the emphasis of this approach is not to abandon stimulants prematurely, but to proceed systematically through checks, optimisations and, where indicated, augmentation.

A STEPWISE ‘WHAT TO DO’ APPROACH

The first task is clinical reasoning—not collecting combinations. The authors propose a series of questions to anchor that reasoning (see Table 1). Only once these are addressed should we switch classes, introduce a non-stimulant, or consider augmentation. Table 1 summarises key questions before switching to non-stimulants or augmenting.

A practical method to reach an effective dose is shown in Figure 1

Questions to Ask Before Switching to non-stimulants or adding augmenting strategies
Have I titrated properly?
Is the patient at the maximum dose?
Is this drug/preparation working well at any times during the day and do I need to change the dose or preparation to get a more balanced effect?
Am I targeting the right symptoms?
Is there a behavioral explanation for the drug “wearing off” or is the patient becoming tolerant to the medication?
What else is going on in patient’s life/family life, and are there non-pharmacological reasons for poor response?
Have I missed any comorbidity?
Is the diagnosis right?
Consider second line medications (atomoxetine, guanfacine, clonidine, viloxazine)
Consider augmenting agents (guanfacine or clonidine XR)
Consider other agents under specialistic advice/supervision

Table 1. What to do before switching or augmenting (adapted from Cortese, Newcorn & Coghill, 2021).

Maximum Benefit – Minimum Dose

Aim: reduce core ADHD symptoms

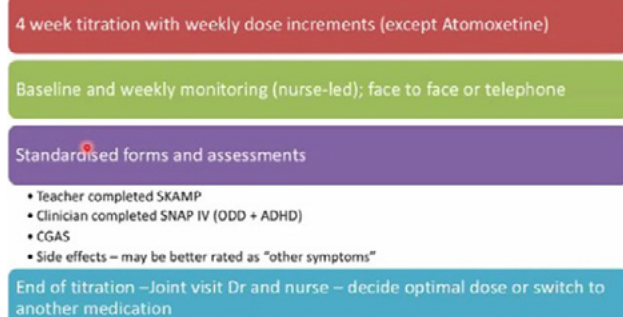


Figure 1. Forced-dose titration with weekly increments and systematic monitoring (after Coghill & Seth, 2015).

TITRATION, COVERAGE AND COMMON PITFALLS

Dose matters. Meta-analytic dose–response curves show meaningful gains as dose increases within tolerated bounds. Prof Cortese cautioned against stopping at ‘polite’ doses: many apparent non-responses reflect suboptimal titration. He also described a forced-dose titration strategy—mirroring RCT practice with weekly increments and systematic monitoring—which helps reach an effective dose quickly and reproducibly (Figure 1). Beyond regulatory maxima some guidelines allow higher supervised ceilings; above these, average incremental benefit tends to be modest while adverse effects rise, although individual variability remains large.

When families say a medicine ‘doesn’t work’, careful probing may reveal that it works in the morning but not after lunch. This is not a failure of mechanism; it is a coverage problem. Long-acting profiles differ (e.g., biphasic vs smooth release), and real-world duration varies. Solutions include adjusting timing, adding a small afternoon booster, or switching formulation/class. Expectation-setting matters: stimulants are best at core symptoms; effects on quality of life or executive skills are smaller and usually require behavioural or environmental interventions alongside medication.

Clinicians often worry about ‘tolerance’. Neurobiological plausibility exists, but the true prevalence and best responses are unclear. Before assuming tolerance, revisit sleep, stress, substance use, trauma and major life changes; many ‘loss of effect’ stories have behavioural or contextual explanations. Where genuine tachyphylaxis is suspected, options include brief drug holidays, switching stimulant class, or moving to/adding a non-stimulant under supervision.

WHEN FIRST-LINE STRATEGIES ARE EXHAUSTED PRACTICAL GUIDANCE FOR CLINICIANS

After exhausting careful titration and both stimulant classes, move deliberately to second-line options (atomoxetine, guanfacine or clonidine XR), and consider augmentation where impairment persists. The best-supported combination is a stimulant plus an α 2-agonist (e.g., guanfacine ER), which can improve outcomes and sometimes permits a lower stimulant

dose. A stimulant plus atomoxetine is used in some settings with modest evidence and requires cardiovascular monitoring. Few combinations show replicated benefits across multiple trials, underscoring the value of mastering core strategies before complex polypharmacy. Other studied combinations for stimulant-refractory ADHD are described in Cortese, Newcorn & Coghill (2021) [see reference below].

CONCLUSION

The message is disciplined simplicity: define the problem carefully, titrate properly, ensure day-long coverage, check context and comorbidity, then escalate in a stepwise, evidence-informed fashion. New agents may emerge, but most ‘refractory’ cases improve when we use existing tools expertly.

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Samuele Cortese is currently NIHR Research Professor, Professor of Child and Adolescent Psychiatry at the University of Southampton, Honorary Consultant for Hampshire and Isle of Wight Healthcare NHS Foundation Trust, UK and professor of child neuropsychiatry at the university of Bari, Italy. Prof. Cortese’s main research interests are around neurodevelopmental disorders. He has published more than 450 peer-review papers. He has secured funding as main/co-applicant for more than £ 23 M. Since 2022, he has been included in the top 1% scientists in the field of psychiatry/psychology (Web of Science). Since 2022, he has ranked #1 worldwide in terms of expertise on ADHD (Expertscape). He is the Chair of the European ADHD Guidelines Group.

WHAT MAKES, AND HOW TO APPROACH, ADHD COMPLEX CASES

Presented by Jeffrey Newcorn

This Report was compiled by Anelet James and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

Complex ADHD is the rule rather than the exception in real-world practice. Prof Jeffrey Newcorn outlined why: high rates of psychiatric and medical comorbidity, variable treatment tolerability, risks of misuse and diversion, and the powerful influence of family context—especially parental psychopathology—on outcomes. The approach he advocates is pragmatic and personalised: prioritise diagnoses, optimise stimulant dosing and coverage, combine treatments when needed, and invest early in adherence through close follow-up and side-effect management.

THE COMORBIDITY LANDSCAPE

ADHD seldom travels alone. In the MTA study, parent-report data showed that ADHD without another psychiatric diagnosis was the minority, with substantial overlap with oppositional defiant disorder, anxiety disorders, tics and conduct disorder. Prof Newcorn used this to illustrate why assessment must actively search for co-occurring problems and why diagnostic labelling can be confounded by overlapping symptom criteria. He also highlighted adult patterns from the National Comorbidity Survey Replication—higher rates of major depression, bipolar disorder, anxiety, and alcohol/drug dependence among adults with ADHD. As a visual anchor, see Figure 1, showing the comorbidity profile from the MTA dataset.

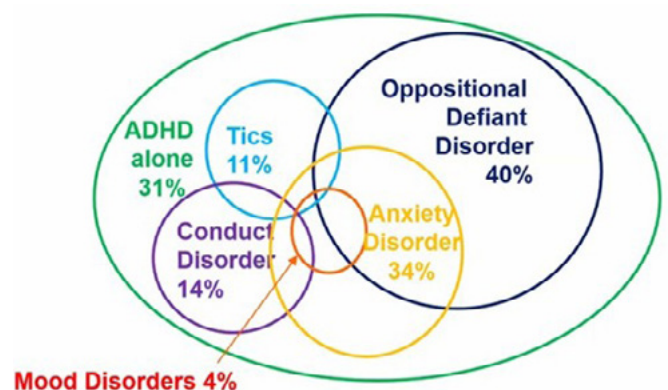


Figure 1. Psychiatric comorbidity in children with ADHD in the MTA Study (parent-report DISC). Adapted from MTA Cooperative Group, 1999.

DIAGNOSTIC PRIORITISATION

Sequence matters. Stabilise substance misuse first. Treat severe mood disorders before ADHD unless low mood appears secondary to uncontrolled ADHD. For anxiety, target ADHD first if anxiety is largely performance-bound; if anxiety is global, address it directly. Personality pathology—often under-recognised—can derail care and requires concurrent formulation and support.

PARENTAL FACTORS AND CONTEXT

Parental psychopathology (ADHD, depression, substance use, personality disorders) strongly predicts child outcomes. In the MTA study, parental depression was a stronger predictor of 14-month outcome than IQ and baseline ADHD severity. Practical implications: screen parents, align expectations, and enlist caregivers as partners in treatment implementation.

PERSONALISED TREATMENT: GETTING THE BASICS RIGHT

The effect sizes of ADHD pharmacotherapies are among the largest in medicine—provided we use them correctly. Optimise dose and coverage (morning through late afternoon/evening as needed), mitigate adverse effects proactively, and define functional targets up front (two or three daily problems to track). Combined treatment is not failure: pairing a stimulant with an α_2 -agonist or atomoxetine, or a short with long-acting stimulants, can be beneficial at lower doses and help manage comorbidity.

ADHERENCE, MISUSE AND DIVERSION

Non-adherence is the single biggest barrier to success. Adherence falls sharply in the first months after initiation unless we educate, set realistic timelines, titrate to meaningful benefit, and schedule frequent early follow-ups. For young people at risk of non-medical use, opt for longer-acting formulations or non-stimulants, verify impairment and collateral history, use rating scales (including validity indices where available), and keep documentation tight.

STRATEGY CHECKLIST

1. Diagnose comprehensively; prioritise safety and acuity.
2. Optimise stimulants with systematic titration and explicit functional targets; fix coverage gaps before switching class.
3. Combine treatments judiciously when monotherapy cannot meet goals or tolerability limits dose.
4. Address parental psychopathology and family processes that constrain implementation.
5. Prevent and monitor misuse/diversion; use longer-acting agents and non-stimulants where indicated.
6. Sustain adherence: early, frequent follow-ups; side-effect troubleshooting; motivational framing around function.

CONCLUSION

Complex ADHD demands disciplined flexibility: clear priorities, meticulous titration, personalised combinations, and persistent attention to adherence and family context. With this approach, most 'complex' cases become treatable..

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Jeffrey Newcorn is a Professor of Psychiatry and Pediatrics; Director of the Division of ADHD and Learning Disorders, and the Center for Excellence in ADHD and Related Disorders; Icahn School of Medicine at Mount Sinai. Dr. Newcorn is a highly regarded researcher in the areas of ADHD, aggression, descriptive psychopathology of child and adolescent disorders, and child and adolescent psychopharmacology, whose work spans both clinical and translational topics. Over the course of his career, he has published over 350 articles and book chapters on these and related subjects. Dr. Newcorn has received numerous awards for his work, including the Hulse Award for lifetime achievement from the New York Council on Child and Adolescent Psychiatry (2002), and the Elaine Schlosser Lewis Award for Research in Attention Deficit Disorder (2018). He was elected to the CHADD Hall of Fame in 2014. Dr. Newcorn is an internationally recognized educator and mentor and is an editorial board member of several leading child psychiatry/psychology and psychopharmacology journals. He was a member of the steering committee of the NIMH-funded multicenter study “Multimodal Treatment of Children with ADHD (MTA)” and the DSM-IV advisory committees on child and adolescent disorders and disruptive behavior disorders. He was a founding member of the board of directors of the American Professional Society for ADHD and Related Disorders (APSARD) and served as President from 2020–2022.

THE NEURODIVERSITY MOVEMENT AND THE NEWS MEDIA: HELPING OR HURTING

Presented by Mia Malan

This Report was compiled by Anelet James and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

Mia Malan mapped the South African news ecosystem and its implications for coverage of neurodiversity. With shrinking newsroom budgets and the loss of specialist health desks, complex topics are often assigned to junior generalists—raising the risk of oversimplification or sensationalism. In parallel, donor-funded health outlets have emerged as critical spaces for rigorous, evidence-based reporting when advocates partner early and provide clear, jargon-free material.

THE STATE OF THE SOUTH AFRICAN MEDIA

Over two decades, digital disruption has hollowed out advertising revenue and newsroom capacity. Retrenchments removed senior editors and specialist beats; very few publications now maintain a health desk. This shapes coverage: neurodiversity gets framed at the extremes rather than the nuanced middle where most people live.

WHERE ACCURATE NEURODIVERSITY STORIES CAN LAND

Because mainstream capacity is thin, the most robust health reporting often comes from donor-funded outlets with distinct audiences: Bhekisisa (science/policy), Spotlight (technical/rights), Health-e (community), and GroundUp (accountability). Partner choice should match the goal.

HOW TO ENGAGE NEWSROOMS EFFECTIVELY

Practical rules for clinicians and advocates: (1) Focus each pitch on one condition; weave comorbidities around it without equal weight. (2) Write in plain language—assume copy-paste risk in lean newsrooms. (3) Approach specific journalists whose work you rate; track bylines via newsletters. (4) Earned coverage should not cost money; if payment is involved it must be labelled as advertorial/sponsored.

CASE STUDY: ADHD ACCESS AND SCHEDULE 6 RULES

Case study: ADHD access and Schedule 6 rules — An op-ed co-authored with Prof Renata Schoeman explained how monthly-script rules limit access to methylphenidate for children, especially in the public sector—creating a compelling policy contradiction that resonated with readers and regulators (see Figure 1). Following publication, SAHPRA engaged the authors on rescheduling steps; parents submitted lived-experience letters for a follow-up.

WHAT THIS MEANS FOR ADVOCATES AND CLINICIANS

What this means for advocates and clinicians: News values matter (evidence + tangible barrier + path to action). Co-produce with

Attention deficit and hyperactivity disorder (ADHD) affects between 5% and 7% of schoolgoing children, but because doctors can only prescribe treatment for a month at a time, many kids in South Africa, especially those who can't afford monthly doctors' visits, don't access medication regularly.

Methylphenidate, a central nervous system stimulant that can significantly reduce symptoms in about 70% of users with the condition and that the World Health Organisation (WHO) recommends for the treatment of ADHD, helps people with ADHD to concentrate better, and to be less impulsive and overactive.

Studies have shown that when the methylphenidate — the gold standard for ADHD treatment — is used correctly, children's school marks improve and they become better equipped to develop social skills. In other words, effective ADHD treatment doesn't just help schoolgoers with ADHD to sit still and focus in class, but it also supports them to learn and socialise — outcomes which form the foundation of a healthy and productive adulthood.

Methylphenidate is, however, classified as a schedule six drug in South Africa, placing it in the same regulatory category as medicines with a high potential for abuse. Pharmacies are therefore only allowed to dispense the medicine to people with doctors' prescriptions, and by law, physicians can only prescribe 30 days' worth of methylphenidate treatment at a time.

Figure 1. Extract from the Bhekisisa op-ed "Monthly prescription rule blocks ADHD treatment for SA kids" (9 June 2025). Reproduced for educational purposes with permission; slide adapted for the Congress.

journalists; reshape academic prose for news without losing accuracy. Use syndication to multiply reach; expect pushback and engage it.

CONCLUSION

Bottom line: Pick a single, concrete problem; match it to the right outlet and reporter; offer plain-language, evidence-anchored material; and help audiences see both harms and solutions. Done well, media can help—not hurt—the neurodiversity movement.

QUESTION & ANSWER HIGHLIGHTS

Q&A highlights—putting it into practice:

- Finding the right journalist & cost: track bylines (Bhekisisa, Spotlight, GroundUp, Health-e) and contact reporters directly; earned news should not carry a fee—payment means advertorial and must be labelled as such.
- Communicating complexity: choose one primary condition (e.g., ADHD) as the spine and situate co-occurrence around it to preserve clarity.
- Take-home: pick a focused story, write it plainly, choose the right outlet and reporter, and stay available for follow-up.

Mia Malan is the founder and editor-in-chief of Bhekisisa. She has worked in newsrooms in Johannesburg, Nairobi and Washington, DC, winning more than 30 awards for her radio, print and television work. A former Knight International Journalism Fellow and a Reuters Institute Journalism Fellow, Mia speaks internationally about health issues in Africa and media sustainability in the Global South. Mia has published widely in books and academic journals, including the *Brown Journal of World Affairs* and the *Georgetown Journal of International Affairs*. She was a TEDx speaker on how Covid changed news reporting and regularly moderates panels for high-level events. Society for ADHD and Related Disorders (APSARD) and served as President from 2020-2022.

PARENTING AND FORENSICS: REFLECTIONS ON ADOLESCENCE, VIOLENCE, AND THE VULNERABILITY OF YOUNG MEN

Presented by Larissa Panieri-Peter

This Report was compiled by Anelet James and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

INTRODUCTION

The intersection between psychiatry, parenting, and forensic contexts is increasingly important in a world where adolescents face complex risks both offline and online. In her presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, forensic psychiatrist Dr Larissa Panieri-Peter drew from the Netflix series *Adolescence* to reflect on the ordinariness of violence, the vulnerability of boys and young men, and the challenges parents and practitioners face in an algorithm-driven society. Her talk was simultaneously unsettling and illuminating, offering a call to action for clinicians, educators, parents, and policy-makers.

VIOLENCE AS ORDINARY, NOT EXCEPTIONAL

Popular culture often portrays perpetrators as aberrant figures — serial killers with complex motives, or hardened criminals with long histories of violence. Adolescence, however, highlights a more disturbing reality: that acts of extreme violence can arise suddenly in ordinary contexts. A single impulsive act — a shove in a school corridor, a fight gone too far — may irreversibly change lives.

South Africa is no stranger to this ordinariness of violence. Statistics reveal an alarming burden within schools: in one year, there were 19 homicides, 83 rapes, 258 murders, and over 400 incidents of gang-related violence in the Western Cape alone. Accepting this ordinariness is not to excuse it, but to create space for meaningful prevention, intervention, and policy reform.

THE HIDDEN SUFFERING OF PERPETRATORS' FAMILIES

A notable feature of Dr Panieri-Peter's practice is her work with families of accused individuals. She emphasized that crime creates concentric circles of suffering: victims' families carry immense trauma, but perpetrators' families also experience shame, grief, and alienation. This dual recognition broadens the lens of psychiatric practice, highlighting the need for trauma-informed and family-inclusive approaches in forensic psychiatry.

THE SILENCE AND ALIENATION OF YOUNG MEN

One of the strongest threads in the presentation was the silence around boys and men. Cultural norms often discourage emotional expression among males, equating vulnerability with weakness. This fosters alienation, loneliness, and difficulty seeking help — all risk factors for violence and self-harm.

Recent South African data underscore this crisis. A 2025 study among university students found that 92.6% reported moderate-to-high loneliness, with men possibly under-reporting due to stigma. Moreover, suicide rates remain significantly higher in men than women, while boys in South Africa are less likely to finish high school than girls. These disparities highlight systemic neglect of male mental health needs.

Dr Panieri-Peter argued persuasively that addressing toxic masculinity and gender-based violence — both vital issues — must not eclipse recognition of boys' vulnerabilities. Without acknowledging their suffering, interventions risk deepening alienation and inadvertently fueling cycles of violence.

ALGORITHMS, ONLINE CULTURES, AND THE "MANOSPHERE"

The digital ecosystem is reshaping adolescent development in profound ways. Algorithms — or "aggro-rhythms" as Panieri-Peter playfully described them — curate polarized, sometimes toxic content loops. A single click on sports supplements can quickly funnel a young man into increasingly aggressive echo chambers.

Two online subcultures discussed were incel culture (involuntary celibacy communities characterized by misogyny and grievance) and the broader manosphere, where alienated young men find validation in anti-feminist, hypermasculine ideologies. Research confirms that online radicalization thrives in such algorithm-driven spaces, particularly among youth experiencing loneliness, developmental immaturity, or untreated psychiatric conditions.

This phenomenon intersects with forensic psychiatry: online environments can shape motives, normalize violence, and reinforce destructive identities. The challenge for clinicians and parents is that adults and adolescents inhabit different algorithmic realities, widening the generational gap and making parental guidance more difficult.

PARENTING IN A SCREEN-SATURATED ERA

Parenting has never been simple, but the ubiquity of screens amplifies the challenge. Adolescents' online lives are not peripheral but central to their identities. For many South African youth, especially in unsafe communities, TikTok and gaming platforms provide both distraction and social connection. Yet these same platforms carry risks of predation, bullying, and ideological manipulation.

Dr Panieri-Peter encouraged parents to engage rather than retreat. This means meeting adolescents in their digital spaces — even if that involves “one-word WhatsApp check-ins” or online conversations from the next room. Parent education, online safety training, and strategies for building trust in digital communication are critical tools for bridging the gap.

IMPLICATIONS FOR PSYCHIATRY AND SOCIETY

Forensic psychiatry occupies a unique position at the interface of mental health, law, and community safety. Dr Panieri-Peter urged colleagues not only to work with individuals, but also to advocate at macro levels — shaping tech policy, influencing education, and challenging online misinformation.

She suggested that, much like smoking, society may one day look back at unrestricted adolescent exposure to harmful online content with disbelief. Clinicians, researchers, and parents must collaborate with “tech insiders” to reshape algorithms toward pro-social engagement, community building, and mental health promotion.

Key strategies include:

- Advocacy and policy reform to regulate harmful online content.
- Integration of mental health promotion into digital platforms, making pro-social activities “algorithmically rewarding.”
- School-based interventions that foster resilience, critical thinking, and safe online practices.
- Family-based approaches that reduce stigma around male vulnerability and encourage open communication.

CONCLUSION

Dr Larissa Panieri-Peter's session was both provocative and sobering. Adolescence may be a fictionalized series, but its themes resonate deeply in South Africa, where violence, alienation, and inequality converge in young people's lives.

Her reflections challenge psychiatry to move beyond individual diagnosis and treatment, toward a broader societal role: amplifying the voices of vulnerable young men, countering toxic digital cultures, and reshaping online and offline environments into spaces of connection rather than alienation.

The message is clear: boys are not the problem. Rather, they are often casualties of systemic neglect, cultural silence, and digital exploitation. The responsibility lies with parents, clinicians, educators, and policy-makers to ensure they are not left voiceless — and to intervene before ordinary moments spiral into extraordinary tragedies.

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Larissa Panieri-Peter is a forensic psychiatrist in Cape Town, working in independent private practice with a focus on psycho-legal assessment, treatment of mostly adult patients with psychiatric illness, and crisis and risk management. She graduated with an MBChB from UCT in 1994, and as a psychiatrist in 2001, whereupon she worked at the Valkenberg Forensic Unit and University of Cape Town as one of two psychiatrists assessing Criminal Capacity in the Western and Northern Cape, treating in- and out-patient state patients and teaching medical students and registrars. Her current psycho-legal work involves a spectrum of civil and criminal cases, determination of psychiatric influences in legal matters, and looking at psychiatric factors motivating or determining behaviour and current functioning. She provides expert testimony for Courts and other forums; opinion and assessments of risk to legal, psychiatric and psychological colleagues. Increasingly, her practice provides outreach in the form of crisis intervention, strategic planning, coordinated management of multiple members of a crisis team, in which support and leadership is required for colleagues, parents, and institution leaders in her community, in clinical practice, at local hospitals, Universities and schools. Her particular focus is on negotiated resolution, and de-escalation of conflict and crisis.

WORK ENVIRONMENT CONSIDERATIONS FOR ADULTS WITH ADHD – IT IS ABOUT EQUITY

Presented by Linda Hiemstra

This Report was compiled by Anelet James and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

INTRODUCTION

In her talk, “**hybrid work: an advantage or challenge for individuals with adhd,**” Linda Hiemstra highlighted how new and uneven the evidence base still is. Her practical guidance blends emerging research with lived experience from adult patients and lessons from vocational rehabilitation practice.

Hiemstra’s through-line is unequivocal: **workplace decisions must be driven by equity**—treating people differently to achieve the same outcome. Equity sits within South African “reasonable accommodation” law; clinicians can help employers operationalise it instead of defaulting to one-size-fits-all solutions.

ADHD AT WORK: WHY FUNCTION (NOT LABELS) SHOULD STEER RECOMMENDATIONS

Adult ADHD often shifts from visible hyperactivity to inner restlessness, disorganisation and inattention, with functional impacts on productivity and relationships. Pain points include distractibility, time blindness, working-memory lapses, boredom, emotional reactivity and social misunderstandings—yet individuals with ADHD also bring pattern recognition, divergent thinking, originality and periods of intense hyperfocus when engaged. The goal is to design environments that let strengths show while buffering vulnerabilities.

WHAT DO WE MEAN BY HYBRID WORK?

Hybrid work means performing duties across office and non-office locations (not necessarily “home”), often at different times, using

connected digital tools. That definition carries practical consequences: who supplies devices and connectivity; cybersecurity and data privacy; insurance and physical safety of the non-office site; and the task/environment switching expected between settings.

Common models

- Office-centric hybrid (varied zones—quiet rooms, collaboration spaces).
- Remote-first (mostly off-site with periodic in-person days).
- Flexible (employee chooses where/when).
- Fixed hybrid (e.g., two office days/week with clear team schedules).

Across models, two predictors of success recur: **employee autonomy** and **crystal-clear expectations** (working hours, response norms, meeting etiquette).

WHEN HYBRID HELPS—AND WHEN IT DOESN’T

When hybrid helps

- **Fewer unhelpful distractions (when set up intentionally).**

A quiet, controlled environment can reduce auditory and visual noise that derails task initiation. Example: an analyst schedules deep-work blocks at home on report days and uses the office for meetings and brainstorming.

- **Better regulation of movement and arousal.**

Being able to pace, stretch, or use a sit-stand desk/cycling pedal without feeling conspicuous supports sustained attention and mood stability.

- **Energy conservation and time recovery.**

Cutting a long commute may return 60–90 minutes of high-value cognitive time that can be channelled into planning or exercise—both protective for ADHD.

- **Freedom to personalise sensory and digital setups.**

Lighting, noise-cancelling, screen layout, and notification rules can be tuned to the individual without office constraints.

- **Improved work-life fit.**

For some, hybrid allows alignment with natural productivity rhythms (e.g., early-morning deep work, later collaborative blocks) and family logistics—reducing stress that otherwise compounds inattention.

When it doesn't (or can even hinder)

- **“Quiet” ≠ “focus.”**

If the alternative space isn't truly fit-for-purpose (shared flat, caring duties, unstable internet), attentional load and frustration increase.

- **Boundary erosion and time blindness.**

Without explicit “on/off” rules, working days stretch, breaks disappear, and sleep erodes—fuel for emotional dysregulation.

- **Paradoxical under-movement.**

Hyperfocus at home can lock people into static postures for hours. Musculoskeletal pain and cognitive fatigue then worsen task switching and planning.

- **Notification overload and tool sprawl.**

Too many apps/channels (email, Teams, WhatsApp, task boards) increase context-switching costs—exactly where ADHD is vulnerable.

- **Hidden costs and risks.**

Personal spend on bandwidth, device wear-and-tear, insurance gaps, and weaker data security can make hybrid inequitable unless addressed up front.

Bottom line: saying “I'm distracted in open plan” does **not** automatically mean “hybrid will fix it.” Success depends less on where one works than on **how the environment is designed and managed.**

FROM “ACCOMMODATION” TO ACCESSIBILITY: THE EQUITY LENS

Think beyond individual tweaks to accessible design for everyone—physical, sensory, cognitive, emotional and digital. In hybrid settings, that includes: camera/background norms to limit visual clutter; explicit rules for turn-taking and chat use; captions/AI notes; agenda-first meetings with clear actions; and agreed response windows so people can batch notifications without penalty.

Practical guidance (clinician & employer checklist)

1. **Start with function and job demands.** Map the role's cognitive/interaction profile; hybrid is a tool, not a default.
2. **Co-design the non-office site.** Specify the actual location, furniture, and sensory ergonomics (lighting, noise, seating); confirm bandwidth and data security.

3. **Codify expectations.** Define “online” windows, deliverables, and how performance is measured; write this down.

4. **Engineer movement and recovery.** Use timers/micro-breaks; build “off-desk” tasks (calls while walking) to avoid static hyperfocus.

5. **Streamline digital noise.** Choose a single source of truth for tasks, limit channels, and batch notifications; teach notification hygiene.

6. **Review and iterate.** Re-assess after 4–6 weeks; hybrid fit changes with projects and seasons.

AUDIENCE PERSPECTIVE—SENSORY ERGONOMICS MATTER

From the floor, participants emphasised **choice** in sensory tools: **noise-cancelling headphones** (where safe), **variable seating options** (including movement-friendly chairs/balls), access to **quiet rooms** and **collaboration spaces**, and variety in room size and colour. Industry constraints (e.g., call centres) are real, but the equity principle is to **offer options** so individuals can exercise **day-to-day autonomy.**

DISCLOSURE AND EQUITY

Question: *Should employees with well-managed ADHD disclose to prospective employers?*

Hiemstra's answer: **Disclosure is voluntary**, but **early, purposeful disclosure** helps when the candidate can articulate: (i) what they need to perform optimally; and (ii) how ADHD-linked strengths benefit the role. Employers are not obliged to accommodate a condition that has not been disclosed. Framing needs **positively and concretely** (needs → outcomes) supports good-faith negotiation and equitable accommodations.

CONCLUSION

Hybrid work can help—but it is neither panacea nor default. The “right” recommendation depends on job demands, resources, logistics, personal context and, above all, **intentional design.** As Hiemstra emphasised, **it's about equity—treating people differently to achieve the same outcome.**

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DIGITAL SOLUTIONS IN THE ASSESSMENT AND MANAGEMENT OF ADHD

Presented by Manfred Döpfner

This Report was compiled by Anelet Jame and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

INTRODUCTION

Digital health technologies promise to transform ADHD care—but but which tools are ready for clinical practice today? Prof Manfred Döpfner surveyed the landscape of digital solutions in ADHD assessment and treatment, distinguishing evidence-based applications from those requiring further research. His message was pragmatic: digital tools can meaningfully improve guideline adherence, reduce clinician burden, and extend treatment reach—but only when applied thoughtfully and grounded in robust evidence. This report focuses on what already helps clinicians and should be used now in routine practice.

CLASSIFICATION OF DIGITAL HEALTH INTERVENTIONS

Digital interventions can be classified along several dimensions. The technological platform may involve computers (computer-based CBT), internet (iCBT), smartphones (mobile CBT), telephone, virtual reality, or emerging technologies such as social robots. The focus of assessment or intervention may be child-centred (e.g., computerised cognitive training, computer-assisted tests) or directed toward parents, teachers, or other caregivers (e.g., parent management training apps, web-based rating scales). A critical dimension is the level of therapeutic support: interventions may be purely self-directed, guided by expert support, or delivered as blended treatments combining digital tools with face-to-face therapy.

DIGITAL SOLUTIONS IN ASSESSMENT

Unmet needs in ADHD assessment

A comprehensive practitioner review by Ke and Soeller (2024) identified persistent gaps in ADHD assessment across

many healthcare systems. Key problems include delays in diagnosis, poor guideline adherence (notably underutilisation of teacher ratings despite their recommendation), limited access to multiple informants, insufficient monitoring of psychosocial and pharmacological treatment effects, and particularly weak monitoring during medication titration. Digital rating scales offer a practical solution by reducing clinician time for administration and scoring, improving guideline adherence, supporting assessment of comorbidities and parenting factors, and facilitating systematic monitoring of treatment outcomes.

Web-based assessment portals

One exemplary system is the web portal developed by Epstein and colleagues. In this platform, physicians register children online; parents and teachers then receive email links to complete validated rating scales. Computer algorithms automatically score and interpret results, generating reports for clinicians alongside textual guidance for diagnostic formulation and treatment recommendations. The portal also supports continued assessment during medication titration. An observational trial randomising 230 providers to technology-assisted quality improvement versus standard care demonstrated striking benefits: time to first parent rating during medication titration was significantly shorter in the intervention group, and the number of both parent and teacher rating scales used to monitor treatment effects was substantially higher (mean of three scales in the intervention group versus fewer in controls). Importantly, while the number of clinical contacts increased slightly in the first year (eight versus six), there was no difference in stimulant dosage prescribed—yet symptom reduction was significantly greater in the intervention group. These findings suggest that digital support for systematic assessment with rating scales is genuinely helpful in routine practice.

Computerised assessment of attention and executive functions

Despite their widespread use, computerised tests of attention and executive function have limited clinical utility for ADHD diagnosis. Systematic reviews and meta-analyses of continuous performance tests (CPTs) and other neuropsychological measures, including the widely used QbTest, consistently show only modest to moderate ability to differentiate children with ADHD from non-ADHD controls. This is not surprising: ADHD is defined clinically by problem behaviour in naturalistic settings such as home and school, whereas neuropsychological tests assess performance in highly artificial laboratory conditions. As a stand-alone tool, computerised cognitive assessment lacks sufficient diagnostic accuracy. However, as an adjunct to clinical assessment via rating scales and structured interviews, digital neuropsychological testing may occasionally provide useful supplementary information.

Ecological momentary assessment

Ecological momentary assessment (EMA) represents a promising advance. Using mobile devices, EMA captures brief, repeated assessments in the individual's natural environment, focusing on moments of everyday life. Patients may actively report symptoms or behaviours in real time, or passive sensors may automatically capture data such as activity levels or location. EMA offers several theoretical advantages: ecological validity by measuring symptoms in real-world contexts, characterisation of lived experience, reduction of recall bias inherent in retrospective reports, and the ability to model within-person variability across time and situations. Early research initiatives, such as the ADHD Remote Technology (ART) project in the United Kingdom, combine active and passive EMA measures and have yielded preliminary promising results, though this approach remains primarily a research tool at present.

Prof Döpfner's group developed a day profile assessment tool (DAYS) to evaluate medication effects across different times of day. In the parent version, caregivers rate hyperactive and oppositional behaviours hourly throughout the day: mornings at home, school hours (rated separately by teachers), afternoons and evenings at home, and bedtime. Teachers rate problem intensity during the first and second halves of the school morning. This tool is now available as a mobile application. An observational study examining the switch from immediate-release to modified-release methylphenidate illustrated the tool's utility: symptom intensity profiles showed reductions throughout the day with modified-release formulation, with particularly strong effects during late morning school hours and early afternoon—precisely when extended coverage would be expected. Such digital momentary assessment may be helpful for precise titration of medication in routine care, though further research is needed.

DIGITAL SOLUTIONS IN TREATMENT: PATIENT-FOCUSED INTERVENTIONS

Game-based cognitive training

More than 36 randomised controlled trials, summarised in multiple systematic reviews and meta-analyses, have evaluated computerised cognitive training—predominantly working memory training. The consistent finding is that working memory training on a computer improves working memory performance on computer-based tests, but does not generalise to other neuropsychological

outcomes, academic achievement, or real-world behaviour. This holds true for both blinded and unblinded outcome assessments. As such, traditional computerised working memory training cannot be recommended as an evidence-based treatment for ADHD.

However, a small number of studies using video game-like training platforms targeting multiple cognitive domains have shown more promising results. Collins and colleagues developed a video game interface requiring children to perform two adaptive tasks in parallel, adjusting difficulty based on performance (the STARS-ADHD trial). In children aged 8–12 years, this intervention produced significant improvements on neuropsychological tests of attention and impulsivity, but not on parent-rated or clinician-rated symptoms or functional impairment.

Another approach evaluated central executive functioning training using nine different adaptive training tasks in a hybrid format combining in-office and at-home training (15 minutes daily, two to three days per week), reinforced with a token economy system. This intervention, as presented by Prof Döpfner, improved not only neuropsychological function but also teacher-rated ADHD symptoms, academic productivity, and academic achievement compared to an active control condition (inhibitory control training). While these findings are promising, further replication is required before clinical recommendations can be made.

Ecological momentary intervention

Ecological momentary intervention (EMI) extends the concept of EMA by delivering therapeutic content in real time during individuals' daily lives. Interventions may be triggered by reminders, by ecological momentary assessment indicating current difficulties (e.g., homework struggles), or by other contextual cues. Potential advantages include personalised, precision interventions tailored to the moment; extension of therapeutic support beyond standard clinic sessions; and systematic reinforcement of skills in naturalistic contexts.

Prof Döpfner's group developed an app-supported treatment for children aged 6–12 years with behavioural and emotional problems, including ADHD. The app includes multiple modules: psychoeducation for children about specific disorders; a video diary allowing children to record experiences of difficult situations and therapeutic homework by answering structured prompts (e.g., "What happened? What did you think? What did you do?"); standardised momentary assessments of mood, cognition, or behaviour; problem-solving training exercises; reminders to complete homework and record experiences; and a reinforcement module. Preliminary results showed that patients with oppositional defiant disorder (many with comorbid ADHD) described peer conflict situations via the app far more completely and consistently than with traditional paper diaries, which were often not completed at all. A similar app has been developed for adolescents.

Virtual reality social skills training

Social skills training presents a practical challenge in one-

to-one therapy: the therapist must role-play peer interactions, which often feels artificial. Interactive virtual reality (VR) offers an innovative solution. In VR social skills training, the patient becomes immediately immersed in realistic social scenarios with virtual peer characters (avatars) controlled in real time by the therapist. The patient engages in natural dialogue without being constrained by pre-programmed scripts, and the therapist tailors the virtual characters' responses to create a wide variety of social interactions. Prof Döpfner's group developed several conflict scenarios for children aged 8–12 years. Preliminary results indicate high acceptability: children enjoy the VR experience, perceive the conflict situations as highly immersive, and demonstrate increased conflict resolution skills on VR-based tests. A randomised controlled trial using this approach showed that cognitive behavioural therapy effectiveness could be enhanced by incorporating virtual reality components. While promising, this remains an emerging area requiring further research.

Computer-assisted social competence training

Prof Döpfner's group also developed a computer-assisted social competence training programme for children with aggressive behaviour and conduct problems, which frequently co-occur with ADHD. This is a therapist-supported (blended) intervention. Each module presents problem-solving steps in conflict situations via video vignettes. The child watches a video depicting a conflict, then engages in structured exercises to identify social cues, thoughts, feelings, and actions; develop alternative solutions; and evaluate potential consequences. Sessions integrate video content with role-playing with the therapist and conclude with therapeutic homework assignments. A randomised controlled trial in 100 children with oppositional defiant disorder (80% with comorbid ADHD) compared this computer-assisted treatment to a resource activation control condition. Published in the *Journal of the American Academy of Child and Adolescent Psychiatry*, results showed significantly greater reductions in proactive aggression, oppositional defiant symptoms (DSM-5 criteria), and functional impairment in the computer-assisted intervention group. Again, while promising, replication studies are warranted.

DIGITAL SOLUTIONS IN TREATMENT: PARENT-FOCUSED INTERVENTIONS

Medication adherence reminders

One of the simplest yet most effective digital interventions addresses a critical clinical problem: poor medication adherence. Despite demonstrated efficacy of ADHD medications, long-term adherence rates are very low. Several non-randomised controlled trials have evaluated text message reminders sent to parents once daily, prompting adherence to the medication regimen, contacting the clinician for prescription refills, and picking up medications from the pharmacy. Results consistently show substantially higher adherence rates in groups receiving text message reminders compared to treatment as usual. Four studies, including samples of both children and adults, confirm this effect. Digital reminders for medication adherence represent a straightforward, low-cost, evidence-based intervention that clinicians can implement immediately.

Mobile-based parent management training

Prof Döpfner's group developed a comprehensive mobile-based, self-directed, personalised parent management training programme. The app includes multiple modules: psychoeducation

about ADHD (definition, prevalence, aetiology); information on diagnosis and treatment options (assessment procedures, medication, psychological interventions); coping skills for parents to manage their own challenges (stress reduction, daily life planning, improving self-control, handling partner problems or single parenting); strengthening family resources and positive relationships; and an extensive module on solving specific child behaviour problems (homework difficulties, room chaos, disturbing others, temper tantrums) using classical parent management training principles.

A randomised controlled trial evaluated this mobile-based intervention in children aged 4–12 years. At weeks 8, 12, and 16, combined ADHD and oppositional defiant disorder (ODD) symptom scores rated by parents showed modest reductions, with stronger effects observed in children with a confirmed ADHD diagnosis compared to those with only suspected ADHD. Interestingly, children already receiving pharmacological treatment did not show substantial additional benefit from the digital parent training, whereas medication-naïve children demonstrated clear improvements. Effect sizes at week 12 were moderate (Cohen's $d = 0.7$), declining slightly to 0.5 at later follow-up. Parent-rated functional impairment also improved significantly more in the intervention group compared to controls. These findings, published in the *European Child and Adolescent Psychiatry* journal, suggest that mobile-based parent management training produces moderate treatment effects.

Importantly, other research groups have compared face-to-face parent management training with web-based versions in children with disruptive behaviour problems. Prof Döpfner referenced studies showing remarkably similar symptom reduction and adherence rates between online training (essentially self-directed with only technical assistance and encouragement) and traditional staff-delivered, multi-session face-to-face training. While these findings require replication and we do not yet know which parents benefit most from which format, the data suggest that web-based and mobile-based parent management training may be as effective as face-to-face delivery for some families. This has profound implications for improving access to evidence-based parenting interventions.

SUMMARY: WHAT ALREADY HELPS CLINICIANS?

Digital interventions offer important opportunities to transform clinical ADHD care, and the evidence base is growing. However, study quality is variable, and findings are not always consistent across outcomes. Digital tools have clear advantages: they are highly scalable, can overcome barriers to treatment access (available anytime, anywhere), and do not always require highly trained therapists. Based on current evidence, the following digital solutions can be recommended for clinical practice:

Assessment and monitoring:

Digital support for assessment using rating scales is genuinely helpful and should be adopted widely. Web-based portals that facilitate multi-informant ratings, automate scoring, and provide decision support improve

guideline adherence and treatment monitoring. Other forms of digital assessment support, including ecological momentary assessment, show promise but require further research before routine clinical use.

Treatment:

Traditional computerised cognitive training (particularly working memory training) is not helpful and should not be recommended. Psychoeducation delivered digitally may have limited impact as a stand-alone intervention. However, two parent-focused digital interventions show clear benefit: medication adherence reminder systems (via text message or app notifications) are effective and should be implemented routinely; and mobile-based or web-based parent management training applications produce meaningful symptom reduction and may be as effective as face-to-face training for many families.

ADDRESSING EQUITY AND CULTURAL SENSITIVITY

In the discussion following the presentation, important questions were raised about equity and cultural adaptation. Digital tools have the potential to worsen the digital divide, enlarging the gap between those with and without mental health resources. Developers and researchers in high-income countries must work intentionally to make digital resources accessible and affordable for lower-income settings. This includes not only reducing costs but also ensuring that infrastructure requirements (reliable internet connectivity, device access) are realistic for diverse contexts.

Cultural sensitivity is equally critical. Adaptation goes far beyond simple translation. Parent management training interventions, for example, must be tailored to specific parenting styles and family structures that vary across cultures. Video content, examples, and case vignettes must reflect the lived experiences of the target population. While digital tools may help reduce treatment gaps in both high-income and low- and middle-income countries—where face-to-face services are equally scarce—careful, culturally informed adaptation is essential to ensure effectiveness and acceptability.

CONCLUSION

Digital solutions in ADHD care are not a panacea, but they represent practical, evidence-based tools that can meaningfully improve assessment quality, treatment access, and clinical outcomes. Clinicians can and should adopt digital rating scale systems and medication adherence reminders now. Mobile-based parent management training offers a promising avenue to extend evidence-based parenting support to families who might not otherwise access services. As the field matures, careful attention to study quality, replication of findings, personalisation of interventions, and equitable, culturally sensitive implementation will be essential to realise the full potential of digital health in ADHD care.

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IS GETTING AN ADHD DIAGNOSIS HARMFUL OR BENEFICIAL FOR CHILDREN IN THE GREY ZONE FOR DIAGNOSIS?

Presented by David Coghill

This Report was compiled by Anelet Jame and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

INTRODUCTION

Should clinicians diagnose ADHD when a child sits in the diagnostic “grey zone”—meeting some but not all criteria, or showing clear impairment without quite reaching symptom thresholds? Prof David Coghill confronted this clinically vexing question with Australian epidemiological data and international evidence. His answer: diagnosis in the grey zone can be beneficial when done transparently with appropriate intervention, but harmful when applied carelessly or when diagnosis becomes only a gateway to medication. The outcome depends entirely on what clinicians do for and to the patient after diagnosis.

DEFINING THE GREY ZONE

The grey zone refers to individuals who do not strictly meet DSM-5 criteria for ADHD but experience significant difficulties. Prof Coghill emphasised systematic evaluation of all 18 DSM-5 symptom questions while maintaining clinical flexibility when warranted.

DSM-5 criteria require:

- Six or more symptoms of inattention and/or hyperactivity-impulsivity (five for adults)
- Several symptoms present before age 12
- Symptoms present in two or more settings
- **Clear evidence that symptoms interfere with functioning** (Criterion D)
- Symptoms not better explained by another disorder

Criterion D—the impairment criterion—is the most critical determinant of ADHD prevalence. If only symptom criteria were applied, approximately 25% of children would meet thresholds. The actual 5–7% prevalence reflects the substantial reduction when clinicians insist on documented functional impairment.

For research purposes, Prof Coghill’s group operationalised **subsyndromal ADHD** as three to five symptoms in one domain plus clearly documented impairment—allowing empirical study of grey zone outcomes.

RESEARCH VERSUS CLINICAL DIAGNOSIS

In research, Prof Coghill maintains strict DSM-5 adherence to ensure replicability. Clinically, some flexibility is appropriate under specific conditions—for example, five inattention symptoms and four hyperactivity-impulsivity symptoms with substantial impact.

The cardinal rule: transparency. When his team diagnoses ADHD outside strict criteria, they explicitly

document which thresholds were not met and why clinical judgment supported diagnosis. This contrasts with the growing phenomenon of social media-driven self-diagnosis, which he reframes as “identifies as” rather than “self-diagnosis”—respecting patient insight while preserving diagnostic rigour.

GLOBAL TREATMENT PATTERNS AND IMPLICATIONS

Prof Coghill presented 2019 data on ADHD medication consumption across 64 countries. Treatment prevalence (estimated by dividing defined daily doses per 1,000 by 10) varied dramatically: Canada/US ~10–11%, Norway 7.5%, Australia 4.6%, Germany ~3%, UK 1.5%, with a global average of ~1.5%.

South Africa's consumption suggests treatment prevalence under 1% despite estimated ADHD prevalence of 5–7%—indicating that only the most severe cases receive treatment, with much higher diagnostic thresholds than countries like Australia or the United States.

Recent Australian data (2023–2024) showed 8.7% of males and 4.1% of females aged 12–17 receiving ADHD medication—closely matching epidemiological prevalence. However, concurrent government inquiries documented significant access barriers. **The implication: Australia likely experiences both over-diagnosis (treating subsyndromal cases) and persistent under-diagnosis (unmet need among those with full ADHD).**

EVIDENCE ON SUBSYNDROMAL ADHD OUTCOMES

Clinical sample findings

A 2019 systematic review by Biederman and colleagues (15 studies, meta-analysis of 9) found that in clinical samples, individuals with subsyndromal ADHD showed significantly higher rates of family dysfunction, cognitive impairment, executive dysfunction, interpersonal and school problems, psychiatric comorbidity, and juvenile delinquency compared to controls. **These deficits were highly consistent with full-threshold ADHD.**

Australian population studies: Young Minds Matter

Prof Coghill's group analysed Young Minds Matter, a nationally representative study of Australian youth aged 12–17. Examining self-harm and suicidality across ADHD, subsyndromal ADHD, and no ADHD groups (adjusting for age, sex, and comorbidities), they found:

- **No statistically significant differences** in self-harm or suicidal thoughts between full and subsyndromal ADHD
- Both groups had **substantially elevated rates** compared to controls
- **Suicide attempts** were significantly elevated in full ADHD; subsyndromal ADHD showed intermediate rates

Prof Coghill admitted: “I was wrong. When we looked, we found that adolescents with subsyndromal ADHD had increased rates comparable to those with full ADHD.”

Broader functional outcomes

Ongoing Young Minds Matter analyses examining academic functioning, mental health disorders, risk behaviours, and well-being show preliminary results: both ADHD and subsyndromal ADHD groups demonstrate poorer outcomes across multiple domains compared to controls, with minimal differences between the two groups. Statistically significant differences emerged only for writing/numeracy standards, conduct disorder symptoms, and parent-reported SDQ difficulties.

Separate analyses of Grade 5 children showed both groups had **poor academic outcomes with medium effect sizes**, with no differences between subsyndromal and full ADHD.

Medication effects across changing treatment prevalence

ADHD medications improve multiple real-world outcomes: reduced criminality, substance abuse, traffic accidents, deaths from unnatural causes, physical abuse, and improved academic and employment outcomes. Given subsyndromal ADHD's similar impairments, Prof Coghill asked: **Do medications retain protective effects as treatment rates increase and less severe cases are treated?**

Swedish national registry study

A 2025 Swedish study examined outcomes during a period when medication use increased nearly fivefold (2006–2020). Using within-individual comparisons (medication on vs. off periods), researchers assessed self-harm, accidental injury, traffic accidents, and crime across three time periods.

Key findings:

- **Self-harm:** Protective effects slightly attenuated but remained statistically significant
- **Accidental injury, traffic accidents, crime:** Protective associations decreased significantly over time but remained statistically significant even in 2016–2020

Conclusion: As clinicians treat less severe ADHD, medication benefits on injury, accidents, and crime diminish but remain clinically meaningful.

CLINICAL IMPLICATIONS

What we know

1. Many individuals being diagnosed as treatment rates increase likely have subsyndromal ADHD
2. Subsyndromal ADHD carries similar functional impairments as full ADHD
3. Medication benefits persist even when treating less severe cases, though effect sizes diminish

Critical caveat

“We do not have any clinical trials of ADHD medications in subsyndromal populations.” No randomised controlled trials have tested medication safety or efficacy in subsyndromal ADHD. Therefore, **medication may not be the most appropriate first-line approach.**

RECOMMENDED APPROACH

First-line interventions for subsyndromal ADHD:

- Enhanced psychoeducation for patients, families, and schools
- Formal evidence-based interventions: CBT, parent training
- Informal accommodations at school, work, and home

Emerging research on individuals on ADHD waiting lists—many with subsyndromal presentations—demonstrates that psychosocial interventions produce positive outcomes.

When medication may be considered: For subsyndromal cases where non-pharmacological interventions are insufficient and severe impairment persists—particularly when suicidality is a concern—clinicians may consider medication. **The requirement: transparency.** Clearly document rationale, acknowledge absence of trial evidence, and explain off-label nature.

Diagnostic coding

Prof Coghill and colleagues emphasised accurate ICD-10 coding:

- **F90.0:** General ADHD
- **F90.9:** Hyperkinetic disorder, unspecified (recommended for subsyndromal presentations)

Specific coding facilitates epidemiological tracking, service planning, and research.

CONCLUSION

Receiving an ADHD diagnosis in the grey zone is neither inherently harmful nor universally beneficial—the outcome depends on what follows. When diagnosis is transparent, with rigorous assessment, clear documentation, and appropriate non-pharmacological interventions, it can be profoundly helpful. Subsyndromal ADHD carries similar risks as full ADHD, and individuals deserve recognition and support.

However, diagnosis becomes harmful when applied carelessly, when it serves primarily as a gateway to medication without considering alternatives, or when it medicalises normal variation. The absence of clinical trial evidence means psychosocial interventions should be first-line treatment. Medication may be considered when these approaches are insufficient, but only with explicit informed consent and transparent documentation.

The message: assess thoroughly, diagnose transparently, intervene appropriately, and maintain humility about the limits of current evidence.

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BUILDING CULTURALLY ATTUNED PARENT TRAINING FOR ADHD: LESSONS FROM JAPAN

Presented by Gail Tripp

Original presentation title: “Cultural considerations in the development and adoption of parent management programs for ADHD.”

This Report was compiled by Anelet Jame and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

WHY CULTURE MATTERS IN ADHD CARE

Prof Tripp argued that culture—shared systems of knowledge, values and practices—shapes how communities interpret behaviour and accept treatments. For ADHD, culture influences what is seen as problematic, whether families seek assessment, and which interventions feel acceptable. Because most evidence originates from WEIRD contexts, local adaptation is essential for relevance and uptake.

IS ADHD UNIVERSAL?

Cross-national findings support ADHD’s core validity and broadly similar responses to medication and psychosocial care. Yet implementation must reflect local beliefs, resources and service structures; otherwise, families receive care that is ineffective—or unwanted.

FROM PARENT TRAINING TO CULTURALLY RESPONSIVE PROGRAMS

Behavioural parent training (BPT) is central for preschool and primary-school ADHD but was largely designed in Europe/North America. When programmes move elsewhere, Tripp distinguishes surface adaptations (translation, local examples) from deeper changes (therapist preparation/supervision, delivery format, content and pacing, and outcome measures that fit the language and context). A key exemplar is the New Forest Parenting Programme (NFPP), which has been trialled across settings and delivery modes.

THE JAPAN EXPERIENCE: WELL PARENT JAPAN (WPJ)

In Okinawa, access to ADHD-specific psychosocial care was limited and few therapists had training. Beginning in 2012, Tripp’s team co-developed Well Parent Japan (WPJ)—a hybrid that combines parent well-being/psychoeducation with a culturally adapted NFPP. Early pilots supported group delivery and revealed needs for more self-care content, cognitive reframing to counter self-blame, communication skills for school/family, and extra scaffolding around praise/reinforcement. Across pilots, proof-of-concept work and small RCTs, WPJ showed good acceptability and signals of effectiveness. A pragmatic, multi-site trial during COVID-19 emphasised feasibility and cost-effectiveness; despite school-closure disruptions to teacher data, family-strain outcomes improved.

WHAT HAD TO CHANGE?

- Therapists & delivery: extra rehearsal and supervision; group formats preferred; home delivery impractical—clinics/schools used instead.
- Teaching style & pacing: more didactic steps; teach skills serially; frequent role-plays and concrete examples.
- Language & constructs: replace labels with behavioural descriptions; re-film model videos with Japanese actors.
- Praise & reinforcement: discuss attitudes; practise specific, timely praise and context-appropriate token systems.
- Learning context: honour harmony while inviting disagreement; rotate contributions so all voices are heard.

WHAT ABOUT FATHERS?

WPJ began with mother-only groups; interest from fathers grew with visibility. School-based offerings helped engage dads—meet caregivers where they already gather.

Practical implications for South Africa (and beyond)

- 1) Co-produce with local parents, clinicians, teachers and service managers from day one.
- 2) Prepare the workforce (training, supervision, fidelity tools) and match delivery (group/clinic/school) to access realities.
- 3) Use DSM-5 Cultural Formulation tools before planning.
- 4) Teach praise/reinforcement explicitly; make contingencies concrete and supportive.
- 5) Measure what matters locally while building capacity for teacher-rated outcomes and follow-up.

CONCLUSION

Parent programmes travel best when they travel light on assumptions. Start with evidence-based kernels, then adapt with families and therapists—language, pace, delivery and measures—to the culture you serve.

Useful resources

- NFPP: <https://nfppprogram.com/about/>
- WPJ RCT protocol: <https://www.researchprotocols.org/2022/4/e32693/>
- DSM-5 CFI: https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/DSM/APA_DSM5_Cultural-Formulation-Interview.pdf
- DSM-5 Cultural concepts: https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/DSM/APA_DSM_Cultural-Concepts-in-DSM-5.pdf

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Gail Tripp leads the Human Developmental Neurobiology Unit at OIST in Okinawa, Japan. Her research examines reinforcement sensitivity in ADHD and translates motivation science into culturally relevant behavioural interventions for children and families.



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SPORT AS A SCAFFOLD: BUILDING ROUTINES IN ADHD

Presented by Tanya O'Callaghan

Original presentation title: "Using sport to build routines in ADHD."

This Report was compiled by Anelet Jame and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

INTRODUCTION

Drawing on three decades in paediatric occupational therapy, Tanya O'Callaghan described how structured physical activity can translate therapy gains into everyday routines for children with ADHD. Her clinic's aim is straightforward: move skills out of the therapy room and into predictable, motivating sport settings—so that regulation, executive functioning and participation generalise across home, school and community.

THE OT LENS: SENSORY PROCESSING, REGULATION AND EXECUTIVE FUNCTION

O'Callaghan emphasised the frequent overlap between ADHD and sensory processing differences and how these shape participation, persistence and drop-out from activities. From an OT perspective, she targets (i) sensory integration and environmental adaptations, (ii) self-regulation strategies (interoceptive awareness, "inner coach," planned breaks), and (iii) executive skills (initiation, planning, cognitive flexibility) as the foundation for sport participation. The goal is to find a sport-sensory fit—matching the child's sensory profile with the demands and rewards of specific activities.

WHY SPORT?

Sport offers predictable schedules, clear rules, repetition with variation, and social reinforcement—ideal conditions for building routines. Many sports naturally deliver regulating input (e.g., proprioception from resistance/heavy work; vestibular input from movement), which can expand a child's bandwidth for inhibitory control, attention and problem-solving during practices and games. The team uses this to sequence learning: teach rules and skills, practise with scaffolding, then fade support as independence grows. Recent reviews and meta-analyses report moderate improvements in executive functions (especially inhibitory control and working memory) and ADHD symptoms following structured exercise, with promising data for adults as well.

A STEPPED GROUP MODEL (HOW HER CLINIC RUNS IT)

The clinic starts with individual OT, using a sensory and occupational profile to identify the best inputs (vestibular, proprioceptive, tactile) and to establish basic self-regulation tools. Children then transition to small, therapist-supported sport groups (typically 8 weeks; 3–4 sports rotated), where therapists scaffold rules, role-play waiting/turn-taking, and fade prompts as routines consolidate. Finally, children move into community programmes (e.g., cycling clubs, martial arts) with minimal therapist contact and periodic check-ins.

CASE VIGNETTE (DE-IDENTIFIED)

A 4½-year-old boy was referred with developmental delays, sensory over-responsivity (movement/touch/sound), weak bilateral coordination, and emotional dysregulation. After individual OT focused on vestibular

and somatosensory inputs and on self-regulation language (“inner coach,” planned breaks), he joined a bike-riding group. Clear rules, graded challenges and peer modelling built confidence; successful bilateral tasks (balance, pedalling) generalised to frustration tolerance. Next, a therapist-supported judo group introduced close proximity and turn-taking—initially hard, but manageable with pre-agreed signals and breaks. Over time, he moved to school athletics and then cross-country, using exercise as a regulation strategy alongside school demands.

PRACTICAL POINTERS FOR CLINICIANS, COACHES AND FAMILIES

Match the sport to the sensory profile (seekers: movement-rich options; over-responsive: predictable, lower-noise starts). Teach routines explicitly with visual schedules and “first–then” plans; agree on/off signals for breaks to protect self-efficacy. Build executive skills inside practice through micro-roles, consistent cues for inhibition/shift, and brief post-practice reflections. Reinforce rule-following and self-advocacy, then export the same cues to home routines.

CONCLUSION

Sport is not a bolt-on to therapy; done intentionally, it is the vehicle through which ADHD self-management becomes habit. With the right sensory fit, explicit teaching of rules and routines, and a plan to fade support, structured activity can deliver regulation, executive function gains and durable participation beyond the clinic.

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Tanya O’Callaghan is a paediatric occupational therapist with 30 years’ experience across clinical, hospital, school-based and academic settings in South Africa, the USA and the UK. She founded a community paediatric therapy service in the Pacific Northwest, with advanced training in sensory integration and assistive technologies, and a focus on translating therapy gains into everyday participation.

TECHNOLOGY IN EDUCATION: PROS AND CONS

Presented by Rorke Wilson

Original Title: "Parenting the Screenager"

This Report was compiled by Anelet James and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

INTRODUCTION

"Yes, kids love technology, but they also love Lego, scented markers, handstands, books and mud puddles. It's all about balance." This quote captures the essence of Deputy Principal Chrizanne de Beer's message to the congress: technology in education is neither savior nor villain, but a tool whose impact depends entirely on how we use it.

Speaking from over a decade of experience leading curriculum and learner care at a Cape Town primary school, de Beer brought a unique practitioner perspective to the ADHD congress. Her school has undergone complete digital transformation—not just changing curriculum, but reimagining physical classroom setup, routines, and teaching models. The result: consistently strong academic outcomes, particularly for neurodiverse learners including those with ADHD.

Her message was pragmatic and balanced: technology offers unprecedented opportunities for personalization, engagement, and inclusion, but also carries serious risks of inequality, over-reliance, and harm if implemented without careful thought. The question facing South African educators is not *if* we use technology, but *how* we use it wisely.

JOHN AND AMY: TECHNOLOGY TRANSFORMING ADHD TRAJECTORIES

De Beer introduced two ADHD learners whose stories bookended her presentation. John, diagnosed at age seven, and Amy, diagnosed at nine, received every recommended intervention: reward charts, strict routines, medication, fidgets, therapy. Despite dedicated parent and teacher efforts, both struggled academically. John's parents were advised to move him to a

smaller school; Amy's parents were told she couldn't continue in mainstream education.

Everything changed when they gained access to thoughtfully implemented digital curriculum. John, who loved coding and robotics, could explore his interests during school hours while completing required subjects. Disruptive behaviours disappeared. He's now studying electrical engineering. Amy discovered digital art on her tablet—an escape from noisy classrooms and a medium for expression. Teachers marvelled at her work. Later assessments revealed her intellectual giftedness, contrary to initial perceptions. She's now a professional digital designer.

These stories illustrate technology's potential—not as standalone solution, but as part of comprehensive support enabling ADHD learners to access education in ways traditional structures failed to provide.

THE BENEFITS: FOUR COMPELLING ADVANTAGES

1. Enhanced engagement and motivation

Interactive platforms like Kahoot, Quizlet, and Nearpod transform learners from passive recipients to active participants. A 2020 meta-analysis by Hillmayr and colleagues found digital tools generally improve motivation and achievement, particularly when learning is interactive and learner-centred. Gamification and multimedia cater to multiple learning preferences: visual, auditory, kinaesthetic, and reading/writing.

At de Beer's school, technology integration has sparked genuine enthusiasm reflected in consistently strong external test results. "Engagement is not just about fun. It directly impacts outcomes," she emphasized. **Critical question:** Are we using technology to truly engage learners or simply to entertain them? Engagement must always have purpose.

2. Unprecedented access to information

For the first time in history, knowledge isn't locked in elite institutions. Open resources like Khan Academy, Coursera, and YouTube democratize learning. UNESCO reports show digital access can close educational gaps—provided infrastructure exists.

De Beer noted that today's learners have substantially wider general knowledge, casually referencing documentaries or podcasts. This creates "hidden curriculum"—learning beyond formal instruction. However, access alone is insufficient. "We don't just give

access. We also need to teach discernment,” she stressed. Not everything online is accurate or healthy.

3. Support for diverse learners

This was de Beer’s most passionate advocacy. Technology opens doors for learners with barriers:

- Dyslexic children accessing text-to-speech software
- ADHD learners benefiting from timers and focus reminders
- Students with processing difficulties receiving audio notes
- Anxious children too shy to raise hands sending questions via digital platforms

A 2021 study in *Computers and Education* showed assistive technologies improve inclusive classroom participation. De Beer witnessed transformation firsthand: “That quiet child who would never raise their hand suddenly has courage to send a question via Viva Engage. Technology in that moment doesn’t just support learning. It restores dignity and confidence.”

In multilingual classrooms, tools like Google Translate bridge linguistic gaps. “That is inclusion in action.”

4. Personalized and self-paced learning

Technology allows embracing learner diversity. Adaptive platforms adjust to individual pace. RAND Corporation research found students using personalized tools made greater gains, particularly in mathematics.

De Beer’s school implements differentiation while maintaining print materials: high achievers access enrichment activities; average learners complete standard curriculum; below-average learners focus on fewer activities emphasizing quality over quantity. **Key clarification:** “Personalization doesn’t have to mean screen learning all day. Definitely not.” Children still write in books and don’t watch screens constantly.

A video demonstration showed this blended approach: a girl with noise-reducing earphones browsing digital content while working in her workbook; a boy using digital materials alongside printed copies, with his learning preference card visible to guide teacher methods.

THE DRAWBACKS: FOUR SERIOUS CHALLENGES

1. Digital divide and inequality

During COVID-19, UNICEF reported one-third of school children worldwide had no remote learning access. In South Africa, the divide is stark: approximately 90% of urban learners have internet access compared to only 60% in rural areas.

“This isn’t just inconvenient—it widens inequality,” de Beer stated. “Learners with access surge ahead; those without fall behind. As educators and policy makers, we need to ask: Are we building equity or deepening divides?”

2. Over-reliance and reduced human interaction

Children learn through relationships—needing eye contact,

encouragement, peer collaboration, and caring teachers. MIT researcher Sherry Turkle warns that excessive digital interaction can weaken empathy and deep focus. Too much screen time leads to social isolation, especially in younger learners who develop through play and face-to-face interaction.

“No app can replace the impact of a teacher saying, ‘I see you, I believe in you, and you can do this,’” de Beer emphasized.

3. Distraction and unhealthy digital habits

Everyone has experienced checking emails that becomes a two-hour distraction spiral. A Stanford study found multitasking on devices reduces comprehension and retention. Gamified systems, while motivating, can create unhealthy dopamine-driven habits. “I’ve seen this even in primary school learners,” de Beer shared. “Technology must be intentional.”

4. Data privacy and safety

Many educational apps collect detailed learner data—attendance, performance, behaviour. Parents often don’t know what’s tracked or how it’s used. Beyond data concerns are risks like cyberbullying, online predators, and inappropriate content exposure. “These are not abstract dangers. They’re realities, but we must prepare our children for it.”

THE IRREPLACEABLE TEACHER

Despite technological advances, teachers remain irreplaceable. Technology can deliver content but not compassion. It can mark tests but not mentor children. The OECD stated clearly in 2023: technology is only effective when guided by well-trained educators.

De Beer referenced the SAMR (Substitution, Augmentation, Modification, Redefinition) framework for assessing where technology adds genuine value. Professional development is crucial. “Out of personal experience, you have to talk to yourself about this weekly. Without it, technology risks becoming a gimmick instead of a game changer.”

PRACTICAL GUIDELINES FOR IMPLEMENTATION

De Beer prefaced recommendations with a disclaimer: these reflect her experience and don’t necessarily represent her school’s current policies.

Guideline 1: Intentional use over blanket adoption

Core question: Does this tool improve learning outcomes?

Strong recommendation: Schools should provide tablets in closed systems, using single platforms (like Apple) ensuring control over access. Her school uses BYOD with Microsoft 365, with OneNote hosting their “living curriculum.” Key features: printed copies alongside digital

access, individual secure logins, multiple security layers, teachers physically monitoring device use.

The real problem: “Not screen time at school, but what parents allow at home without supervision, often with open access to anything.” Schools must teach children device safety and educators must remain critical curators, not passive adopters.

Guideline 2: Equity first

Policy and budgets must prioritize closing the digital divide through offline-friendly tools, community internet hubs, and device-sharing programs.

Guideline 3: Set boundaries on screen time

Cell phones at school: “From my experience, cell phones at school should be a big no.” Policies should require phones stay home or be collected at day’s start. Several countries—France, Netherlands, Italy, Australia, some US states—have implemented phone-free schools.

No teacher-to-learner phone contact. All schoolwork during school hours. De Beer’s school has no-homework policy so children can play after school.

Age recommendations: When asked about appropriate phone age, de Beer said “16,” later clarifying “honestly, not before age 13”—and only after thorough preparation about responsible use.

Digital citizenship: Teach online safety, empathy, critical thinking. Cyberbullying prevention should be in every school.

Guideline 4: Co-design with learners

Involve students in technology decisions. “They know what engages them and what distracts them. Empowering learners makes them co-creators of their education.”

CONCLUSION

“Technology in education is not inherently good or bad. It is a tool. Its impact depends on how we use it.”

Used well, technology connects, supports, and personalizes learning. Used poorly, it excludes, distracts, and harms. The responsibility of educators, parents, and policy makers is discernment—asking not what the latest app can do, but what children truly need.

John and Amy’s transformations from struggling students written off by initial schools to thriving professionals illustrated that technology, integrated thoughtfully within systems prioritizing human connection and genuine understanding of diverse learning needs, can transform educational trajectories.

The timeless truth: “At the heart of learning, no matter how advanced our tools, there will always be one timeless truth: Children learn best when they feel seen, valued, and inspired by another human being.”

The question for South African educators is not whether to embrace educational technology, but how to do so wisely, equitably, and humanely—maintaining the irreplaceable elements

of connection, relationship, and care that have always been at the heart of transformative education.

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Chrizanne de Beer is the Deputy Principal of Eversdal Primary School and the founder of Neurotoys, an educational initiative that creates tailored resources to support neurodiverse learners. She holds a bachelor’s degree from Stellenbosch University, an honours degree from North-West University, and is currently pursuing her Master’s degree in Special Needs Education, also through North-West University. With a strong background in primary education, curriculum design, and developmental psychology, Chrizanne is committed to advancing inclusive education. Her work focuses on identifying and addressing learning barriers, supporting neurodivergent learners through individualized support plans, and fostering environments that promote emotional well-being and academic success. As a passionate advocate for parent-teacher collaboration, Chrizanne also hosts Evertalk, a podcast aimed at equipping parents with practical strategies, expert insights, and guidance on supporting their children’s learning journeys. Driven by a belief in the potential of every child, she works to ensure that all learners are empowered with the skills, confidence, and support they need to thrive in the classroom and beyond.

NAVIGATING DIGITAL CHILDHOOD: A PRACTICAL GUIDE TO PARENTING THE SCREENAGER

Presented by Chrizanne de Beer

This Report was compiled by Anelet Jame and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

INTRODUCTION

The rapid proliferation of digital technology has fundamentally altered childhood development, social interaction, and family dynamics. As societies grapple with the consequences of ubiquitous screen access, a global conversation has emerged regarding the appropriate age for social media exposure and smartphone ownership. This presentation synthesizes current legislative trends, neuroscientific research, and practical interventions to support families in establishing healthy digital habits.

THE LEGISLATIVE LANDSCAPE: GLOBAL RESPONSES TO CHILD ONLINE SAFETY

Australia's Groundbreaking Social Media Ban

In a bold move that captured international attention, Australia announced legislation to ban social media access for all individuals under sixteen years of age. The law, implemented in December 2024, represents a paradigm shift in regulatory responsibility by placing enforcement obligations directly on social media platforms rather than parents or minors. Under this framework, companies such as Snapchat, Twitter, and TikTok face substantial financial penalties if underage users are discovered on their platforms.

This approach addresses a fundamental challenge in child online safety: the burden of monitoring and enforcement. By shifting accountability to corporations with vast technical resources, the legislation acknowledges that individual families cannot reasonably police the sophisticated mechanisms platforms employ to capture and retain young users' attention. The global community is closely watching Australia's implementation to assess feasibility and effectiveness.

The United Kingdom's Online Safety Act

The United Kingdom has adopted an even more comprehensive approach through the Online Safety Act. This legislation extends

beyond age restrictions to criminalize the display of inappropriate content to anyone under eighteen. While more protective in scope, the Act has generated significant controversy regarding implementation mechanisms and their implications for digital privacy.

Compliance typically requires age verification through government identification, raising concerns about surveillance and data security. The broad scope of enforcement has created unintended consequences, with users reporting restricted access to educational resources including Wikipedia and other reference materials. This illustrates the tension between child protection objectives and the preservation of internet openness and anonymity.

The Value of Digital Anonymity

Digital anonymity serves important societal functions beyond individual privacy. The Arab Spring of 2011 demonstrated how anonymous online platforms enabled political organization and protest under authoritarian regimes with extensive censorship apparatus. Tools such as Twitter allowed citizens to coordinate mass movements for democratic reform despite state surveillance. As governments worldwide consider restrictive legislation, preserving spaces for anonymous communication remains crucial for free expression, whistleblowing, and political dissent. The challenge lies in balancing these civil liberties with legitimate child safety concerns.

RECOMMENDED AGE THRESHOLDS

Based on developmental neuroscience and practical experience with digital harms, the following age recommendations emerge:

- No smartphone access before age 13
- No social media access before age 16
- Devices should remain out of bedrooms until ages 16-17

These recommendations align with emerging research on adolescent brain development, particularly regarding executive function, impulse control, and long-term consequence evaluation. The prefrontal cortex, responsible for these higher-order cognitive processes, continues developing into the mid-twenties, with particularly rapid changes occurring during adolescence.

NEURODEVELOPMENTAL CONSIDERATIONS: ADHD AND DIGITAL VULNERABILITY

Children and adolescents with ADHD face heightened vulnerability in digital environments. The core deficits associated with ADHD—impulse control, delayed gratification, and task initiation—align precisely with the psychological mechanisms that social media platforms exploit for user engagement.

The Attention Economy and ADHD

Modern digital platforms operate within what researchers term the "attention economy," where corporations compete for every second of user engagement. Platform design incorporates sophisticated psychological techniques including:

- Variable reward schedules that mirror gambling mechanisms
- Infinite scroll features that eliminate natural stopping points
- Algorithmic content curation designed to maximize engagement duration
- Social validation metrics (likes, comments, shares) that trigger dopamine release

For ADHD youth, these features create what can be described as a “dopamine machine.” The immediate rewards, constant novelty, and minimal barriers to access prove particularly compelling for brains with dopamine dysregulation. These individuals lack the neurobiological “internal breaks” that facilitate voluntary disengagement from stimulating activities.

THE GOLDEN TICKET PRINCIPLE

Perhaps the most critical element of any digital contract involves establishing a “Golden Ticket”—a guarantee that the child can approach parents about digital problems without fear of immediate punishment. This principle recognizes that adolescents, particularly those with ADHD, will inevitably make impulsive decisions that place them in difficult or dangerous situations.

When youth face online threats such as sextortion, cyberbullying, or exposure to harmful content, fear of parental reaction often prevents them from seeking help. Perpetrators of online exploitation actively leverage this fear, instructing victims that disclosure will result in punishment or family shame. By offering a Golden Ticket, parents position themselves as allies in crisis management rather than additional sources of threat. The Golden Ticket should not apply to deliberate harmful behavior toward others, but rather to situations where the young person has made an impulsive or naive decision with negative consequences.

ESSENTIAL RESOURCES FOR DIGITAL PARENTING

Several organizations provide evidence-based guidance for navigating digital parenting challenges:

Common Sense Media (www.commonsensemedia.org)

This platform offers comprehensive reviews of television shows, movies, applications, games, and digital services. Reviews include both expert analysis and user-generated content from parents and children. The site provides age recommendations and detailed content descriptions, enabling informed decision-making about media consumption.

Protect Young Eyes (www.protectyouneyes.com)

This resource specializes in technical guidance for implementing parental controls across various devices and platforms. The site offers step-by-step instructions for configuring safety settings on smartphones, tablets, gaming consoles, and computers.

Smartphone Free Childhood (www.smartphonefreechildhood.co.uk)

This UK-based initiative facilitates collective action among parents committed to delaying smartphone provision. Families register their children’s information (first name, surname initial, grade, and school), and once sufficient participants from the same grade join, the organization connects them. This creates peer networks where families can mutually support delayed smartphone adoption, addressing the social exclusion concerns that often pressure parents into early device provision.

MONITORING SOFTWARE AND TECHNICAL SOLUTIONS

Effective digital parenting requires both trust-building and

verification. Monitoring software provides parents with visibility into concerning behaviors while respecting appropriate privacy boundaries.

Bark (www.bark.us)

Bark represents a particularly sophisticated approach to digital monitoring. Rather than providing complete access to all communications, Bark uses keyword detection algorithms. Parents configure trigger words related to concerning topics such as self-harm, eating disorders, bullying, sexual content, or substance use. When these keywords appear in communications, Bark sends parents a notification with relevant context, allowing for targeted intervention without constant surveillance.

CRITICAL MEDIA LITERACY: THE SOCIAL DILEMMA

The documentary “The Social Dilemma” (2020) provides essential viewing for families initiating digital device use. The film features whistleblowers from major technology companies explaining the psychological manipulation techniques embedded in platform design.

Key revelations from The Social Dilemma include:

- Platforms employ algorithms specifically designed to maximize engagement duration
- User data enables increasingly precise prediction and manipulation of behavior
- The business model relies on selling user attention to advertisers
- Platform design incorporates techniques from persuasive technology and behavioral psychology

Watching this documentary together serves multiple purposes: it provides age-appropriate education about platform mechanisms, cultivates healthy skepticism toward social media companies, and opens dialogue about the challenges of self-regulation in environments specifically designed to undermine it.

ESSENTIAL DIGITAL SAFETY RULES

Never Devices in Bedrooms Overnight

Bedrooms should remain device-free overnight, with all technology charging in common family areas. This single intervention addresses multiple concerns:

- Prevents late-night social media use that disrupts sleep
- Reduces exposure to nighttime cyberbullying
- Eliminates opportunities for unsupervised communication with potential predators
- Protects circadian rhythms from blue light exposure

The Billboard Test

The Billboard Test provides a simple decision-making framework for all online posting. Before sharing any content, youth should imagine their post displayed on a roadside billboard with their photograph, full name, school, and grade level prominently featured. If they would not want this public association, the content should not be posted online. This visualization emphasizes

the permanent, public nature of digital communication while remaining age-appropriate and easily remembered.

The Six P Framework

Before posting any online content, youth should consider six key audiences who might view the material:

- Police – Could this content suggest illegal activity or threats?
- Parents – Would I want my parents to see this?
- Principal – Could this violate school conduct policies?
- Pedophiles – Does this content reveal personal information or could it be exploited?
- Prospective universities/employers – Could this content affect future opportunities?
- Public – Am I comfortable with unlimited public access to this content?

BET: Block, Evidence, Tell

The BET protocol provides clear action steps when youth encounter cyberbullying, inappropriate contact, or online threats:

- Block: Immediately block the problematic user from all communication channels
- Evidence: Capture screenshots of all relevant communications before blocking
- Tell: Report the situation to a trusted adult immediately

This protocol addresses a critical vulnerability in youth online safety. Many cases of cyberbullying and sexual extortion depend on victim silence. Perpetrators explicitly instruct targets not to tell adults, often threatening escalation if disclosure occurs. Teaching youth that silence only protects the perpetrator empowers them to seek help despite intimidation tactics.

SEXTING AND SEXUAL EXPLOITATION: CRITICAL VULNERABILITIES

Sexting—the sharing of sexually explicit images or messages—generates powerful dopamine responses in adolescent brains. The combination of sexual arousal, social validation, and risk-taking creates a neurochemical “perfect storm” particularly appealing to youth with sensation-seeking tendencies or ADHD. Research indicates that sexting behaviors often begin earlier than parents anticipate, with documented cases including exchanges between children as young as nine and twelve years old.

Sextortion: When Manipulation Becomes Blackmail

Sextortion represents a particularly pernicious form of online exploitation. The pattern follows predictable stages:

- Initial Contact: Predator establishes communication through gaming platforms, social media, or messaging apps
- Relationship Building: Extended interaction builds trust and emotional connection
- Sexualized Content Introduction: Predator requests or manipulates victim into sharing explicit images
- Blackmail Phase: Predator threatens to distribute images unless victim provides additional content or sexual access

The psychological impact of sextortion proves devastating. Victims experience shame, fear, isolation, and in extreme cases, suicidal ideation. This dynamic reinforces the critical importance of the Golden Ticket principle—youth caught in sextortion situations

desperately need adult support but often feel unable to seek help due to fear of punishment.

ARTIFICIAL INTELLIGENCE AND DEEPFAKES

Artificial intelligence technology enables the creation of convincing fake images, videos, and audio recordings with minimal technical skill. A single photograph suffices to generate explicit images, defamatory videos, or impersonation content. These “deepfakes” create new forms of harassment, extortion, and reputation damage.

South Africa’s Cyber Crimes Act criminalizes the creation and distribution of deepfake content, particularly intimate images created without consent. Penalties include up to 20,000 Rand fines and three years imprisonment. However, enforcement challenges exist due to anonymity tools and cross-border jurisdiction issues. The most effective protection involves minimizing publicly accessible photographs.

PRACTICAL IMPLEMENTATION STRATEGIES

Modelling Appropriate Behaviour

Children observe and replicate parental behaviour more than they follow verbal instructions. Parents who constantly engage with devices while demanding children limit use undermine their message. Key modelling strategies include:

- Establishing device-free family meal times
- Prioritizing face-to-face conversation over screen engagement
- Demonstrating appropriate boundaries around work communication
- Showing children how to disengage from devices

Charging Station Protocol

Establishing a physical charging station in a common family area (kitchen, living room) creates natural boundaries around nighttime device use. All family member devices, including adult phones, should charge in this location overnight. This visible, collective participation eliminates temptation for late-night device use, models healthy boundaries for children, and creates natural opportunities for morning connection before device retrieval.

QUALITY VERSUS QUANTITY: SCREEN TIME NUANCE

Not all screen time generates equivalent impact. Research demonstrates that screen time quality matters more than pure duration. Examples of potentially valuable screen time include computer programming, digital art creation, and virtual communication with geographically distant family members. Examples of concerning screen time include infinite scroll social media browsing, parasocial relationship development with influencers, and algorithm-driven content consumption that eliminates user agency.

Parents of neurodivergent children may need to implement individualized screen time budgets that recognize legitimate differences in both risk profile and potential benefits. An eight-year-old with autism and a special interest in computer programming represents meaningfully different circumstances than a typically developing peer, warranting distinct approaches.

CORPORATE ACCOUNTABILITY AND SYSTEMIC CHANGE

While individual families must implement protective strategies within current circumstances, meaningful progress requires corporate accountability and regulatory reform. Social media platforms employ design features specifically intended to maximize engagement duration, including variable reward schedules, infinite scroll, algorithmic content curation, and social comparison metrics.

These features did not emerge accidentally but reflect deliberate design choices informed by behavioural psychology and neuroscience research. Internal documents from major platforms acknowledge the psychological manipulation at work and demonstrate awareness of harmful impacts, particularly on adolescent mental health. Individual families cannot effectively counteract corporate behaviour designed to undermine their authority and their children's well-being. Meaningful change requires collective action through consumer behaviour or political advocacy supporting protective legislation.

SUMMARY AND KEY TAKEAWAYS

Effective digital parenting in the contemporary landscape requires:

- Delayed device provision (no smartphones before 13, no social media before 16)
- Collaborative contract development before device introduction
- Physical boundaries (no devices in bedrooms, charging stations in common areas)
- Monitoring software that balances safety with privacy
- Critical media literacy education (The Social Dilemma as family viewing)
- Clear action protocols (BET: Block, Evidence, Tell)
- Golden Ticket provision for protected disclosure
- Modelling appropriate adult technology use
- Ongoing education about online risks
- Advocacy for systemic reform and corporate accountability

Children with ADHD and other neurodevelopmental differences require particular attention given their heightened vulnerability to exploitative platform design. Perhaps most critically, parents must position themselves as allies and resources rather than additional critics when children inevitably encounter problems online. The Golden Ticket principle recognizes that mistakes will occur and prioritizes teaching recovery and problem-solving over punishment.

USEFUL WEBSITES AND RESOURCES

The following resources were referenced during the presentation:

- **Smartphone Free Childhood:** www.smartphonefreechildhood.co.uk – Parent networking initiative for coordinated delayed device provision
- **Common Sense Media:** www.common sense media.org – Age-appropriate media reviews and digital parenting guidance
- **Protect Young Eyes:** www.protectyouneyes.com – Technical guides for parental control implementation
- **Bark:** www.bark.us – Keyword-based monitoring software for proactive intervention
- **Qustodio:** www.qustodio.com – Comprehensive parental control software
- **HaveIBeenPwned:** www.haveibeenpwned.com – Data breach notification and password compromise checking

- **JustDelete.me:** www.justdelete.me – Account deletion instructions for online services

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Australia Social Media Ban (2024)

Implementation: December 2024. Key provisions: Age 16 minimum for social media access, enforcement responsibility on platforms.

United Kingdom Online Safety Act (2023)

Key provisions: Prohibition of inappropriate content display to minors, age verification requirements.

South Africa Cyber Crimes Act (2020)

Key provisions: Criminalization of cyber threats, deepfake creation and distribution, sexual exploitation of minors.

Rorke Wilson is an Associate at The Digital Law Company, where they bring a rare combination of academic rigor, generational insight, and frontline experience with young people and technology. They completed their LLB with Honours at the University of Edinburgh, where Rorke focused their research on the intersection of addictive behaviour, legal systems, and the philosophy of free will. This foundation deeply informs their approach to the legal and psychological dimensions of digital life.

As a digital native and elder Gen Z, Rorke has an intuitive understanding of internet culture, platform mechanics, and the subtle ways in which social media shapes identity, relationships, and decision-making. They have worked with teenagers, schools, parents, and professionals to unpack the real risks of the digital world, including sextortion, cyberbullying, cancellation culture, platform addiction, and privacy failures.

At The Digital Law Company, Rorke presents regularly to schools and corporations on the legal, reputational, and disciplinary risks of social media use. They advise companies on employment-related legal issues arising from online conduct, draft customized social media policies for schools and businesses, and advise individuals on how to navigate the variety of negative consequences that can come with digital citizenship.

Rorke has been widely interviewed across radio and television on issues of youth digital behaviour, online safety, and platform ethics. Their debut book, co-authored with Emma Sadleir, *How Not to Mess Up Online: The Teenager's Guide to Not Getting Catfished, Arrested, Sued, Cancelled or Addicted*, was published in 2025 by Penguin Random House.

NAVIGATING ADHD IN THE PERINATAL PERIOD: THE DIGITAL DILEMMA

Presented by Elsa du Toit

This report was compiled by Anelet Jame and is, based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

WHY THIS TOPIC MATTERS

ADHD does not “evaporate” in adulthood; many reproductive-age women live with ADHD into pregnancy and the postpartum period. Dr du Toit emphasized that the perinatal window introduces **bidirectional pressures**: pregnancy and early parenting tax executive functions (forgetfulness, planning, task completion), which can **exacerbate ADHD symptoms**, while untreated ADHD (and common comorbidities such as anxiety/depression) can undermine perinatal well-being, parent–infant bonding, and family functioning.

HOW THE DIGITAL WORLD HELPS—AND HARMS

Du Toit argues against a simplistic “screens are bad” narrative. Digital tools expand access to information, support, and care—especially for women in geographically underserved areas. But the online ecosystem is poorly regulated and riddled with conflicting guidance about ADHD treatment in pregnancy. For many women this breeds ambivalence and fear, fuelling non-adherence (e.g., abruptly stopping ADHD medication) and clinician hesitancy. She cautioned against extrapolating risk data from high-dose substance-use cohorts to women using therapeutic ADHD medication under supervision. The take-home: information abundance without critical appraisal can harm mothers and babies.

Du Toit also names the Dunning–Kruger effect online: low-trained “experts” speak with high confidence, while qualified professionals—keenly aware of uncertainty—may under-communicate. The antidote is proactive clinician voice and patient education on how to vet sources.

ISOLATION, EXPECTATIONS, AND “TECHNOFERENCE”

Online peer groups can counter the loneliness of pregnancy and newborn care, particularly when mood and anxiety symptoms

limit going out. Yet “airbrushed” feeds and post-partum body ideals can intensify shame and isolation. Du Toit highlights technofence: device use in moments that should be parent–child connection (feeding, wake-up, after school, bedtime) can blunt sensitivity and undermine attachment. Pragmatic household rules—e.g., “10-minute golden windows” on wake-up/after-school/bedtime with all phones away—help families protect relational time.

CLINICAL APPROACH: CONSERVATIVE AND AMBITIOUS

Her mantra is “conservative but aggressive”: risk-aware, but aiming for remission, not mere symptom reduction.

- **Mild ADHD:** prioritize non-pharmacological care—psychoeducation, CBT/DBT, mindfulness, occupational therapy (often under-utilized), and structured ADHD coaching by qualified practitioners.
- **Moderate–severe ADHD:** combine the above with pharmacotherapy, individualized via formal risk–benefit analysis; do not stop effective ADHD medicines solely because of pregnancy. Shared decisions should weigh illness severity, comorbidity, social context, and available supports.

SLEEP, TIMING, AND INTENTIONAL USE

Perinatal sleep is already fragile; excessive night-time scrolling further erodes mood, cognition, and impulse control. Du Toit reframes the conversation: it’s not only how much we’re online but how and when. Encourage tech-free zones, router-level downtime, and the difference between aimless scrolling and intentional learning/support.

Practical digital checklist (for clinicians to share with patients)

1. **Purpose:** Before opening an app, ask: What am I here to do?
2. **Timing:** Avoid feeds during the three daily connection windows (wake-up, after school, bedtime).
3. **Sleep:** No devices at night feeds; keep screens out of the bedroom.
4. **Source check:** Prefer qualified clinicians and reputable orgs; be wary of “one-size-fits-all” protocols.
5. **Medication decisions:** Never stop or start ADHD meds without a clinician-led risk review.

KEY MESSAGES FOR PRACTICE

- **ADHD is present in pregnancy and postpartum;** the perinatal period can both worsen symptoms and be worsened by them.

- **Digital ecosystems can enable** (access, community) or **undermine** (misinfo, technofence) health—intentional use matters.
- **Don't weaponize uncertainty:** use structured risk–benefit reviews instead of blanket medication cessation.
- **Protect sleep and bonding** with timed tech-free rituals and clear household rules.

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(Context editor note you can include if desired: JAMA Psychiatry cohort suggests a small ↑ risk of cardiac malformations with methylphenidate—not amphetamines—whereas recent systematic reviews/meta-analyses overall do **not** show increased major malformations and add longer-term neurodevelopment safety signals; these data align with the talk's “conservative but ambitious” risk–benefit framing.) (PMC)

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Elsa du Toit is a perinatal psychiatrist whose clinical, academic, and advocacy work spans state and private sectors. Her PhD explored mental illness and unplanned pregnancy; she practices at Panorama Health Care Psychiatry, is active in Marcé South Africa and the SASOP Women's Mental Health Subgroup, and maintains a women's mental health learning hub at www.drelsadutoit.com.

WHEN FOCUS IS THE GOAL: SPORT-SPECIFIC STRATEGIES FOR ATHLETES WITH ADHD

Presented by Neil Tuck

Alternative title: Coaching attention: practical focus strategies for ADHD athletes in real competitions.

This Report was compiled by Anelet James and is based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

WHY THIS TALK MATTERS

Neil Tuck works with athletes who already have a chosen sport and want to optimize performance—from elite professionals to developing juniors. His premise is practical: the core elements of “mental fitness” (goal clarity, self-belief, arousal regulation, discipline, resilience, and team skills) apply to all athletes, but ADHD changes the load on those systems. With a good individualized assessment, ADHD can be reframed as a performance profile to coach, not a barrier to excellence. Tuck points to many world-class examples—athletes who channel high energy, spontaneity, and the capacity for hyperfocus into competitive advantage.

PREVALENCE: ATHLETES VS. GENERAL POPULATION

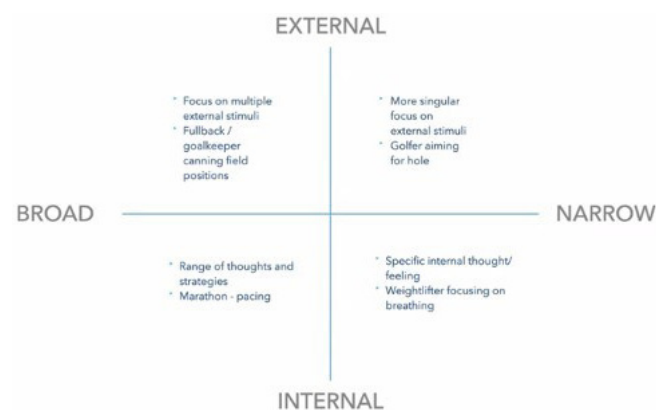
Does ADHD occur more often in athletes? Evidence suggests at least similar—and possibly higher—rates than in the general population. A 2019 BJSM review estimated 7–8% among student and elite athletes. A 2021 review reported 4.2–14.1% in young athlete samples. By comparison, meta-analyses estimate ~3–5% ADHD prevalence in adults in the general population (method-dependent). In short: athlete prevalence appears equal to or modestly higher than general norms, though estimates vary by criteria and sampling. ([British Journal of Sports Medicine](#))

THE FOCUS PROBLEM (AND OPPORTUNITY) IN ADHD

Tuck distinguishes between challenges and “superpowers.” On the challenge side: inattention (missed cues, long drills fatigue), working-memory load (complex plays), motivation inconsistency, and emotional dysregulation (impulsivity spilling into technical errors). On the strengths side: hyperfocus under pressure, high energy, creative problem-solving, and, for some, a grit forged by years of having to work harder to keep up. The task for coaches and clinicians is to tilt the environment so strengths are cued and costs are buffered.

A SHARED LANGUAGE FOR “WHAT TO PAY ATTENTION TO”: NIDEFFER’S MODEL

To coach attention deliberately, Tuck uses Nideffer’s Attentional Model—a 2x2 of *broad* vs. *narrow* and *external* vs. *internal* focus. Athletes must flex across all four quadrants: scanning the field (broad-external), monitoring pacing plans (broad-internal), locking onto a target (narrow-external), or attending to breath/kinaesthetic cues (narrow-internal). ADHD increases the friction of switching among these modes; therefore, training should make those switches explicit, cued, and rehearsed.



Nideffer's Attentional Model. The four attentional styles—Broad-External (e.g., goalkeeper scanning field positions), Broad-Internal (strategy/pacing), Narrow-External (golfer aiming at hole), and Narrow-Internal (weightlifter focusing on breathing)—illustrate how athletes must shift focus state to meet task demands.

TUCK'S PERFORMANCE FRAMEWORK: ASSESSING AND TRAINING "MENTAL FITNESS"

- 1) **Vision and goals.** Start with a clear vision of success and sport-specific action plans; goals should specify what "good" looks like in attention terms (e.g., "three pre-serve breaths; eyes to target; cue word").
- 2) **Self-belief and narratives.** Audit personal narratives—unhelpful beliefs ("I always choke late") quietly undermine execution. For ADHD athletes, normalize variability and emphasize controllables (sleep, routines, cues).
- 3) **Resilience and grit.** Distinguish resilience (bounce-back after setbacks) from mental toughness (willingness to "go dark" when it hurts). Train both explicitly with setback simulations, not only physical sets.
- 4) **Arousal & distraction management.** Teach athletes to recognize their arousal–performance curve and pick tools (breathwork, cue words, attentional resets) that get them back to the "sweet spot."
- 5) **Mental hygiene (CBT-informed).** Map thought → feeling → action links; replace catastrophizing with neutral, process-focused scripts.
- 6) **Team & system skills.** Even in individual sports, communication micro-skills (check-ins, coded signals, feedback timing) determine whether attentional plans survive real competition.

COACHING FOR ADHD: PRACTICAL ADJUSTMENTS THAT CHANGE OUTCOMES

Training environment. Where possible, provide low-distraction zones; display simple visual schedules; break drills into bite-size blocks; and vary intensity/format to avoid boredom.

Instruction design. Use single-tier instructions, given just-in-time; pair with visual/physical cues (hand signs, coloured cards). Agree on pre-agreed signals for resets during play.

Structure + flexibility. Over-structure early (clear roadmaps, predictable routines), then customize once the athlete demonstrates stability; small variations can lower anxiety without losing the scaffold.

Motivation & consistency. Expect fluctuations; protect sleep; build accountability partners and checklists (gear, warm-up, timing). Keep reviews frequent and brief to prevent drift.

Coach stance. Adopt a destigmatizing, collaborative style. The athlete often knows what helps; co-design cues and routines, and treat lapses as data, not defiance.

PRE-COMPETITION, ON-THE-DAY, AND POST-COMPETITION ROUTINES

Pre-competition. Rehearse breathing protocols (box breathing or 4-7-8), autogenic/PMR (tension–release), and visualization (clear, short scripts). Lock in warm-up sequences, time awareness, equipment checks, and roles for an accountability partner.

On the day. Control the environment (e.g., a swimmer waits in a quieter area if the call room spikes arousal), use coded coach signals for micro-resets, and emphasize process goals over outcomes. If

energy is high, allow constructive movement between tasks rather than enforced stillness that burns willpower.

Post-competition. Hot debrief while the experience is fresh: list wins and development edges, document cues that worked, and set one attention target for the next session.

TECHNOLOGY: USEFUL—BUT MAKE IT SERVE THE PLAN

Tuck encourages using organizing/scheduling/goal-tracking apps and breathing/mindfulness apps, but only as support for pre-agreed routines (not as yet another distraction stream). Choose one planning app and one regulation app; embed them in the warm-up and cool-down so usage is automatic and context-bound.

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Neil Tuck is a clinical psychologist and performance consultant based at the Sports Science Institute of South Africa (Cape Town). He consults in individual psychotherapy, sport performance (individual and team), and corporate performance. His work centres on helping people "master the psychology of performance and wellbeing."

Elsa du Toit is a perinatal psychiatrist whose clinical, academic, and advocacy work spans state and private sectors. Her PhD explored mental illness and unplanned pregnancy; she practices at Panorama Health Care Psychiatry, is active in Marcé South Africa and the SASOP Women's Ment

EXPLORING THE INTERPLAY BETWEEN ADHD AND HORMONES

Presented by Naz Daniels

Report compiled by Anelet James for the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

WHY THIS TALK MATTERS

Hormones are often treated as a nuisance “confounder” in research; in real clinical life they are context. Dr Daniels argues that while rigorous data remain limited, what we know already is enough to start framing conversations and tailoring care for girls and women with ADHD across puberty, the menstrual cycle, pregnancy and the perimenopause/menopause transition. Her stance is careful but practical: acknowledge uncertainty, map the individual’s hormonal journey, and build treatment plans that anticipate the predictable headwinds it creates.

SIGNAL VS NOISE: SOCIAL MEDIA AND UNDER-RECOGNITION

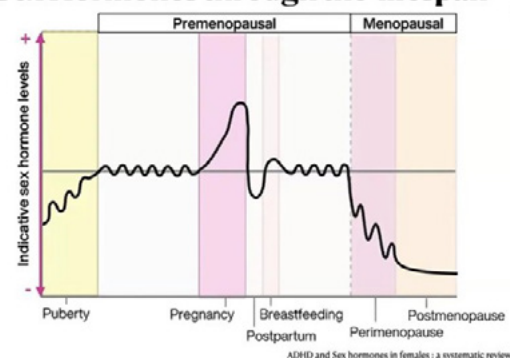
ADHD in females is historically under-diagnosed—partly because many tools were normed on boys and externalising phenotypes, and partly because girls and women often mask difficulties and present with internalising problems. In this vacuum, “diagnosis-by-algorithm” flourishes: social media content resonates with lived experience but is frequently inaccurate or overconfident, which can both empower help-seeking and derail assessment. Daniels’ advice: validate the signal (why the content resonates) while bringing people into a proper, formulation-based evaluation.

HOW SEX HORMONES MIGHT SHAPE ADHD EXPRESSION

Oestrogen, progesterone (and its metabolite allopregnanolone), and androgens influence monoaminergic systems (dopamine,

noradrenaline, serotonin) and HPA-axis regulation. High-oestrogen states are generally pro-cognitive (memory, synaptogenesis), while low-oestrogen states often correlate with worse executive functioning; progesterone effects are context-dependent, and allopregnanolone’s GABA-ergic actions may modulate mood and reactivity. For some individuals, higher androgen tone may relate to hyperactivity phenotypes. These mechanistic clues help explain the clinical variability women report across the life course.

Sex Hormones through the lifespan



Sex hormones through the lifespan. Schematic trajectory of sex-hormone levels from puberty through reproductive years, pregnancy/postpartum, perimenopause and postmenopause.

ACROSS THE LIFESPAN: WHAT CLINICIANS CAN EXPECT

Puberty and adolescence

Puberty brings a surge in sex steroids and rapid brain remodeling. Daniels highlights survey data showing adolescent girls with ADHD report more mood lability, rejection sensitivity and executive difficulties; risk behaviours (earlier sexual debut, inconsistent contraception, substance use) are amplified when ADHD is unrecognised or untreated. Practical implications: add sexual-health counselling, safeguard sleep, and monitor medication response as the hormonal milieu shifts.

The menstrual cycle

Rising oestrogen in the follicular phase may support attention and working memory; the luteal/premenstrual phase (high progesterone, falling oestrogen) is where many patients report worsening in inattention, impulsivity and co-occurring mood/anxiety symptoms. One small study suggests some women benefit from pre-menstrual stimulant dose optimisation; Daniels frames this as a shared, data-informed experiment rather than a blanket rule. Encourage cycle tracking (symptoms, sleep, workload) and review patterns every 1–2 cycles.

Contraception and reproductive planning

Given higher rates of unplanned pregnancy in ADHD, discuss long-acting reversible contraception (LARC) for adherence advantages. Some evidence suggests women with ADHD may be more sensitive to mood effects from oral contraceptives—flag this, monitor closely, and personalise choice.

Pregnancy and postpartum

Pregnancy is a high-oestrogen environment; some women feel cognitively better, others worse—heterogeneity is the rule. A Canadian population study cited by Daniels shows large increases in stimulant prescribing over time but high discontinuation in pregnancy and only partial resumption postpartum. Her message aligns with perinatal psychiatry principles: use a structured risk–benefit approach rather than reflex discontinuation; plan proactively for the postpartum drop in oestrogen, sleep disruption, and load on executive function.

Perimenopause and menopause

Perimenopause brings volatile oestrogen and frequent reports of “brain fog,” slowed processing and executive slippage. In clinical practice, women with ADHD often describe this as a step-change in severity. Preliminary studies in non-ADHD samples hint that lisdexamfetamine or atomoxetine may help menopausal cognitive symptoms; robust ADHD-specific trials are needed. Screening for sleep disturbance is essential—this is a triple-hit (ADHD + menopausal transition + insomnia) for attention and mood.

“ADHD OR PERIMENOPAUSE?”—GETTING THE FORMULATION RIGHT

Daniels proposes a pragmatic differential anchored in onset, collateral history, pattern of impairment and associated features.

- **Onset/history:** Lifelong variability, “always been like this,” and childhood corroboration suggest ADHD; new decline from prior baseline in the 40s–50s points to perimenopause.
- **Profile:** Lifelong disorganisation and time-management failure vs fluctuating “brain fog,” word-finding and slowed recall.
- **Collateral:** Consistent, cross-setting childhood history vs mid-life onset.
- **Assessment tools:** ADHD rating scales + developmental history vs menopause history, cycle/symptom diaries, ± FSH/estradiol when uncertain.
- **Treatment emphasis:** ADHD—stimulants/non-stimulants and

skills; Perimenopause—HRT where appropriate, sleep optimisation, and mood treatment; stimulants may help select cognitive symptoms but are not primary menopause therapy.

GYNECOLOGICAL CONDITIONS TO KEEP IN MIND

Emerging data suggest PCOS may be more common among women with ADHD and that endometriosis may co-occur; causal pathways remain unclear, but awareness helps prompt screening and referral when symptoms align.

PRACTICAL TAKEAWAYS FOR CLINIC AND TEAM ROOMS

- **Name the pattern:** link symptom flare-ups to hormonal phases; encourage **tracking** and “if-then” plans.
- **Individualise medication:** consider **time-limited PM dose adjustments** or adjuncts for premenstrual exacerbation; use perinatal risk–benefit frameworks in pregnancy/postpartum.
- **Protect sleep** across all stages; treat insomnia as a multiplier of executive dysfunction.
- **Plan for transitions** (menarche, starting contraception, conception, late pregnancy, postpartum, perimenopause).
- **Collaborate** with GP/gynecology/endocrine colleagues; treat hormones as **teammates** to **coordinate**, not noise to ignore.

References available on request

Dr Naz Daniels is a general adult psychiatrist in private practice at Constantiaberg Mediclinic, Cape Town. Trained in South Africa and the UK, she has a special interest in women’s mental health and interdisciplinary, whole-person care. She currently convenes the SASOP Women’s Mental Health Special Interest Group.

Conundrum : Adult ADHD or Perimenopause



Age of Onset/ Symptom history	Lifelong, starting in childhood/adolescence “Always been like this” – chronic disorganization, distractibility, forgetfulness	Typically begins in 40s–50s during menopausal transition New or worsening cognitive complaints compared to previous baseline
Symptom Profile	Inattention, distractibility, impulsivity, time-management issues, losing things, task initiation/completion problems	“Brain fog”: memory lapses, word-finding difficulty, slower recall/processing, fluctuating focus
Associated Features	Emotional dysregulation, anxiety/depression, family history of ADHD, academic/work struggles lifelong	Vasomotor symptoms (hot flushes, night sweats), sleep disturbance, new mood changes (irritability, low mood, anxiety)
Functional Impact	Lifelong academic/work/relationship struggles despite effort	Decline from previous baseline; Difficulties emerged in mid-life professional/personal roles
Collateral History	Consistent reports of difficulties since childhood across multiple settings	Collateral notes decline beginning in midlife, not present earlier
Assessment Tools	Adult ADHD Self-Report Scale (ASRS-v1.1), Conners’ Adult ADHD Rating Scales, structured developmental history	Clinical history of menopause, menstrual changes, symptom diaries Consider FSH/estradiol if uncertain
Treatment	Stimulants/non-stimulants improve core symptoms	Hormone therapy Sleep optimization SSRI/SNRI’s for mood/vasomotor symptoms

Conundrum: Adult ADHD or Perimenopause? A side-by-side comparison of history, symptom profile, associated features, functional impact, collateral notes, assessment tools and treatment emphasis for lifelong ADHD vs perimenopausal cognitive change.

SENSORY INTEGRATION IN THE PERINATAL PERIOD

Presented by Kath Smith

Report compiled by Anelet James for the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

Perinatal services often focus on mood, anxiety, and feeding—yet many mothers (and fathers) with ADHD or other neurodivergent profiles struggle because of sensory processing differences that impair day-to-day praxis (ideation → sequencing → execution of multi-step routines). These praxis burdens—not simply sensory “reactivity”—drive much of the distress during pregnancy, birth, and the first months at home. Clinicians can reduce crises by naming these patterns early and scaffolding routines with visual supports, graded practice, and sensory-based self-regulation tools.

FROM SENSORY SENSITIVITY TO PRAXIS

Using Ayres Sensory Integration (ASI) concepts, Smith distinguishes familiar reactivity issues (noise, light, touch) from praxis problems that derail caregiving: getting started (ideation), ordering steps (sequencing), and carrying out tasks under load (execution). In ADHD, sensory–motor factors (low tone, proprioceptive/tactile discrimination differences, hypermobility) interact with executive-function demands, producing predictable pinch-points: sterilising bottles, latching, bathing a slippery infant, packing the nappy bag, or installing car seats—especially when sleep-deprived. Unrecognised praxis challenges can be misread as “non-compliance” or neglect, escalating to safeguarding concerns unless sensory-informed assessment and supports are introduced.

WHAT THE EMERGING EVIDENCE SAYS

A growing literature documents sensory processing differences in ADHD, including adults and females. For clinicians, the

implication is not to pathologise parenting but to engineer tasks and environments so that multi-step caregiving becomes reliable and safe—for example, by increasing proprioceptive input, simplifying motor demands, and externalising sequencing with pictures and checklists (Jurek, 2025; Fabio, Antonietti, & Castriciano, 2024).

ANTENATAL PLANNING: BUILD THE SCAFFOLD BEFORE THE BABY ARRIVES

- Map sensory preferences & pain points (sounds, lights, textures, smells that dysregulate—and those that calm).
- Externalise the steps: photo-based, step-by-step home guides for feeding set-up, sterilising, nappy changes, car-seat transfers, and “out-the-door” checks.
- Birth plans that include SI: address hypermobility/low tone and positions for labour; include proprioceptive strategies (pressure inputs where safe, movement as tolerated), personalised playlists, dimmed lighting.
- Practise the choreography: rehearse sequences with real equipment; break actions into short, repeatable micro-skills; add if–then prompts for disruptions.

Postnatal routines: stabilise the daily sequence

- Three anchor routines: feeding set-up/tear-down, nappy-change sequence, and out-the-door packing—each with a one-page 5–7 step visual and a final safety tick-box.
- Proprioception first: brief heavy-muscle work before fine-motor tasks to reduce overflow and steady sequencing.
- Accountability pairing: in high-risk tasks while exhausted, use call-and-response checks (e.g., “strap, clip, chin-check”).
- Sleep protection: treat sleep as a system variable; adjust routines before adding new skills.

TOOLS YOU CAN HAND FAMILIES TOMORROW

- ASI Wise — education & resources: <https://sensoryproject.org/>
- The Sensory Project — Sensory Ladders (global translations): <https://sensoryproject.org/sensoryladders/>

- ICE-ASI — International education standards in ASI: <https://www.ice-asi.org/>
- SAISI — South African Institute for Sensory Integration: <https://instsi.co.za/>
- CLASI — EASI background and practitioner FAQs: <https://www.cl-asi.org/easi-faq>

ASSESSMENT: WHEN TO CONSIDER THE EASI

Where standardised assessment is available, the **Evaluation in Ayres Sensory Integration (EASI)** provides a structured approach to sensory discrimination, praxis, and postural functioning; see Mailloux et al. (2018) for a scholarly overview and CLASI's practitioner resources for implementation notes.

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Kath Smith is a UK-based Consultant Occupational Therapist who has advanced Ayres Sensory Integration (ASI) across the lifespan. She leads ASI Wise (a not-for-profit education initiative) and founded The Sensory Project, which created widely used tools such as Sensory Ladders. She contributes to international ASI education standards (ICE-ASI) and delivers sensory-informed neurorehabilitation at the Merlin Neuro Therapy Centre in Cornwall. Awards include the RCOT Merit Award (2025).



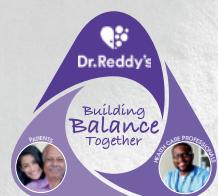
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SENSORY INTEGRATION IN THE YEARS BEFORE DIGITAL DISTRACTION

Presented by Emma Wijnberg

This report was compiled by Anelet James, based on a presentation at the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

ADHD did not arrive with smartphones. Wijnberg traces the diagnosis back through DSM history—“hyperkinetic reaction of childhood” (DSM-II, 1968), ADD (1980), and ADHD (late 1980s/1990s)—to underline that today’s digital environment may amplify challenges, but it didn’t create them. The practical implication: clinicians should pair modern screen-use guidance with foundational sensory-motor care that predates the digital era.

THE CORE ARGUMENT IN ONE LINE

Digital media can exacerbate attention and regulation problems, but the most powerful, protective inputs for developing brains remain vestibular, proprioceptive, tactile, and social play—the same ingredients that organised attention before the internet.

ADHD NEUROBIOLOGY (WHY NOVELTY “HOOKS,” AND ROUTINE TASKS DON’T)

Wijnberg links clinical patterns to dopamine circuitry. Lower tonic dopamine and blunted phasic “highlight” signals in mesolimbic and frontostriatal loops bias attention toward high-salience,

immediate rewards and away from slow, effortful tasks—explaining hyperfocus on fast-feedback activities (e.g., games) and difficulty sustaining effort on homework. This framing is consistent with PET and review evidence of altered dopamine signalling in ADHD.

SENSORY INTEGRATION AS SCAFFOLDING (BEFORE AND BEYOND SCREENS)

Wijnberg emphasises that sensory integration—the brain’s ability to receive, organise, and respond to sensory input—underpins attention, arousal regulation, and adaptive behaviour. When children lack whole-body sensory experiences (movement, deep pressure, messy play), they miss the stabilising inputs that help regulate arousal and sustain goal-directed behaviour. Overreliance on fast-feedback digital content then “hijacks” motivation without delivering the regulatory benefits that come from movement and touch.

SLEEP AND “TECHNOFERENCE”

Two modern frictions amplify the problem:

- **Evening/light-linked sleep disruption.** Screen exposure and stimulating content around bedtime are associated with poorer sleep—an ADHD performance multiplier. Clinically, protect wind-down routines and move devices out of sleep spaces.
- **Parent-child “technoferece.”** Caregiver device absorption correlates with reduced sensitivity

and more child behaviour problems in observational and longitudinal studies; Wijnberg's practical tip is to protect key connection windows (wake-up/after-school/bedtime) as device-free.

PRACTICAL TRANSLATION—WHAT TO ADD BACK BEFORE SUBTRACTING SCREENS

1. **Daily vestibular & proprioceptive “doses.”** Rough-and-tumble play, climbing, swinging, carrying, pushing/pulling, animal walks, and heavy-work chores before seated tasks.
2. **Tactile + social play.** Messy play, construction, crafts, cooperative games—slow, mastery-based activities that build “campfire” motivation (steady effort, persistence) rather than “fireworks” dopamine bursts.
3. **Externalise sequences.** Visual step-cards (5–7 steps) for morning/bed routines and “out-the-door” checks; use brief call-and-response safety checks.
4. **Sleep hygiene as therapy.** Lighting, predictability, and stimulus control every night; delay digital rewards until after regulation-rich activities.
5. **Assess media history, not just minutes.** Content, timing, context, and co-viewing matter as much as totals.

CLINIC TOOLS & WEBSITES MENTIONED / RECOMMENDED

- SAISI — South African Institute for Sensory Integration (training, resources, therapist finder). Website: SAISI (instsi.co.za).
- SAISI “Beyond childhood” resources (lifespan SI, community projects). See SAISI site sections.

Tip: When signposting families, pair an **activity menu** (movement, heavy work, tactile) with a **sleep-safe media plan** (no devices in wind-down, model device-free connection windows).

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- South African Institute for Sensory Integration (SAISI)—training, resources, therapist finder. SAISI website. instsi.co.za

Emma Wijnberg is an Occupational Therapist and SAISI board member who leads online workshops, national networking, and lectures on sensory integration. She runs a paediatric practice in the KZN Midlands and has post-graduate training in Ayres Sensory Integration, DIR/Floortime, Precht's General Movement Assessment, and Hippotherapy. She advocates for early intervention and evidence-based guidance for families and educators, with a special focus on supporting neurodivergent children, including ADHD. Emma is a Board Member, South African Institute for Sensory Integration — SAISI).

RESTLESS MINDS, RESTLESS NIGHTS: UNDERSTANDING SLEEP IN ADHD

Presented by Dora Wynchank

Report compiled by Anelet James for the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

Sleep and ADHD have a bidirectional relationship: ADHD traits (time blindness, poor routine, hyperarousal) worsen sleep; in turn, insufficient or poorly timed sleep mimics or amplifies ADHD symptoms. Dr Wynchank's message is pragmatic—screen sleep first, treat what you find, and outcomes for ADHD get better. Her session reviewed the major sleep disorders seen in adults with ADHD, the role of psychiatric comorbidity, and targeted treatments, drawing on her clinic's cohort work and practical protocols.

THE OVERLAP—FOUR HYPOTHESES

Why do ADHD and sleep problems cluster? Possibilities include: (1) ADHD causes sleep problems (e.g., late routines, hyperarousal); (2) sleep problems cause ADHD-like daytime symptoms; (3) reciprocal causation; and (4) shared biology (genetic/circadian/neurotransmitter factors). Clinically, assume co-existence is common and assess both.

WHAT CLINICIANS SEE MOST OFTEN

- **Delayed sleep-wake phase (DSWPD).** Adults with ADHD frequently show a delayed dim-light melatonin onset (DLMO)—on average ~1–1.5 h later than neurotypical controls—translating to late sleep onset and social jet-lag on workdays. Melatonin phase delay and late sleep timing in ADHD are well documented (van Veen et al., 2010).
- **Insomnia.** Difficulty initiating/maintaining sleep is highly prevalent in adult ADHD and is more common in women; insomnia severity correlates with ADHD symptom burden (e.g., Wynchank et al., 2018; Uygur et al., 2025).
- **Restless legs syndrome (RLS)/periodic limb movements.** RLS is over-represented in ADHD; iron status (ferritin) matters for dopamine synthesis and symptoms. Recent AASM guidance supports iron supplementation when ferritin is low, with thresholds typically <75–100 ng/mL prompting treatment,

plus non-dopaminergic options such as pregabalin in selected adults.

- **Sleep-disordered breathing (SDB/OSA).** Consider especially in males and in patients with weight gain and daytime sleepiness; OSA exacerbates inattention, mood, and fatigue.

Comorbidity multiplies risk. In her clinic cohort (n≈3,691 adults), screening flagged high rates of delayed phase, insomnia, RLS/PLMD, and SDB; each additional psychiatric diagnosis raised the probability of at least one sleep disorder—with the largest effects for PTSD, depression, anxiety, substance use, and some personality disorders. Bottom line: expect multiple sleep problems in adults with ADHD plus comorbidity, and plan management accordingly.

RECOGNISING THE PHENOTYPES (FAST CLINICAL CUES)

- **Delayed phase:** Life-long “night-owl,” wide weekday–weekend gap (“social jet-lag”), trouble waking for fixed obligations, feels best later in the day/evening. Consider DLMO where available.
- **Insomnia:** ≥3 months of difficulty falling/staying asleep or early waking with daytime impact; normal PSG possible (a clinical diagnosis). Risk higher in women, and around perimenopause. Use CBT-I as first-line.
- **RLS/PLMD:** Evening or nocturnal leg discomfort with urge to move, transient relief on movement; check ferritin and aggravating meds (antihistamines, some antidepressants).
- **OSA:** Loud snoring, witnessed apnoeas, non-restorative sleep, morning headaches, sleepiness; screen and refer for testing.

TREATMENT—PAIR ADHD CARE WITH SLEEP-SPECIFIC THERAPY

1) Chronotherapy for delayed phase.

- Morning bright light (e.g., ~10,000 lux for 20–30 min soon after waking) advances phase;
- Evening melatonin in low doses (≈0.5–1 mg, ~1 h before target bedtime);
- Reduce evening blue-enriched light (filters/orange lenses), increase daytime light. Low-dose melatonin advances DLMO and, in trials, reduced ADHD symptoms by ~14% during treatment (van Anel et al., 2021).

2) Insomnia: CBT-I first.

Six–eight session CBT-I (stimulus control, sleep restriction, cognitive strategies, relaxation) is guideline first-line; daridorexant (an orexin antagonist) may be considered only after CBT-I fails or is unavailable per NICE recommendations.

3) RLS/PLMD: treat iron and triggers.

Check ferritin and transferrin saturation; supplement iron when ferritin is low (often target >75–100 ng/mL), review aggravating drugs, consider pregabalin or other agents per AASM algorithm.

4) OSA: address risk, test, treat.

Weight management, positional therapy, avoid evening alcohol/sedatives; confirm with sleep study and initiate CPAP or oral appliance as indicated. Expect daytime cognition to improve with OSA control.

5) Integrate with ADHD pharmacotherapy.

Stimulants/non-stimulants have heterogeneous effects on sleep; time dosing and formulation to minimise evening activation; review for rebound, consider earlier last dose, and monitor outcomes (Stein, 2012 review).

SCREENING TOOLS & WEBSITES MENTIONED

- **HSDQ (Holland Sleep Disorders Questionnaire):** multi-sleep-disorder screener; recent psychometrics in mental-health samples.
- **DIVA-5 (Diagnostic Interview for ADHD in Adults)** — interview and resources (DIVA Foundation).
- **ADHD Powerbank** — short, evidence-based videos for clinicians and patients.

KEY TAKEAWAYS

- In adult ADHD, **assume a sleep disorder until proven otherwise**—and expect more than one in the presence of comorbidity.
- For delayed phase, **light in the morning, low-dose melatonin in the evening**, and strict light hygiene are high-yield.
- **CBT-I first** for insomnia; consider orexin antagonists only after guideline-consistent behavioural care.
- Check **ferritin** in RLS and treat iron deficiency; be cautious with aggravating meds.
- Treating sleep **improves ADHD outcomes**—don't wait to address it.

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- **DIVA Foundation:** Diagnostic interview & resources — <https://www.divacenter.eu/> ([DIVA Foundation](#))
- **ADHD Powerbank:** Curated short videos — <https://www.adhdpowerbank.com/> ([ADHD POWERBANK](#))
- **HSDQ information & psychometrics:** summary reviews/validations. ([PMC](#))

Dora Wynchank is a psychiatrist, researcher, and educator specialising in adult ADHD. After consultant roles and professional leadership positions in South Africa, she relocated to the Netherlands in 2014 and completed a PhD on adult ADHD and biological rhythms (Amsterdam UMC/VUMC). She practices at PsyQ (The Hague) and serves on the DIVA Foundation (international ADHD diagnostic interview). Her interests include women's ADHD, sleep disorders in ADHD, and cardiovascular presentations linked to ADHD. She is a professional board member of ADHD Europe and co-founded ADHD Powerbank, a short-format educational video platform for clinicians and patients.

EXHAUSTED AND DYSREGULATED: THE OVERLOOKED ROLE OF SLEEP IN ADHD

Presented by Michelle Baker

Report compiled by Anelet James for the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

Michelle Baker argues that many struggles attributed to ADHD are “sleep stories in disguise.” In her clinical practice and qualitative research, she sees a repeating loop: restless nights → exhausted, dysregulated days → more restless nights. Unless clinicians screen for—and treat—sleep problems early, ADHD care is only “half the job.”

FROM “TIRED” TO EXHAUSTED: NAMING THE STATE WE’RE TREATING

Baker distinguishes ordinary tiredness from exhaustion—a depleted state where rest no longer feels restorative and the nervous system has lost flexibility. Patients describe low cognitive energy, emotional volatility or numbness, and interpersonal strain. In ADHD, these states are not occasional; they become patterns unless we interrupt them with targeted sleep care.

HYPERAROUSAL, HYPOAROUSAL, AND THE WINDOW OF TOLERANCE

Insomnia care lives in the terrain of arousal. Baker invites us to map patients on a simple frame:

- **Hyperarousal:** heightened alertness, worry, a “hot” amygdala; classic insomnia.
- **Hypoarousal:** low energy, emotional blunting, shutdown; “stuck in neutral.”

The aim is to help patients grow their window of tolerance—that zone where arousal is optimal for sleep and daytime function—and teach self-regulation strategies matched to each arousal state.

SHARED CIRCUITRY: WHY ADHD AND SLEEP AMPLIFY EACH OTHER

Baker links ADHD symptom expression with sleep–wake control systems: amygdala hyper-reactivity with weaker prefrontal “brakes”; HPA-axis changes; and salience/default-mode network switching difficulties. These mechanisms explain why poor sleep mimics/worsens ADHD (inattention, impulsivity, emotional dysregulation) and why ADHD behaviours (time-blindness, late routines, evening cognitive “second winds”) disrupt sleep. It’s a bidirectional loop that needs treating on both sides.

THE COMMON CLINICAL PICTURE IN ADHD CLINICS

- **Delayed sleep–wake phase (night-owl profile):** late melatonin timing, difficulty waking for fixed obligations, “social jet-lag.”
- **Insomnia:** trouble initiating/maintaining sleep; often worse in peri-menopause; daytime fatigue and cognitive fog.
- **Restless legs syndrome / periodic limb movement disorder:** evening restlessness, urge to move; check ferritin and medication triggers.
- **Sleep-disordered breathing (OSA):** snoring, witnessed apnoeas, non-restorative sleep; screen when daytime sleepiness and weight gain are present.

Co-morbid psychiatric conditions (depression, anxiety, PTSD, substance use) multiply sleep-disorder risk—expect more than one sleep problem per patient.

A PRACTICAL PATHWAY

1. **Screen first, routinely.** Add two minutes to every ADHD visit: bedtime, latency, awakenings, wake-time, naps, caffeine/alcohol, medications, snoring/legs, daytime sleepiness. Use a brief multi-sleep screener when available.
2. **Map the arousal profile.** Identify hyper- vs hypoarousal signatures and agree on a personalised calming/activation toolkit.
3. **Treat the sleep problem directly—behavioural first.**
 - o **Delayed phase:** morning bright light; earlier anchors; consider low-dose evening melatonin; strict evening light hygiene.
 - o **Insomnia:** CBT-I (stimulus control, sleep restriction, worry time, relaxation); medications only after guideline-consistent behavioural care.
 - o **RLS/PLMD:** check iron (ferritin/TSAT), remove aggravating drugs, treat deficiency; consider non-dopaminergic agents where indicated.
 - o **OSA:** refer for testing; expect cognition and mood to improve with CPAP/oral appliance if positive.
4. **Synchronise ADHD meds with sleep.** Optimise formulation and last-dose timing; watch for evening rebound and caffeine stacking.
5. **Coach the family system.** Routine, repetition, visuals, and a morning “activation plan” reduce chaos and support adherence.

TOWARDS A PATIENT-CENTRED MODEL FOR SOUTH AFRICA

Baker’s doctoral work proposes a pragmatic framework to embed sleep health in ADHD services across all levels of care: align with global standards; respect cultural and traditional perspectives; address employment stress, trauma exposure and safety; provide digital training/resources for patients and HCPs; and capacitate teams for routine sleep conversations and stepped-care protocols. Early detection is the lever that prevents the “exhausted–dysregulated” loop from becoming a family-wide crisis.

WEBSITES AND TOOLS MENTIONED / RECOMMENDED

- **South African Society for Sleep Health (SASSH)** — professional education and public resources: search “SASSH South Africa” (official site).
- **ADHD Powerbank** — short, practical videos for clinicians and patients (co-founded by Baker’s colleagues in the ADHD community).
- **Basic CBT-I resources** — patient handouts and sleep-diary templates (clinic-agnostic).

KEY TAKEAWAYS

- Sleep and ADHD have a **reciprocal** relationship—treat both to break the loop.
- Match strategies to **arousal state**; grow the patient’s **window of tolerance**.
- Start with **behavioural** interventions; synchronise ADHD pharmacotherapy to protect sleep.
- Build **patient-centred** systems that fit South African realities—early screening at every level of care.



Baker’s patient-centred approach to sleep care in ADHD (doctoral framework): integrating global sleep-medicine standards with cultural context, trauma/stress, digital training, early detection, and capacitating multidisciplinary HCPs.

References available on request

Michelle Baker is registered with the HPCSA as a Clinical Neuropsychologist and in Clinical Technology (Neurophysiology). She practises in Kloof, KwaZulu-Natal, providing neuropsychological assessment, cognitive rehabilitation, family-systems interventions, and psychotherapy for adolescents and adults with conditions including ADHD, autism spectrum conditions, concussion/TBI, epilepsy, dementia, pain, trauma, and functional neurological disorders. She completed a fellowship in Insomnia (University of Pennsylvania, 2010), serves as Vice-Chair of the South African Society for Sleep Health (SASSH), and collaborates on home-based sleep screening and CPAP titration with sleep physician Dr Alison Bentley. Baker is a doctoral candidate (Psychiatry, University of KwaZulu-Natal) researching insomnia. She is affiliated with NeuropsychologySA and is a full member of SACNA.

ADHD AND CONCUSSION

Presented by Leigh Gordon,

Report compiled by Anelet James for the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

Concussion is common across school and elite sport, yet ADHD changes the baseline against which concussion is detected and managed. Dr Gordon presented a practical end-to-end program—education → policy → baseline → recognition → return-to-learn → return-to-sport—and showed where ADHD (and frequently overlapping autistic traits) require format, pacing, and threshold adjustments.

DEFINING CONCUSSION (AND WHAT YOUR SCANS WON'T SHOW)

Using the latest international consensus, sport-related concussion is a traumatic brain injury induced by transmitted forces to the head/neck/body that trigger a neurotransmitter/metabolic cascade, sometimes with axonal strain and transient blood-flow changes. Routine neuroimaging is typically normal; symptoms can emerge immediately or evolve over minutes to hours. Only ~10% have loss of consciousness. Amsterdam 2022 (published 2023) remains the reference statement for recognition and management. ([British Journal of Sports Medicine](#))

ANTI-DOPING REALITY CHECK (STIMULANTS & TUE)

In codes adhering to WADA, stimulants (e.g., methylphenidate, amphetamines) are prohibited in-competition; atomoxetine is not prohibited. ADHD athletes who need stimulants should obtain a Therapeutic Use Exemption (TUE); diagnostic justification must detail how DSM-5 criteria were established—“ADHD” alone won't suffice. See the current WADA Prohibited List. ([World Anti Doping Agency](#))

EDUCATION & POLICY (MAKE IT NEUROINCLUSIVE)

- Education: South African schools lag behind North American concussion legislation; where possible, mirror best practice: annual education with signed acknowledgement by athlete and parent/guardian. Tailor the format and duration for ADHD (short modules, self-paced video, visual summaries).

- Policy: Identify a concussion officer and keep a school register; align with sport-specific guidance (e.g., World Rugby modules and HIA protocol). ([World Rugby Resources](#))

BASELINE, BUT MAKE THE BASELINE HONEST

- Symptoms: Use SCAT6/symptom scales for “average day” values; expect ADHD athletes to score non-zero for light/noise sensitivity, concentration, sleep, and mood—so “symptom-free” later means “back to their baseline,” not absolute zero. ([British Journal of Sports Medicine](#))
- Digital systems: Many federations log baselines into secure apps (e.g., SCRM used in World Rugby's HIA process). ([passport.world.rugby](#))
- Neurocognitive tests: ADHD is associated with greater invalid baseline rates on computerized tools (e.g., ImPACT); treat an invalid flag as a prompt for collateral history and transparency about diagnosis/medication rather than grounds to exclude the athlete. ([PMC](#))

RECOGNITION ON THE DAY

Clear remove-from-play signs: LOC or suspected LOC, confusion/disorientation, balance disturbance, abnormal eye movements, vacant/dazed appearance, emotional lability, vomiting, or amnesia. Use the Concussion Recognition Tool 6 (CRT6) as a one-page field aide. For ADHD athletes, compare behaviour to their usual (stamina, appetite, sleep routine, behaviour/emotion). ([Sports Medicine Australia](#))

MANAGEMENT PRINCIPLES (THE FIRST 48–72 HOURS)

1. Medical assessment to rule out structural injury; examine neck carefully.
2. Avoid opioids and NSAIDs early (sedation/bleeding confounds).
3. Relative rest (24–48 h), limited screen time, and no driving for ~72 h given evidence of impaired performance.

4. Begin cognitive-load management, then graded return steps. ([British Journal of Sports Medicine](#))

RETURN-TO-LEARN (RTL): THE SCHOOL IS REHAB

Standard sequence: daily activities ($\leq 2/10$ symptom increase) → light academic work → part-time school → full-time school (with temporary accommodations). For ADHD athletes, integrate preferred calming strategies (noise-cancelling headphones, low-stimulation space), shorter class blocks, scheduled brain breaks, and sensory trigger reduction in class, so athletes can recover at school instead of being sent home. The Virginia Concussion Initiative (VCI) Neurodiversity Toolkit offers visual cards, smiley-face scales, and ND-friendly templates. ([vci.gmu.edu](#))

RETURN-TO-SPORT (RTS): SYMPTOM-LIMITED AND STAGED

Progress from symptom-limited activity → aerobic exercise → sport-specific drills → non-contact → full-contact practice → return to play—but only when back to baseline. Because ADHD baselines are seldom zero, document the athlete's pre-injury symptom profile up front, and use consistent scales to judge "return to baseline" before contact phases. Align with CISG/Amsterdam guidance and your code's protocol (e.g., World Rugby HIA). ([British Journal of Sports Medicine](#))

TOOLS & WEBSITES TO SHARE WITH FAMILIES/TEAMS

- **Virginia Concussion Initiative – Neurodiversity Toolkit:** ND-friendly recognition and recovery supports. ([vci.gmu.edu](#))
- **Concussion Recognition Tool 6 (CRT6):** Free one-page sideline tool. ([Sports Medicine Australia](#))
- **Concussion in Sport Group – Amsterdam 2022/2023 Consensus:** Clinical reference. ([British Journal of Sports Medicine](#))
- **World Rugby HIA Protocol & education:** Baselines, HIA app (SCRM), staged RTS. ([passport.world.rugby](#))
- **WADA Prohibited List (2025/2026):** Check stimulant status; plan TUE early. ([World Anti Doping Agency](#))

KEY TAKEAWAYS

- ADHD shifts the baseline—measure it, don't guess it.
- Prefer neuroinclusive education/policies and RTL in school with accommodations.
- Use graded cognitive and physical loading; progress only when back to baseline, not necessarily "symptom-free."
- Plan early for TUE where stimulants are required in-competition.

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Leigh Gordon is a Sport & Exercise Medicine physician at Cape Sports Medicine (Sports Science Institute of South Africa, Cape Town) and leads a state-based concussion clinic at the Neuroscience Institute, Groote Schuur Hospital. A former team physician to Springbok Sevens (men & women), she serves as a World Rugby Medical Trainer, Independent Concussion Consultant, and Head Injury Match Day Doctor for major rugby events in Cape Town. She sits on the Concussion in Sport Group (CISG) Tools Sub-committee, and is a Medical Officer for the International Hockey Federation (FIH), serving at the Paris Olympic Games.

STIMULANTS AND ADD: FRIEND OR FOE?

Presented by **Merryn Young**,

Report compiled by Anelet James for the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

Stimulants are first-line for ADHD, yet sleep is a frequent pain-point for families and clinicians. In this session, Dr Young asked a deceptively simple question: are stimulants friends or foes when it comes to sleep? Her answer: it's complicated—and individual. The same drug that fragments sleep for one patient may stabilise sleep for another by reducing evening hyperarousal and bedtime resistance. Clinicians therefore need a sleep-first baseline, thoughtful titration, and close follow-up to see how a given patient responds.

WHAT THE LITERATURE ACTUALLY SAYS (IN BRIEF)

Children & early adolescents. Multiple trials and meta-analyses show higher rates of treatment-emergent insomnia and shorter sleep with stimulants, especially early in treatment and with more frequent daily dosing (e.g., three times daily immediate-release). Actigraphy/PSG studies echo longer sleep-onset latency and reduced total sleep time in pediatric samples.

Adults. In contrast, several adult studies (including small open-label trials and later controlled work) report improved sleep efficiency and subjective sleep quality on methylphenidate in some patients—likely via reduced evening restlessness and better daytime regulation (so fatigue accrues at the right time). Not all adults benefit, but the direction of effect is more mixed than in child samples.

Adolescents (“the missing middle”). Data are mixed. Many teens show delayed sleep phase and variable schedules; some need longer daytime coverage for study/driving/sport, yet that same coverage can press into bedtime. Expect heterogeneity: some will worsen, some won't change, and a minority will improve with smoother late-day control from an extended-release formulation.

WHY EFFECTS DIVERGE (FRIEND AND FOE)

Dr Young outlined plausible mechanisms: (1) **Direct arousal** via catecholamines can delay sleep; (2) **Circadian effects** (phase shifting) may push sleep later in some individuals; (3) **Rebound hyperarousal** as doses wear off can sabotage bedtime; yet (4) **Paradoxical calming** in those with prominent hyperactivity/impulsivity can **reduce bedtime resistance**, improve sleep efficiency, and regularise the 24-hour rhythm. The “friend or

foe” balance therefore depends on baseline phenotype, comorbid anxiety/sleep disorders, dose timing, formulation, and **individual pharmacokinetics** (slow vs fast metabolisers).

PRACTICAL STRATEGIES FROM CLINIC

1. **Start with a sleep baseline.** Document bedtime, sleep-onset latency, night awakenings, wake time, naps, caffeine, snoring/legs, and daytime sleepiness before initiating or changing medication. A simple one-week sleep diary is enough.
2. **Dose early and match coverage to risk.** For younger children, start doses as early as feasible; in teens who study or drive later, consider once-daily extended-release to avoid multiple evening top-ups (which carry greater insomnia risk).
3. **Expect a two-week window.** Insomnia, when it appears, is often worst in the first 1–2 weeks and may attenuate thereafter; schedule a check-in at ~day 10–14.
4. **Watch the “Saturday shift.”** Irregular weekend dosing or late first doses in teens can push sleep later that night; align weekend timing with school-day timing when possible.
5. **Optimise formulation, then layer behavioural sleep care.** Combine medication with sleep-hygiene and (where insomnia persists) CBT-I principles (stimulus control, fixed wake time, wind-down routine). The MTA lesson holds: combined care outperforms either alone for function (including sleep).
6. **Screen for comorbid sleep disorders.** Delayed sleep-wake phase, restless legs/low ferritin, and OSA will blunt medication gains and need direct treatment.

WEBSITES AND QUICK RESOURCES MENTIONED / ALIGNED WITH THE TALK

- **Sleep diaries & CBT-I basics** (patient handouts; clinic-agnostic resources).
- **Local ADHD and sleep-health professional societies** for referral pathways and clinician education (e.g., national sleep societies; ADHD professional groups).

KEY TAKEAWAYS

- Stimulants can disrupt or stabilise sleep—often dose-, timing-, and phenotype-dependent.
- In children, expect more insomnia risk; in adults, a subset reports better sleep with stimulants. Teens are mixed.
- Write down a sleep baseline, adjust formulation/timing, combine with behavioural strategies, and review within two weeks.
- Treat co-existing sleep disorders to unlock ADHD gains.

References available on request

Dr Merryn Young obtained her medical degree at the University of Pretoria. After internship and community service in rural Limpopo, she worked as a Medical Officer in psychiatry and paediatrics in Limpopo and Johannesburg. She completed specialist training in Psychiatry (University of Cape Town) and a Fellowship in Child & Adolescent Psychiatry at Red Cross War Memorial Children's Hospital, Cape Town. She is in private practice in Cape Town, collaborates widely, and serves as Convenor for the SASOP Child and Adolescent Psychiatry Special Interest Group (CAPSIG).

RETHINKING ADHD FROM THE BELLY UP: WHAT THE GUT–BRAIN AXIS ADDS

Presented by Nerica Ramsundhar

Original session title: “Gut-brain axis in ADHD”

Report compiled by Anelet James for the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

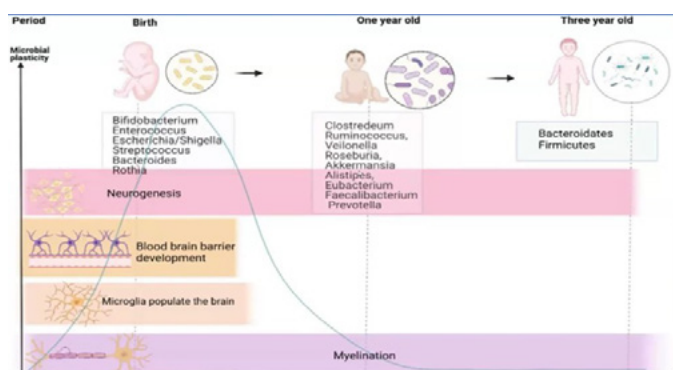
Dr Ramsundhar invited clinicians to shift from a purely brain-centric view to a multi-system model where the gut microbiome, immune system, endocrine signalling, and neural pathways co-produce neurodevelopmental outcomes. The question is not whether the gut influences ADHD—it does—but how and when that influence is strongest, and which interventions are justified now versus those that need better trials.

WHAT WE MEAN BY “GUT–BRAIN AXIS”

The gut–brain axis is a bi-directional communication network linking gut microbes with the brain via neural (vagus, enteric), immune (cytokine and microglial signalling), and endocrine (HPA axis, enteroendocrine peptides) routes. In health (eubiosis), a diverse microbial ecosystem supports barrier integrity, metabolite production (notably short-chain fatty acids), vitamin biosynthesis, and balanced immune tone. In dysbiosis, diversity drops, barrier function loosens, inflammatory signalling rises, and neurotransmitter balance may shift—conditions that plausibly shape ADHD phenotypes.

THE “FIRST 1 000 DAYS”: A SHARED CRITICAL WINDOW

Microbial colonisation accelerates from birth and tends toward an adult-like profile by ~36 months—the same period the brain

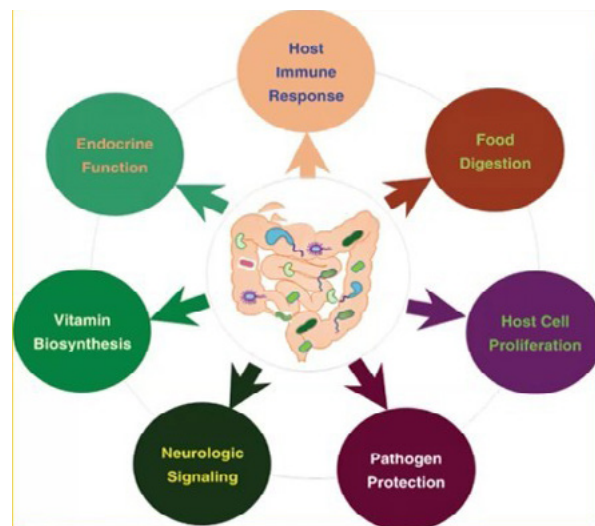


Early-life microbiome and neurodevelopment timeline: from birth to age three, microbial plasticity declines as the microbiota matures in parallel with neurogenesis, BBB development, microglial colonisation, and myelination.

undergoes explosive growth and circuit refinement. Perinatal factors that push toward dysbiosis (maternal inflammation, stress, metabolic disease; caesarean delivery; low-fiber diet; early antibiotics; reduced breastfeeding) co-occur with sensitive windows for BBB maturation, myelination, and neuroimmune training—raising the plausibility that early microbial signals can nudge developmental trajectories toward or away from ADHD risk.

MECHANISMS THAT MAKE BIOLOGICAL SENSE

- Immune: Microbes calibrate innate/adaptive responses, maintain epithelial tight junctions, and generate SCFAs that are anti-inflammatory and trophic for the gut lining.
- Endocrine/metabolic: Fermentation of fiber → SCFAs; bile-acid recycling; B-vitamin and vitamin K synthesis.
- Neural: Microbes produce or modulate neurotransmitters (serotonin, GABA, dopamine) and signal via the vagus; animal work shows microbiota can alter white/grey matter integrity and functional connectivity in regions important for attention and reward.



Core functions of the gut microbiome relevant to brain development: immune training, digestion, host-cell proliferation, pathogen protection, neurologic signalling, vitamin biosynthesis, and endocrine regulation.

WHAT THE HUMAN STUDIES SUGGEST (AND WHAT THEY DON'T)

- Composition differences: Case-control and cohort studies report distinct microbiota profiles in ADHD vs controls (e.g., altered *Bifidobacterium*, *Ruminococcus*, *Dialister*, *Faecalibacterium*), but directionality varies across studies and populations. A 2021 systematic review mapped ~49 taxa associated with ADHD; a large US biobank analysis reported >100 taxa correlating with diagnosis or symptoms—underscoring heterogeneity rather than a single “ADHD microbiome.”
- Medication interactions: Some pediatric data suggest methylphenidate may reduce microbial diversity and lower SCFAs, whereas treatment-naïve ADHD shows different shifts; small samples caution against over-interpretation.
- Animal causality signals: Germ-free mice colonised with microbiota from individuals with ADHD

show structural and behavioural changes consistent with attentional dysregulation—provocative but not definitive for humans.

DIET PATTERNS, NUTRIENTS, AND COLOURS: WHAT TO ADVISE NOW

Observational syntheses support a healthy dietary pattern (vegetable- and fiber-rich, minimally processed) as protective for ADHD-related outcomes, while “Western” patterns associate with higher risk. Evidence for routine zinc/iron supplements is inconsistent unless deficiency is present; vitamin D repletion helps when low. Historical and contemporary trials indicate some children are sensitive to artificial colours/preservatives (e.g., sodium benzoate), justifying a pragmatic reduction strategy within balanced diet counselling.

PREBIOTICS, PROBIOTICS, SYNBIOTICS—AND A WORD ON FMT

- Adjunctive potential: Small RCTs and pilots (e.g., LGG, *Bifidobacterium* strains) report modest improvements in behaviour, anxiety, or quality of life, and reduced inflammation / increased SCFAs with some synbiotic protocols—especially as adjuncts to standard ADHD care. Effects are strain-specific, dose- and duration-dependent, and not uniformly replicated.
- Prevention signals: One infant study suggested early LGG exposure might lower later neuropsychiatric diagnoses; findings need replication and clearer phenotyping.
- Safety & selection: Avoid probiotics in immunocompromised or critically ill patients; match strains to targets; set expectations for trial periods (e.g., 8–12 weeks).
- FMT: Fascinating case reports exist (e.g., ADHD symptom relief when FMT given for recurrent *C. difficile*), but current evidence is insufficient to recommend FMT in ADHD outside research, given donor selection, safety, and durability questions.

CLINICAL TRANSLATION

1. Ask about diet + gut in every ADHD consult (fibre, plants, fermented foods; antibiotic history; early life factors).
2. Consider a food-colour/preservative reduction trial within a whole-diet approach.
3. Where families are keen, a strain-specific probiotic (e.g., LGG or selected *Bifidobacterium*) may be trialled as an adjunct for 8–12 weeks, with prebiotic fibre to support SCFAs—document baseline and outcomes.
4. Treat documented deficiencies (vitamin D, iron, zinc) per guidelines; avoid blanket supplementation.
5. Emphasise that microbiome care does not replace core ADHD treatments; it may sharpen response, mood regulation, and gut comfort for some individuals.

USEFUL WEBSITES MENTIONED / ALIGNED WITH THE SESSION

- International Child Neurology Association (ICNA): clinician education and guidelines.
- Paediatric Neurology and Development Association of South Africa (PaNDA): local professional network/resources.

- ADHD Europe / national ADHD organisations: family-friendly summaries on diet and sleep.

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Nerica Ramsundhar is a Neurodevelopmental Paediatrician at St Augustine's Hospital (Durban) and the first clinically trained, HPCSA-certified developmental paediatrician in KwaZulu-Natal. Her practice uses a trans-disciplinary model for conditions that affect developmental trajectories and behaviour, with special interests in ADHD and autism. She is affiliated with ICNA, PaNDA, SAMLA, and previously served on the KZN Cerebral Palsy Association executive. She presents nationally and internationally and is an advocate for neurodiversity education.

CBT-I IN ADHD

Presented by Melissa Milanak

Report compiled by Anelet James for the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

Cognitive behavioural therapy for insomnia (CBT-I) is one of the most rigorously tested behavioural treatments in mental health, with durable benefits for both primary and comorbid insomnia. Yet most trials were done in neurotypical samples. Prof Milanak synthesised what we know—and what we still need—about adapting CBT-I for people with ADHD across the lifespan, highlighting components that reliably move sleep outcomes while respecting attentional capacity, motivation, and executive-function limits.

THE CBT-I CORE—AND WHAT CHANGES FOR ADHD

Classic CBT-I combines: (1) sleep education, (2) stimulus control (bed = sleep), (3) sleep restriction/consolidation (tight sleep window → expand with efficiency), (4) light timing (morning bright light; evening light reduction), (5) relaxation skills, and (6) cognitive therapy (beliefs about sleep, worry time), plus relapse prevention. Milanak's key message: the *ingredients* stay the same, but dose, pacing, and supports must flex for ADHD—shorter sessions, concrete tools, and quick accountability touches boost adherence and outcomes.

WHAT THE EVIDENCE SHOWS SO FAR

- **Children:** Brief, individualized, behaviorally focused sleep interventions can help in the short term, but gains fade without follow-up; parent buy-in is essential. (Hiscock et al., 2019 cluster RCT).
- **Across neurodivergent populations:** Systematic reviews note benefits, but effect sizes are smaller unless protocols are adapted (shorter visits, more contacts, cognitive components, light and schedule work). (Cullen et al., 2024).
- **Adults with ADHD/ASD:** Group or blended CBT-I (sleep scheduling + light + relaxation + cognitive work) improves insomnia severity; telephone check-ins increase completion and satisfaction. (e.g., Ishii et al., 2022; Jernelöv et al., 2019).

PRACTICAL PATHWAY (ADHD-ADAPTED CBT-I)

1. **Start with one fixed wake time (7 days/week).** Keep the plan visually externalised (fridge card, phone lock-screen).
2. **Sleep window = current total sleep (not time in bed).** Expand only after ≥85–90% efficiency for a week.
3. **Stimulus control with “two rules”:** If not asleep in ~20–30 min (no clock-watching), *get up, low light, quiet task*; return when sleepy. Bed is for sleep (and intimacy) only.
4. **Light is medicine:** Morning bright light; evening screen/light reduction. Use audio-only aids at night (sound, not screens).
5. **Cognitive work matters in ADHD:** Schedule a 10–15-min worry time/brain-dump before bed away from the bedroom; capture to-dos (right side) and thoughts (left side). This reduces rumination and supports stimulus control.
6. **Accountability beats willpower:** Build brief booster contacts (SMS/phone) between sessions and at 2, 6, and 12 weeks to maintain gains.
7. **Parents as co-therapists (for youth):** teach them the why of each step; use rewards to reinforce on-time lights-out and morning activation.
8. **Wearables with care:** Use “do-not-disturb” devices or diary + periodic actigraphy; avoid screen-based trackers that cue checking at night.

WHAT TO WATCH FOR (AND HOW TO FIX IT)

- **“I can’t fall asleep earlier.”** That’s OK—don’t force bedtime; pull mornings earlier and protect light timing.
- **“Weekends wreck me.”** Keep wake time steady; shift leisure to afternoon/evening, not morning lie-ins.
- **“I failed the schedule.”** Expect lapses; plan relapse-prevention (travel, exams, sports seasons) and rehearse the restart steps.
- **Medication interfaces:** Adjust stimulant formulation/last dose; align non-stimulant timing; avoid late caffeine; coordinate with prescribers.

FREE/LOW-COST TRAINING & TOOLS SHE HIGHLIGHTED

- **CBTIweb** — Intro modules and certification pathways; practical manuals and forms. (Access via congress follow-up from Prof Milanak; general site: cbtiweb.org).
- **CBT-I handouts/sleep diary templates** — included in her slide appendix and available on request from organisers.

KEY TAKEAWAYS

- CBT-I works for insomnia across the lifespan and shows emerging benefits for ADHD when adapted.
- The big movers in ADHD: sleep scheduling/consolidation, light timing, stimulus control—plus cognitive restructuring to reduce anticipatory anxiety and support adherence.
- Shorter sessions + booster contacts outperform “one-and-done.” Build accountability into the protocol.

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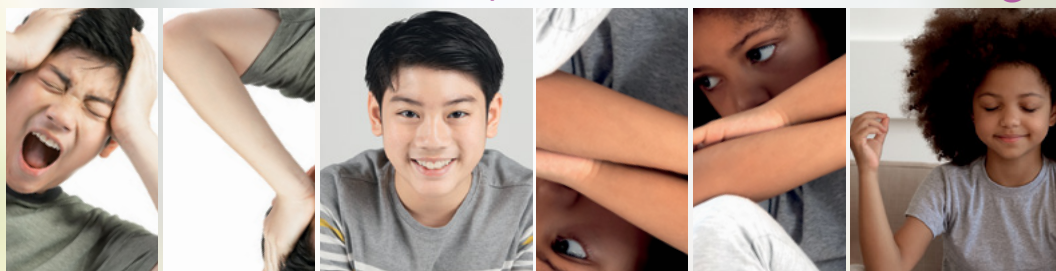
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THIS INFORMATION IS INTENDED FOR HEALTHCARE PROFESSIONALS ONLY.

FEEDING FOCUS, NOT FRICTION: MANAGING PICKY EATING AND POOR APPETITE IN ADHD

Presented by Ms Anél Kirsten

Original session title: "Picky eaters and poor appetite in ADHD"

Report compiled by Anelet James for the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

Selective eating and low appetite are common in ADHD and can erode nutrition, growth, sleep, and family life. Kirsten framed the problem simply: ADHD makes healthy eating harder—inattention drives missed meals and disorganisation; impulsivity amplifies snacking and sugary drinks; sensory sensitivities narrow the safe-foods list; stimulant medication suppresses appetite at key times; and GI discomfort feeds avoidance. Without a plan, the result is a restricted diet, micronutrient shortfalls (iron, zinc, vitamin D, B-vitamins, omega-3s), and a tug-of-war at the dinner table.

WHAT THE EVIDENCE (AND CLINIC) SHOW

Across observational and case-control studies cited by Kirsten, children with ADHD consume less fruit/veg and protein and more free sugars and ultra-processed foods, with downstream risks for lower B-vitamins, zinc, calcium and poorer diet quality overall. Hyperactive/impulsive profiles skew toward grazing and sugary beverages; inattentive profiles toward skipped meals and low fibre. In practice, growth deviation shows up before anaemia—another reason to monitor early.

MECHANISMS THAT MAKE PICKY EATING "STICK" IN ADHD

- **Sensory sensitivities:** textures, smells, colours, temperature—vegetables and mixed-texture foods are frequent casualties.
- **Appetite suppression from stimulants:** low daytime drive to eat, followed by late-day rebound hunger and low-quality snacking.

- **Executive-function load:** planning, sequencing, time-blindness → irregular meals; chaotic mealtimes undermine satiety cues.
- **GI discomfort & fibre gaps:** constipation and dyspepsia reinforce avoidance of "stringy/chewy/crunchy" foods.

ASSESS FIRST: GROWTH, DIET PATTERN, AND MEALTIME ECOLOGY

Kirsten's intake covers growth monitoring (weight/height/BMI centiles; optional body-composition measures), a 24-hour recall plus food-list count (number of accepted foods), sensory triggers/preferences, feeding dynamics (who dishes, presentation, competition/distraction), and medication timing to map eating windows. Red flags for dietetic referral include <10 accepted foods, growth faltering, recurrent GI symptoms, or persistent meal conflict.

STABILISE THE PHYSIOLOGY: BLOOD-GLUCOSE, FIBRE, AND GI COMFORT

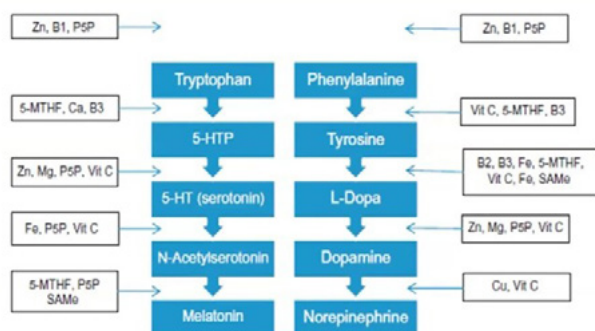
ADHD brains are vulnerable to glucose roller-coasters. Kirsten recommends a regular meal schedule, low-GI carbohydrates paired with protein and fibre, and pruning added sugars (showing parents the teaspoons in common drinks is persuasive). For fibre, she uses the age + 5 g/day rule of thumb and reminds families that soluble, insoluble, and particulate fibres play different roles; where intake is too low, neutral-tasting fibre supplements (dissolvable powders, ready-to-drink gels) can bridge the gap.

NUTRIENTS THAT MATTER (AND HOW TO APPROACH THEM)

Kirsten screens or coordinates testing for iron, vitamin D, B-vitamins (with homocysteine as a functional marker), zinc, magnesium, and omega-3s when clinically indicated. Food first remains the aim, but she is realistic: oily fish and seed intake are often low and sensory-averse; supplementation is reasonable when diet change is unlikely.



Neurotransmitters Needs Nutrients



"Neurotransmitters need nutrients": amino-acid precursors and key enzymatic cofactors involved in serotonin, dopamine, norepinephrine and melatonin synthesis (adapted from Duff, 2013).

Omega-3s. Target EPA+DHA $\geq 1\,000$ mg/day (many need higher); teach families to read labels (add EPA + DHA, not total fish oil). Manage adherence (capsule count, fishy burps) with concentrated formulations or liquids.

B-vitamins. Where indicated, prefer methylated forms (e.g., 5-MTHF) and replete B12 before folate.

Magnesium. Match form to goal (e.g., glycinate for tolerability; citrate if constipation co-exists).

Iron. Coordinate with the clinician; treat deficiency to target (see Rudy Bosch session).

TURNING PICKY EATING INTO PROGRESSIVE EATING: KIRSTEN'S PLAYBOOK

- **Reframe success.** Count exposures and tolerances (food allowed on the plate, touched, licked) — not just swallowed bites.
- **Lower pressure; raise predictability.** Family-style serving; child dishes a safe food every meal; calm seating (next to an adult, away from sibling conflict).
- **Leverage strengths.** Start with accepted foods and nudge variations (new brand/shape/crumb, triangle not square sandwiches).
- **Work with medication.** Front-load breakfast (protein-rich) before the first dose; stock nutrient-dense afternoon snacks for the "hungry window"; consider a second mini-meal before bed if growth is a concern.
- **Schedule snacks.** ADHD kids are sprinters; frequent, planned snacks beat unstructured grazing.
- **Treat malnutrition actively.** Use oral nutrition supplements (ready-to-drink shakes or powders) when intake and growth lag; review progress every 4–8 weeks.

COMMUNICATION CUES FOR PARENTS

Avoid dessert-as-reward traps that label foods "good/bad"; model tasting; involve children in shopping and simple prep to build ownership; and keep a one-page weekly view of intake—don't panic about a single bad day.

KEY TAKEAWAYS

- ADHD-related sensory, appetite, and executive-function hurdles make healthy eating harder—but modifiable.
- Anchor care in growth monitoring, meal scheduling, and protein + low-GI + fibre pairing.
- Screen for and treat nutrient deficiencies that meaningfully affect attention, mood, and sleep.
- Progress beats perfection: measure exposures, not battles won at the table.

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Anél Kirsten is the founder of Paarl Dietitians and a Stellenbosch University-trained dietitian (2002) with a Masters degree in Nutrition (2011) on childhood obesity. She practised in the UK as a Specialist Paediatric Dietitian (allergy, cystic fibrosis, diabetes, feeding clinics) and in adult settings (ICU, stroke rehab). Back in South Africa since 2008, she works across paediatric and adult nutrition, with special interest in insulin resistance/metabolic syndrome, eating-disorder teams, women's health, and nutrigenomics (foundations and Manuka courses). She is a regular public and professional speaker and media contributor.

NON-PHARMACOLOGICAL TREATMENT OF ADHD IN CHILDREN AND ADOLESCENTS: A COMPREHENSIVE REVIEW OF THE EVIDENCE

Presented by Margaret H. Sibley

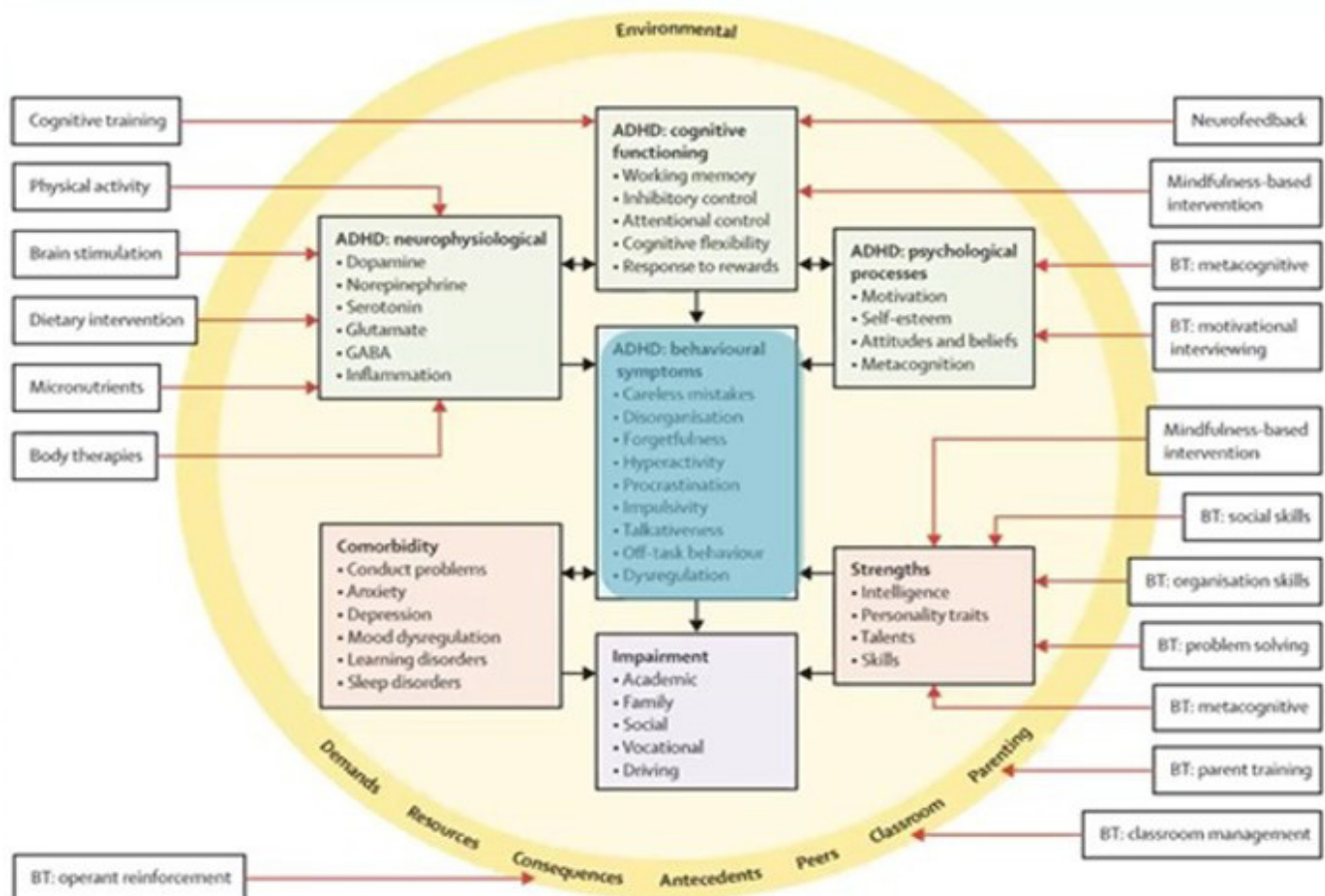
Report compiled by Anelet James for the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

In an era where non-pharmacological treatments for ADHD are increasingly marketed to families and clinicians alike, distinguishing evidence-based interventions from ineffective alternatives has become essential. Professor Margaret H. Sibley presented a comprehensive systematic review examining the current state of evidence for non-pharmacological treatments in children and adolescents with ADHD. Drawing from research published in *The Lancet Child & Adolescent Health*, this presentation synthesised findings from 10 separate systematic reviews covering interventions ranging from behaviour therapy to brain stimulation. The review provides clinicians with a rigorous framework for recommending treatments based on evidence strength, helping practitioners navigate an increasingly complex therapeutic landscape.

[Access the complete published review in The Lancet Child & Adolescent Health.](#)

UNDERSTANDING WHAT WE ARE TRYING TO CHANGE

Before evaluating individual treatments, Professor Sibley emphasised the importance of understanding the multiple levels at which ADHD affects an individual's functioning. This conceptual framework is crucial because different interventions target different aspects of ADHD, and therefore we should expect them to produce different types of change. She presented a comprehensive model



ADHD: Heterogeneous contributors and opportunities for intervention. This model illustrates how different non-pharmacological treatments target different levels of ADHD functioning, from neurophysiological processes to environmental modifications. *pamine, norepinephrine and melatonin synthesis (adapted from Duff, 2013).*

illustrating how ADHD manifests across neurophysiological, cognitive, psychological, behavioural, and environmental domains, with each level representing a potential target for intervention.

At the neurophysiological level, ADHD involves differences in neurotransmitter systems including dopamine, norepinephrine, serotonin, glutamate, and GABA, as well as inflammation. Stimulant medication classically intervenes at this level, but physical activity, brain stimulation, dietary interventions, micronutrients, and body therapies also attempt to modify neurobiological processes.

Moving beyond neurochemistry, cognitive functioning represents another intervention target. Children and adolescents with ADHD commonly experience difficulties with working memory, inhibitory control, attentional control, cognitive flexibility, and response to rewards. Interventions such as neurofeedback, mindfulness-based interventions, and cognitive training programs (including digital therapeutics) attempt to modify these cognitive processes directly.

The behavioural symptoms listed in diagnostic manuals—careless mistakes, disorganisation, forgetfulness, hyperactivity, procrastination, impulsivity, talkativeness, off-task behaviour, and dysregulation—represent the observable manifestations of ADHD. These symptoms directly impact impairment across academic, family, social, vocational, and driving domains. Traditional behaviour therapy techniques intervene most directly at this level.

Finally, environmental factors play a crucial role. Behaviour therapy approaches often focus on modifying the environment by changing reward structures, teaching adults in the child's life how to interact more effectively, and making strategic decisions about school settings, extracurricular activities, and peer groups. The environmental modifications aim to bring out the best in the child's behaviour by optimising their surroundings.

Professor Sibley emphasised that understanding these multiple levels helps clinicians appreciate why different interventions produce different effects. While all treatments ultimately aim to reduce behavioural symptoms and impairment, they do so through distinct mechanisms. A treatment that improves cognitive flexibility may have different effects than one that enhances parenting skills, even if both ultimately benefit the child.

REVIEW METHODOLOGY: A RIGOROUS APPROACH

The review was conducted by a large collaborative team using systematic methodology to ensure rigour and comprehensiveness. Ten separate systematic reviews were conducted in PubMed, each focusing on a distinct intervention category. The PICO framework guided the search strategy: Population included children and adolescents with ADHD, Intervention encompassed the 10 treatment categories, Comparison groups varied from wait-list controls to placebo conditions to active treatment comparisons, and Outcomes extended beyond core ADHD symptoms to include impairment and mechanism-related measures.

Only randomised controlled trials (RCTs) with appropriate statistical analyses were included, representing the gold standard for evaluating treatment efficacy. The 10 intervention categories examined were behaviour therapy, cognitive training,

neurofeedback, body therapies, nutrient supplementation (subdivided by type), dietary interventions, mindfulness-based interventions, physical activity, and brain stimulation.

A particularly important methodological consideration that Professor Sibley highlighted was the issue of blinding in non-pharmacological trials. While ingested treatments can be easily blinded using placebo pills, many non-pharmacological interventions cannot be masked from participants. It is impossible to hide from someone that they have completed a behaviour therapy programme or received a massage. Creating convincing sham treatments for these interventions poses significant challenges.

This limitation creates tension in the field. Some researchers argue that treatments showing effects only in unblinded trials represent weak evidence. Others counter that dismissing potentially effective treatments simply because they cannot be blinded would be a disservice to patients. Professor Sibley encouraged clinicians to make their own informed judgments about how much weight to give evidence from unblinded trials, acknowledging that there is no simple solution to this methodological challenge.

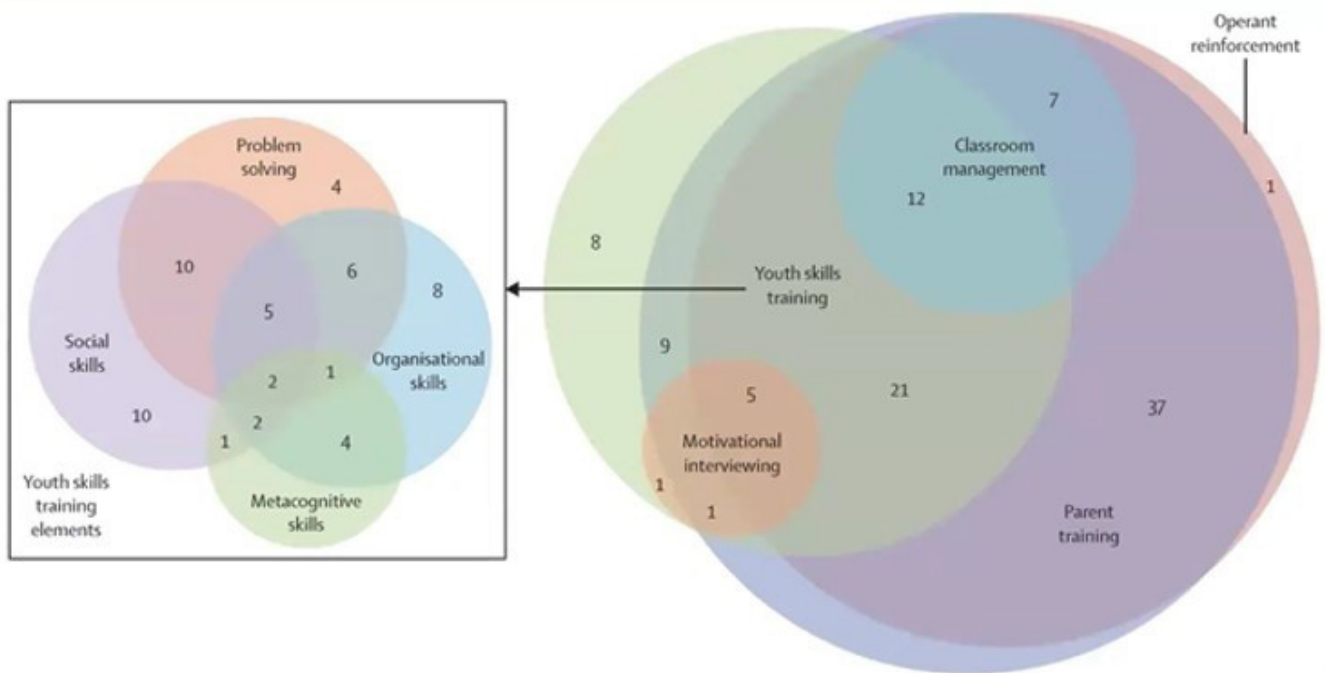
BEHAVIOUR THERAPY: THE PRIMARY EVIDENCE-BASED TREATMENT

With 83 randomised controlled trials identified, behaviour therapy represents by far the largest and most robust evidence base among non-pharmacological treatments for ADHD in youth. Professor Sibley recommended behaviour therapy (also called cognitive-behaviour therapy, as the distinction is somewhat artificial) as the primary non-pharmacological treatment with the strongest evidence base.

Safety has not been a major concern in the behaviour therapy literature. While safety measures are often not formally assessed (a limitation that should be addressed), no significant safety concerns have emerged. Professor Sibley acknowledged that therapy can involve interpersonal challenges and personal crises before improvement occurs, but these do not constitute health safety concerns per se.

One striking finding was the enormous heterogeneity within behaviour therapy interventions. These programmes vary dramatically in the skills taught, treatment duration (from brief to lengthy), provider type, setting, participant focus (parents only, children only, or combined), and session frequency (from daily to monthly). Given this variability, expecting uniform efficacy across all behaviour therapy programmes would be unrealistic.

Analysis of the treatment components revealed that almost all behaviour therapy programmes incorporate parent training and operant reinforcement (changing environmental consequences and rewards to incentivise desired behaviours). Fewer programmes include direct youth skills training, where children are taught specific



Venn diagrams representing components of behaviour therapy interventions. Operant reinforcement was present in almost all behaviour therapy packages (90.2%), as was parent skills training (82.4%). Youth (55.9%) and teacher (18.6%) skills training were less common. Youth skills training included social (30.4%), problem-solving (30.4%), organisation (28.4%), and metacognitive (13.7%) skills. Motivational interviewing, an engagement strategy, was bundled into 6.9% of packages. On average, treatments possessed approximately three components. Numbers indicate the number of intervention packages that have that component.

skills. Classroom management components, when present, are almost always part of multimodal treatments that also involve parents and youth. Motivational interviewing, which helps empower individuals with neurodevelopmental concerns, is increasingly incorporated into these programmes.

Youth skills training itself encompasses diverse elements: some programmes focus on organisational skills, others on problem-solving, social skills, or metacognitive strategies. This further underscores that behaviour therapy is not a monolithic intervention but rather a family of related approaches. Professor Sibley emphasised that best practice involves engaging all relevant stakeholders (parents, youth, teachers) in age-appropriate ways, with older children taking increasingly active roles in their own treatment.

Efficacy findings showed mixed results for core ADHD symptoms but more consistent effects on impairment. Most studies in this literature prioritise impairment reduction (academic performance, family relationships) rather than symptom reduction as primary outcomes. When families learn coping skills, the underlying ADHD has not biologically improved, but the family now knows how to manage it more effectively. Sometimes this improved management circles back to reduce symptom severity; other times, symptoms remain stable while functional outcomes improve.

Importantly, behaviour therapy does not impact performance on cognitive tasks, confirming that these interventions do not change the underlying cognitive architecture. Professor Sibley used the analogy of driving: behaviour therapy helps people become better drivers of their existing vehicle, rather than changing the vehicle itself.

Promising evidence is emerging for long-term effects of adolescent behaviour therapy, with some studies showing maintained

gains up to four years post-treatment. This may occur because teenagers retain and continue applying the skills they learn, unlike younger children who may be more dependent on adult scaffolding.

Moderator analyses identified factors associated with better treatment response: high parental involvement, socioeconomic advantages, female gender, concurrent medication use, older age, predominantly inattentive presentation, comorbid anxiety (as anxious children tend to care about doing well and engaging in therapy homework), and therapist quality. These moderators can guide clinicians in predicting which families may benefit most from behaviour therapy approaches.

SECONDARY TREATMENTS WITH EMERGING EVIDENCE

Mindfulness-Based Interventions

Based on nine randomised controlled trials, mindfulness-based interventions were recommended as a secondary non-pharmacological treatment. Like behaviour therapy, there is considerable heterogeneity in these programmes, with some targeting parents and others targeting children directly. These studies cannot be blinded, as participants know they are learning mindfulness techniques.

The strongest evidence emerged for teaching parents mindfulness for themselves. When parents develop their own mindfulness and self-regulation skills, their parenting behaviours improve. This improvement in parental regulation can have downstream effects on children's ADHD, as a better-regulated parent is more capable of helping their child regulate. The evidence for direct effects on children's ADHD symptoms is mixed but present in

some studies. Overall, Professor Sibley characterised the evidence as consistent but modest, warranting recommendation as a secondary rather than primary treatment.

Nutrient Supplementation

The nutrient supplementation literature spans many different vitamins, minerals, and combinations, with varying levels of evidence. Overall, most supplements did not demonstrate efficacy in blinded trials. However, two exceptions warrant consideration as secondary treatments: polyunsaturated fatty acids (omega-3 and omega-6 fatty acids) and multivitamin formulations that often include these fatty acids alongside other components.

These supplements have shown some consistent effects, though the effects are small—notably smaller than medication effects. A critical consideration is that benefits typically only emerge after at least three months of consistent supplementation, requiring patience and adherence from families. Despite the modest effect sizes, the replication of findings across multiple studies provides some confidence that these supplements may offer benefits worth considering when primary treatments are insufficient or unsuitable.

TREATMENTS WITH LIMITED OR NO EVIDENCE

Cognitive Training

Cognitive training interventions, particularly digital therapeutics that have received substantial marketing attention, showed no evidence of impacting ADHD symptoms in blinded trials (approximately 40 RCTs). These treatments are generally safe, though some vision strain and nausea have been reported with certain digital modalities.

Interestingly, these interventions do improve performance on the specific cognitive tasks they train. For example, working memory training improves working memory performance. However, these cognitive improvements do not translate into reductions in ADHD symptoms. In unblinded studies, small effects on symptoms sometimes emerge, likely representing non-specific placebo effects. Professor Sibley's recommendation was to tolerate families who wish to try cognitive training (as it is not harmful) while being transparent that research does not support ADHD symptom improvement, and noting that these programmes are often expensive.

Neurofeedback

With approximately 27 RCTs, neurofeedback has been well-studied. The advantage of neurofeedback is that sham conditions can be created (participants cannot distinguish between real and fake neurofeedback), allowing for proper blinding. When examining only sham-controlled trials, no effects on ADHD symptoms or impairment emerge. However, unblinded trials do show effects, again suggesting a non-specific or placebo mechanism rather than a true treatment effect.

One potentially useful finding is that combining neurofeedback with medication may allow for lower medication doses. This could be relevant for families seeking to minimise medication exposure while maintaining symptom control. However, given the costs

typically associated with neurofeedback and the lack of specific efficacy, Professor Sibley did not recommend it as a first-line or even secondary treatment.

Physical Activity

Ten randomised controlled trials examined physical activity interventions. While physical activity is unquestionably positive for general health and should be encouraged for all children, the research does not yet support specific effects on ADHD symptoms. Some immediate, acute effects on cognition have been demonstrated (improved cognitive task performance immediately following exercise), but these effects likely apply to all individuals, not just those with ADHD, and they dissipate quickly.

Many individuals with ADHD anecdotally report that exercise helps them manage their symptoms, which Professor Sibley acknowledged as valid. However, these benefits are not yet consistently demonstrated in the research literature. She characterised physical activity as positive and promising, deserving of further investigation, but not yet evidence-based for ADHD specifically.

Dietary Interventions

Only three randomised controlled trials have examined dietary interventions for ADHD, representing a very small and underdeveloped literature. Some preliminary findings exist, but none have been replicated. Dietary changes are generally safe but require monitoring for potential malnutrition, and the burden of implementing major dietary changes on families must be considered. Professor Sibley concluded that evidence is currently insufficient to recommend dietary interventions for ADHD symptom reduction.

Body Therapies

Body therapies (acupuncture, vestibular stimulation, massage) have been studied in only five RCTs, with inconclusive results. These approaches may hold particular value for families from cultural backgrounds where such therapies are integral to health practices, particularly within Chinese medicine traditions. Professor Sibley suggested tolerating their use for cultural reasons while being honest that current research does not demonstrate ADHD symptom improvement. More research in this area would be valuable.

Brain Stimulation

Four RCTs have examined brain stimulation approaches, including transcranial direct current stimulation and trigeminal nerve stimulation. These approaches appear safe, but most trials have shown no effects. One promising first trial examined the Monarch system (trigeminal nerve stimulation) and found effects on ADHD symptoms (though not impairment). This finding awaits replication. Professor Sibley identified this as an interesting area to monitor but emphasised that it remains very preliminary.

CLINICAL RECOMMENDATIONS FOR PRACTICE

Professor Sibley concluded with practical recommendations for clinicians working with children and adolescents with ADHD. First, she emphasised the importance of having two-way conversations with patients when considering treatment options, rather than imposing unilateral decisions. This collaborative approach respects family preferences while ensuring informed decision-making.

Clinicians should caution families against forgoing effective treatments in favour of unproven alternatives. While respecting family autonomy, ensuring that families understand the evidence hierarchy helps them make informed choices. When resources permit, combined treatment (pharmacological plus multi-component behaviour therapy) likely maximises effectiveness.

Secondary treatments (mindfulness-based interventions, omega-3 fatty acids, multinutrients) should be considered when primary treatments are insufficient, unsuitable, or when families seek additional support. The growing movement toward incorporating engagement-focused components, particularly motivational interviewing, into treatment delivery holds promise for improving adherence—a significant challenge for individuals with ADHD.

Personalised treatment selection is increasingly possible based on patient characteristics. Moderator research allows clinicians to consider individual factors (age, presentation type, comorbidities, family resources) when recommending treatments. Finally, when evidence is inconsistent or insufficient for a particular intervention, clinicians can tolerate its use if families insist, given that all reviewed treatments appear safe. However, recommending expensive interventions with low likelihood of benefit raises ethical concerns about resource allocation.

Professor Sibley encouraged clinicians to familiarise themselves with what non-pharmacological treatments are available in their communities and their associated costs. This knowledge equips practitioners to have informed conversations with families about interventions they may be considering or that have been marketed to them.

CONCLUSION

Professor Sibley's comprehensive review provides a much-needed evidence-based framework for evaluating non-pharmacological treatments for ADHD in children and adolescents. Behaviour therapy emerges as the clear primary recommendation, supported by 83 randomised controlled trials demonstrating effects on impairment and functional outcomes. While these studies cannot be fully blinded, the consistency and magnitude of findings across diverse samples and treatment variations provide compelling evidence for clinical utility.

Mindfulness-based interventions, omega-3 fatty acids, and multinutrient supplements represent secondary options with more modest evidence, appropriate for consideration when primary treatments are insufficient or unsuitable. The remainder of non-pharmacological approaches—cognitive training, neurofeedback, dietary interventions, body therapies, physical activity, and brain stimulation—lack sufficient evidence for routine recommendation, though they can be tolerated when families have strong preferences.

The review highlights the importance of understanding that different interventions target different aspects of ADHD functioning. Rather than expecting a single treatment to address all dimensions of ADHD, clinicians should help families understand that treatments work through different mechanisms and may produce different types of benefits. This nuanced perspective allows for more realistic expectations and potentially more strategic combination of interventions.

As the field continues to evolve, with emerging research on personalised treatment selection and engagement-enhancing strategies, clinicians are increasingly equipped to deliver evidence-based, patient-centred care that maximises outcomes for children and adolescents with ADHD.

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Margaret H. Sibley is a Professor of Psychiatry and Behavioral Sciences at the University of Washington School of Medicine and a licensed clinical psychologist at Seattle Children's Hospital. She also holds an adjunct appointment at Florida International University, Herbert Wertheim College of Medicine. Professor Sibley received her PhD in clinical psychology in 2012 from the State University of New York at Buffalo and completed her clinical internship at the Florida International University, Center for Children and Families.

Her research focuses on ADHD diagnosis and treatment in adolescents and young adults, with particular emphasis on building motivation and executive function skills in teenagers and supporting parents of adolescents with ADHD. She has authored or co-authored over 120 scientific papers on ADHD and is the author of "Parent-Teen Therapy for Executive Function Deficits and ADHD: Building Skills and Motivation" (Guilford Press). Her clinical work integrates Motivational Interviewing and organisation skills training through the Supporting Teens' Autonomy Daily (STAND) programme.

Professor Sibley's research has been funded by the National Institute of Mental Health, the Institute of Education Sciences, the Klingenstein Third Generation Foundation, and the American Psychological Foundation. She is Secretary of the American Professional Society for ADHD and Related Disorders (APSARD), serves on the Professional Advisory Board for Children and Adults with Attention Deficit Hyperactivity Disorder (CHADD), and is an Associate Editor of the *Journal of Attention Disorders*. She is a member of the Motivational Interviewing Network of Trainers (MINT) and actively trains

METHYLATION, MTHFR AND ADHD: WHAT GENETIC TESTING CAN (AND CAN'T) TELL YOU

Presented by Monique Zaahl

Original title: "MTHFR gene, ADHD and brain health"

Report compiled by Anelet James for the 6th Southern African Multidisciplinary ADHD Virtual Congress, September 2025.

Prof Zaahl opened with a reminder that ADHD is multifactorial: highly heritable (~70–75%), but shaped by environment—"the genes load the gun; the environment pulls the trigger." In that frame, she located MTHFR not as the ADHD gene, but as a gateway to methylation biology that can influence neurotransmitter synthesis, brain development and treatment response. Her central message: genetic and methylation panels do not diagnose ADHD; used well, they personalise care (e.g., targeted nutrient support, pharmacogenetic guidance) and sometimes reduce trial-and-error.

THE QUICK GENETICS PRIMER (AND WHY MTHFR CAME TO PROMINENCE)

Modern molecular genetics has moved from single-gene disorders to complex traits, from sequence to gene expression and epigenetics (methylation as an on/off dimmer). Next-generation sequencing now reads the exome or genome in days, enabling panels that examine pathways rather than isolated variants. In psychiatry, interest in one-carbon metabolism rose because it sits upstream of many monoamine systems relevant to ADHD.

ONE-CARBON METABOLISM IN PLAIN LANGUAGE

- What MTHFR does. The MTHFR enzyme converts dietary folate/folic acid into 5-methyltetrahydrofolate (5-MTHF), the bioactive form. 5-MTHF donates a methyl group (via the methionine cycle) to make S-adenosyl-methionine (SAME)—the body's universal methyl donor.
- Why methylation matters. Adequate methylation supports gene regulation (epigenetics), neurotransmitter synthesis (dopamine, serotonin, noradrenaline), and detoxification of homocysteine back to methionine (vitamin B12 is the co-factor "bridge").
- When MTHFR underperforms. Common variants—C677T and A1298C—reduce enzyme activity (markedly so when homozygous or compound heterozygous), which may lower 5-MTHF, decrease SAME, and raise homocysteine. Clinically, that can look like low cognitive energy, mood lability, sleep problems, and poorer response to some treatments.

BEYOND A SINGLE GENE: READ THE PATHWAY, NOT JUST MTHFR

Zaahl stressed that inconsistent findings in the literature often reflect narrow testing. The "end-product" the brain needs is a sufficient pool of methyl groups; shortfalls can arise anywhere across the folate-methionine-methylation network (e.g., MTR, MTRR, BHMT, COMT). Practical implication: if testing is considered, panel-based approaches that include MTHFR and partner genes—

and are paired to a clinician-led plan—are more informative than one-off single-variant tests.

WHAT'S EVIDENCE-SUPPORTED NOW (AND WHAT REMAINS EXPLORATORY)

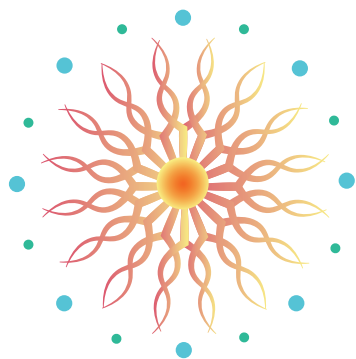
- Use cases with clinical logic. In people with ADHD and suggestive biochemistry (e.g., elevated homocysteine, low B12/folate), or known MTHFR activity-reducing genotypes, a monitored trial of methyl-folate (5-MTHF) and/or B-complex support (especially B12) is reasonable. Some adult series also report benefit from adjunctive SAME, though more ADHD-specific RCTs are needed.
- What testing is—and isn't. Pharmacogenetic and methylation panels are personalised-medicine tools that can guide supplementation or medication choices; they do not diagnose ADHD and should not replace a structured clinical assessment.
- Why studies conflict. Many reports had small samples, focused on single variants, and mixed heterogeneous ADHD phenotypes. The field is shifting toward integrated pathway analyses and bioinformatics that predict functional impact across genes and environments.

PRACTICAL PATHWAY

1. **Start with the basics.** Take a nutrient and family history; measure B12, folate, and homocysteine if accessible. Consider iron studies where indicated (sleep/RLS, fatigue).
2. **Consider targeted testing.** Where families are motivated—or non-response to standard care persists—use a validated panel that includes MTHFR plus key partners (e.g., MTR/MTRR, COMT). Avoid direct-to-consumer reports without clinical interpretation.
3. **Treat the person, not the polymorphism.** If biochemistry and genotype point to reduced methylation, trial 5-MTHF (rather than folic acid), ensure B12 repletion first, and consider SAME as an adjunct in adults. Track outcomes (sleep latency, energy, attention, mood) over 6–8 weeks.
4. **Keep ADHD fundamentals in view.** Genetic support augments core ADHD care (psychoeducation, behavioural scaffolds, sleep, exercise, and evidence-based medication)—it does not replace them.

References available on request

Monique Zaahl is a human geneticist who headed the Department of Human Genetics at Stellenbosch University (2011) and later served as Professor & Executive in the Office of the Rector and Vice-Chancellor. A Commonwealth Split-site Scholar (Oxford University), she has authored 26 peer-reviewed papers, a book chapter and a review, and trained numerous postgraduates. Her awards include the NRF Women in Science — Best Emerging Scientist (2006), NSTF Young Researcher (2009), and the Order of Mapungubwe (Bronze, 2010). She founded GENEdiagnostics (Pty) Ltd in 2010 and has held several non-executive directorships (e.g., People Living with Cancer, Blue Ocean Mussels). She serves as an assessor for SANAS and the HPCSA.



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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.

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