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Abbreviations used in this review:

- aOR = adjusted odds ratio
- MDD = major depressive disorder.

Welcome to this review of the Royal Australian and New Zealand College of Psychiatrists (RANZCP) 2017 congress titled, ‘Speaking our Minds. Telling our Stories’ which was held in Adelaide on 30 April to 4 May 2017.

This review has been created to allow those unable to attend, but with a keen professional interest, to access a summary of some of the presentations. Selection and review of the research has been carried out independently by Associate Professor Ajeet Singh of Deakin Medical School who reviewed abstracts from the meeting.

Highlights of this review include two Australian analyses providing evidence of associations between childhood maltreatment and the development of cannabis use disorders and psychotic symptoms in young adulthood. A sobering epidemiological report from Western Australia details rising rates of amphetamine-associated hospital presentations and admissions which disproportionately affect those of Aboriginal and Torres Strait Islander ethnicity. We also feature a thought-provoking discussion of practical, clinical and ethical issues surrounding the confidentiality of medical records against legal subpoenas.

Abstracts from the meeting can be viewed online here.

We hope you enjoy these selections, and as always, look forward to hearing your comments and feedback.

Kind Regards,
Associate Professor Ajeet Singh
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Walking the tightrope to functional recovery: Are we focused on the right symptoms and outcomes?

Speaker: Professor B Baune

Summary/Comment: An industry sponsored symposium by Prof Bernhard Baune focussed on the role of cognition in functional outcomes for both schizophrenia and major depression. Data in relation to cognition were preliminary, but showed the impacts of paliperidone and aripiprazole in schizophrenia, and vortioxetine in major depression, upon cognition and functional recovery. The premise is that agents which preferentially improve cognition may have better functional improvement outcomes – not least their impact on return to work rates. This is important in the context of mitigating the societal impacts of these conditions in health economic terms. There is interest in the role of the 5HT7 receptor on improving cognition. This receptor is a target of vortioxetine and also of a new agent – brexpiprazole – PBS-indicated for schizophrenia. There is preliminary data indicating that vortioxetine’s properties include specific improvements in cognition and on a variety of functional outcomes. Given major depression is now the leading cause of disability globally, there is greater emphasis on agents that may reduce the functional impacts and thence health economic impacts of the condition. For pharmaceutical companies, an agent with robust data to improve return to work rates would provide them with a strong value position to payors. It is likely that the next wave of psychotropics will have greater data on cognitive improvement and functional outcomes given these considerations. At this stage no psychotropic agent for depression or schizophrenia can claim robust data on clear differentially better functional outcomes over other agents, and resolution of symptoms remains the main focus of care. It is wise for clinicians to be more aware of cognitive functioning and functional outcomes of their patients – at times the focus on symptom control alone crowds out emphasis on functional recovery.

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The global burden of mental and substance use disorders
Authors: Whiteford H

Summary: This presentation discussed the role of Global Burden of Disease Studies (GBD) with reference to the metrics used for measuring disability and premature mortality, and the utility of this approach in terms of monitoring temporal changes in the burden of disease, and planning for service provision. It was noted that according to the most recent estimates, covering 13 mental health disorders and 7 substance-use disorders across 195 countries, that these are top contributors to the global disability burden and have a major impact on global disease burden.

Comment: For decades mental and behavioural illnesses have played ‘second fiddle’ to somatic medicine. But the tide is turning. The most recent WHO global burden of disease metrics are reshaping health resource priorities globally. Not least in Asia. One of the great emerging public health epidemics of our times is the emergence of depressive disorders and self-harm in Asia. Governments in Asia (and elsewhere) have started to heed the message that there is a potent health economic argument to tackle depression. Not only is depression now the leading cause of disability globally – in developing and developed countries combined – but it tends to strike during the most productive years of life. For this reason it has a disproportionate impact on society economically – whereas many somatic illness are a function of longevity. A dilemma not only in Asia is: as awareness and destigmatisation campaigns increase, the triggered help seeking provides a service delivery dilemma for governments. Even in the West there are limitations to resources needed to adequately address such help seekers. In Asia there is scant built mental health infrastructure – posing a significant public health dilemma. It is likely the use of affordable scalable technologies to enhance primary care interventions in mood disorders will provide a pathway for governments to thence neuronal circuit functioning.

The effect of substantiated childhood maltreatment on cannabis use disorders in young adulthood
Authors: Kisely S et al.

Summary: These investigators examined associations between childhood maltreatment (at ages 0-14 years) including physical abuse and neglect, and cannabis use/dependence at age 21 years. Subjects were 2,550 participants in an Australian pre-birth, prospective cohort study of pregnancy. Early cannabis use was increased in subjects with any maltreatment (aOR 2.59), emotional (aOR 2.43) or physical (aOR 3.08) abuse. Respective increases in risk (aOR) for cannabis dependence were 2.22, 1.99 and 2.42. Physical abuse also increased risk of dependence; aOR 2.09.

Comment: Perhaps the ‘elephant in the room’ of mental health is childhood maltreatment? The findings of this rigorous cohort study are sobering. There was an over 3-fold elevated risk of adulthood cannabis abuse for subjects subject to childhood maltreatment in the cohort. The study design – if anything – may have underestimated the rate, as only externally confirmed cases of abuse/neglect were included. As we know anecdotally, many cases go unreported. The study focussed on cannabis misuse. Data on other forms of addiction would have been of interest, but were beyond the scope of the presentation. While universal prevention of child maltreatment is the ultimate aim, an ideal world would be needed for such to ever be attained. Recent government advertising campaigns to focus on reducing family violence are to be commended. This is in no small way related to the advocacy of the immediate past Australian of the year Rosie Batty – who tragically lost her son to violence. Family violence reduction campaigns – targeting both physical and emotional maltreatment – can be a highly strategic umbrella to try and improve social attitudes – reducing tolerance of such behaviours and ‘de-normalising’ them in some communities. For many years childhood maltreatment was seen as purely a psycho-social issue, but awareness of gene silencing through methylation (a key epigenetic process) helps bridge childhood maltreatment to altered CNS gene expression. There is however no definitive epigenetic biomarker for childhood maltreatment to aid in diagnosis.

Independent commentary by Associate Professor Ajeet Singh (MBBS(Melb), MPsych(Melb), MD(Melb), FRANZCP), an academic private psychiatrist with interests in mood disorders, pharmacogenetics, transcranial magnetic stimulation, and medical innovation. He is based at The Geelong Clinic, and teaches at Deakin Medical School. His research has focused on genetically-guided prescribing (pharmacogenetics) of antidepressants, particularly the role of the blood-brain-barrier. He is an academic member of the Clinical Pharmacogenetics Implementation Consortium (CPIC) and member of the Genetic Tests in Psychiatry Taskforce, International Society of Psychiatric Genetics (ISPG). He has recently won awards in multiple start-up competitions, leading his team to win The Melbourne University Accelerator Contest in 2016 for his start-up CNSDose.
Subpoenas and psychiatrist–patient confidentiality

Authors: Jenkins P et al.

Summary: This presentation reviewed the issues surrounding legal access to the confidential medical records of patients with mental health disorders in Australia and New Zealand. Wide variation in the ability to protect confidentiality across different geographic areas were noted, with defences being weaker in Australia than New Zealand and other common law countries. The RANZCP is advocating for reform in this area and has published a position paper outlining key areas for reform and providing guidance for clinicians.

Comment: Trust in the doctor-patient relationship is fundamental to clinical care. Trust facilitates patient confidence to disclose relevant material to help the doctor make the most informed diagnostic formulation for the patient. It enables doctors to advocate a course of treatment which patients are more likely to engage and comply with. Part of the social contract to which members of civil society belong, is to enable rule of law and court processes to establish facts in disputations between citizens and between state and citizen(s). A core mechanism of furnishing courts with otherwise private information is the subpoena. This court power facilitates access to – among other things – usually confidential medical records. In the case of psychiatry this can include highly sensitive disclosures about trauma and personal life stressors, which if made public could precipitate emotional decompensation in vulnerable patients, and terminally undermine the doctor-patient relationship and avert potentially catastrophic emotion reactions by patients to privacy breaches. There is no ideal answer that will meet everyone’s needs. What does make reasonable sense is a greater harmonisation of subpoena powers and processes in the case of access to psychiatric records in differing but juxtaposed jurisdictions. Keeping adequate notes of sessions and respecting patient privacy as a matter of primacy in care remain central to good practice. Instances of acute risk and consideration of the Mental Health Act still require routine navigation by psychiatrists. Seeking legal advice from your medical defence organisation when privacy is in doubt is always a prudent move.

Suggestions for use of a recently published table which assists in prescribing for patients with special dietary requirements

Authors: Murphy M et al.

Summary: These authors note that almost 1 in 5 Australians have special dietary requirements whether that be for religious, medical or ethical reasons. They suggest that consumer engagement can be enhanced by considering the dietary components of medication during the shared decision-making process. They presented a table listing the excipients of common psychotropic medications, demonstrating high proportions containing ingredients of potential concern to consumers including animal products (83%), lactose (78%) and gluten (30%).

Comment: Shared decision-making is a core element to effective prescribing. Shared decision-making with patients usually entails a discussion of non-pharmacological options, and when medication is considered, a discussion of side effects and efficacy profile of prospective agents. Shared decision-making is associated with greater patient satisfaction with care, and also with improved compliance with treatment. Surprisingly there’s a dearth of data on the non-active ingredient contents in medication preparations. The authors of this presentation collated a very valuable table. A large proportion of psychotropics contain animal products – an issue for patients whose religious practice and lifestyle choices need to be respected. Furthermore, many psychotropics contain lactose and/or gluten – potentially a source of gastrointestinal adverse effects for patients with intolerances. Equipping prescribers with such information provides them with an added opportunity to provide shared decision-making, demonstrate personalised care for their patients, and thus improved engagement, compliance, and tolerability of medication. Prescribing does not occur in a vacuum – it occurs in the context of a working relationship. Better tailoring of care through shared decision-making incorporating awareness of the impacts of dietary elements of medication preparations may severe to better respect patient choices and facilitated improved engagement, compliance, and effectiveness – all part of the ‘art’ and science of optimal clinical practice.

Lurasidone treatment of major depression with mixed features: effect on sexual function

Authors: Clayton A et al.

Summary: This 6-week, randomised, double-blind, placebo-controlled trial investigated the impact of lurasidone therapy on sexual functioning amongst patients treated for major depression with mixed features. Sexual function was assessed with the Changes in Sexual Functioning Questionnaire (CSFQ). Lurasidone recipients (n = 109) had significantly improved week-6 CSFQ total scores vs placebo recipients (n = 100); +5.1 vs +3.1, p < 0.05. Lurasidone was also associated with significant improvements on the CSFQ pleasure subscale. Mediator analysis suggested that these effects were an indirect effect of lurasidone via improvement in depressive symptoms rather than a direct pharmacologic effect (β = -0.03, NS).

Comment: This is an interesting study for a number of reasons. Firstly, lurasidone was used to treat major depression with mixed features. This category of diagnosis had its genesis in the DSM-5. While it has become popular to bemoan the DSM-5, there may be merit in this particular category – major depression with mixed features. Some patients have marked – at times – subthreshold elevated and agitated symptoms, which anecdotally appear exacerbated by antidepressant, yet frank mania or hypomania are not induced. In this study the use of lurasidone was found to be an effective antidepressant which restored hedonic drive whilst not interfering with sexual functioning. This is a noteworthy finding as the n = 209 suggests that the effect size was robust given the modest size of the RCT needed for statistical significance. In Australia we are fortunate to have PBS support for medication costs. Alas, there are limitations on the resources that underpin it. This manifests as certain – sufficiently evidence backed - therapeutics not being covered – lamotrigine for bipolar disorders and bupropion only for smoking (rather than as an antidepressant – its primary utility) are two examples that spring to mind. Lurasidone is another such example – with robust evidence for utility in bipolar depression, and now an emerging literature on utility in major depression with mixed features. Increasingly, the range of evidence-based pharmaceutical options open to our patients depends on their capacity to self-fund certain medication options – something more and more patients are prepared to do when cost is woven into the shared decision making dialogue. But where possible, PBS-covered, tolerable, efficacy proven options should be encouraged first.
Childhood maltreatment and young adulthood hallucinations, delusional experiences and psychosis

Authors: Abajobir A et al.

Summary: This longitudinal Australian study used data for 3,752 participants in a prospective, pre-birth cohort study of pregnancy to investigate associations between psychotic symptoms to age 21 years and exposure to maltreatment at ages 0 to 14 years. Findings of hallucinations, lifelong delusional experiences and lifelong experience of psychosis were more common amongst maltreated children. Risk of experiencing hallucinations and delusions was increased among those children exposed to multiple forms of maltreatment, particularly emotional abuse and neglect.

Comment: This is a fascinating study. The well characterised cohort were assessed for independently verified childhood maltreatment – including emotional abuse and neglect. The study showed that subjects with such abuse had small increases in rates of psychotic symptoms in early adulthood to age 21. Adept clinicians will be aware of the common occurrence of dissociative symptoms in cases of childhood trauma/maltreatment. It is likely that the elevated rate of psychotic phenomena in abuse survivors in part reflects dissociative phenomena. But there is also merit in considering paranoid symptoms as reflective of hypervigilance from traumatic stress. This may also drive some of the increased rate observed in the maltreatment group. Finally, when there is a neurobiological diathesis to psychosis, high expressed emotions in family units and stressors such as re-experiencing phenomena from trauma can lead to less well controlled psychosis thus greater point prevalence of psychotic symptoms. Collectively this helps make sense of the finding. It is important to enquire about childhood trauma in case of psychosis – optimal diagnostic formulation and associated management plans will be enriched through the ascertainment of such developmental history data.

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The epidemiology of amphetamine-type stimulant related hospital admissions and presentations to the emergency department in Hedland, Western Australia

Authors: Monahan C et al.

Summary: These authors utilised a retrospective review of medical records to investigate the epidemiology of amphetamine-type stimulant (ATS)-related emergency presentations and admissions in Hedland, Western Australia. During the 5-year period studied, 482 ATS-related presentations and 64 admissions were identified, with rates of each increasing year-on-year. Males were over-represented for both presentations (66%) and admissions (75%), as were those identifying as Aboriginal or Torres Strait Islander, 67% and > 50% for presentations and admissions respectively. Presentations were most commonly for substance use disorders or substance-induced mental disorders; most admissions were for psychotic disorders or acute intoxication.

Comment: This is an alarming – dare I say it alarming – study. Methamphetamine abuse – the principal form of amphetamine abuse – has spread across the nation. Law enforcement has difficulty tracking and uprooting the supply chain, as ‘meth-labs’ can pop up as rapidly as they are identified and disabled. There is no ‘border security’ tightening approach that overcomes the illicit trade - as in the case of important substances such as heroin and cocaine. Amphetamine abuse has spread even to the remote natural paradise of the far north of Western Australia. The data presented tell a tale of over-representation of Indigenous Australians in emergency medical presentations related to intoxication, withdrawal, and psychotic and other mental ill health states related to amphetamine misuse. What’s more alarming is the year-on-year rates of both presentation and hospitalisations (a robust marker of severity of use) have increased. Methamphetamine intoxication is associated with excitotoxicity of neurones in key central neural pathways – both of the mood system, impulse control pathways, and pathways related to reality testing. This bodes poorly for the prognosis of patients suffering chronic substance misuse disorders. The triad of childhood maltreatment, substance abuse, and mental illness is one best prevented rather than cured. Culturally attuned community awareness campaigns to reduce family violence, policing to continually tackle the supply chain of illicit drugs, and fortified mental health services in vulnerable communities the package of care needed to help avert worsening statistics and outcomes.

PHF21B gene: association with major depressive disorder and modulation of the stress response

Authors: Licinio J et al.

Summary: The researchers involved in this international collaboration sought to investigate relationships between stress and genetic composition in major depressive disorder (MDD) using genome-wide association studies with single- and multi-locus mixed-effect models. Stress levels in the control populations were accounted for in the analysis. Two ethnically unrelated populations were studied, Mexican-American (66 controls) and European (473 MDD, 499 controls).

Comment: Since the human genome was first de-coded in 2003, there has been immense hope – but to-date shatteringly little widespread clinical applications of genetics. This has changed in obstetrics and oncology where genetic technology is routinely used to gauge disease risk susceptibility and help guide treatments. In psychiatry we’re faced with arguably the most complex challenge – delineating the genetic and environmental triggers involved in causing illness, and to possible help guide treatments. In this re-analysis of pre-existing data from Europe and America, a variant in a gene related to the hippocampus and stress resilience emerged as being associated with subjects suffering major depression versus healthy controls. Alas, the effect size was too small for any clinically useful diagnostic tests – the sensitivity and specificity metrics probably inadequate. However, the work does highlight the importance of stratifying both the phenotype and genotype to account for gene environment interactions. Such interactions are putatively mediated by epigenetic phenomenon – such as methylation - that leads to gene silencing (reduced or halted expression). It is interesting in this study that the most validated gene variant – the SHITLPR gene variant – was not identified as associated with risk of major depression. Furthermore, methylation profile of the identified variants was beyond the scope of the study. Nonetheless, many canoes where built and sunk before ships were invented. So too it seems the case with the initial pioneering steps to try and elucidate the neurobiology of psychiatric illness in the hope of providing patients and clinicians with useful insights and tools. Genetically guided healthcare (precision medicine) is not yet the norm, but as the early literature expands it provides clinicians opportunity to become more ‘genetically literate’ in anticipation of possible clinically useful in the future. For this reason it is important such research is supported.

Yoga as a treatment for anxiety and depression and improving well-being

Authors: de Manincor M et al.

Summary: This RCT sought to determine the impact of a 6-week yoga intervention (in addition to usual care) amongst participants diagnosed with depression and/or anxiety in comparison to wait-listed controls. In comparison to controls at week-6, the intervention group demonstrated significantly greater reductions in depression, total DASS (Depression, Anxiety and Stress Scale), and psychological distress. Significant improvements in mental health, positive experiences, flourishing and resilience were also observed amongst the yoga group, however no significant differences in anxiety, stress or physical health were noted.

Comment: This RCT joins others in a chorus (dare I say it, chant!) supportive of complimentary therapies in treating depression. What is interesting is the reduction in depression noted in the yoga group compared to wait list control was that it appeared independent of anxiety reduction. Sceptics have made the case that yoga is the same as progressive muscle relaxation. There is overlap – with muscle stretching via poses and deep breathing. What is different is that yoga appears much more appealing to patients and can be adopted as an ongoing element of their lifestyle. As yoga is widely popular in the West and not directly associated with depression, it provides a stigma-free lifestyle mechanism to regularly engage in progressive muscle relaxation and deep breathing. It is important to emphasise that yoga was an add on – augmentation – to treatment as usual. More severe cases of depression often merit use of antidepressants, and rather than an either or approach, the sum is often greater than the parts. Yoga appears to have broad health benefits and offers an opportunity to weave RCT-backed relaxation training into the comprehensive care of depressive presentations. In milder cases such approaches could potentially serve a standalone function – but more data is needed to conclude such. Finally, there may be a preventative benefit to yoga, but large prospective studies would be needed to determine such. Yoga may prove a winning twist on getting out of the knot of depression!