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ORAL PRESENTATIONS

Are we minding the gap?

Robin R Allen
Lentegeur Hospital, Western Cape
rallen@pgwc.gov.za

It has been widely known for some time that the gap is increasing between the number of those requiring treatment for mental ill-health conditions and the number of those able to provide appropriate treatment. Vikram Patel illustrated, with simple arithmetic and using India as an example, how there is no possible way in low- and middle-income countries (LAMICs) that the current numbers of psychiatrists are able to meet the needs of the country. Very clearly, the same conclusion can be drawn for a country like South Africa, where the 700+ registered psychiatrists can hardly be seen as sufficient to meet the needs of the country's population (approaching 50 million); especially considering that roughly 50% (350+) of these psychiatrists are likely to be in private practice. Patel suggested that unless LAMICs begin training psychiatrists differently, to equip them with skills and knowledge in the field of public mental health, and without a shift of focus to the type of mental health systems to be put in place, there is very little hope of the gap narrowing.

Are we minding the gap? Looking at the regulations for sitting the college examinations and the curricula of training institutions, our focus remains on that of training psychiatrists for first-world countries. Why, and what is the hope for the future?

Opportunities for transnational and translational research in Europe

Christer Allgulander
Karolinska Institute, Sweden
christer.allgulander@ki.se

Last May, a bilateral agreement was finalised to enable double PhD degrees to be awarded for one thesis by students at Stellenbosch University and the Karolinska Institute, Sweden. In another vein, eligible research students from the University of Cape Town were granted the opportunity to be exchanged to 12 European universities on scholarships of varying length to study aspects of anxiety, under the aegis of the European College of Neuropsychopharmacology Anxiety Disorders Research Network (ADRN) and its Joint European and South African Research Network in Anxiety Disorders (EUSARNAD) programme, funded through the FP7 scheme of the European Union International Research Staff Exchange Scheme. Nine research exchangees had been approved for this programme by May 2012.

This presentation, primarily aimed at SASOP members interested in pursuing PhD work, will explain why these opportunities were created, and why they should be expanded to include an exchange of teachers and students. The backing by universities and peer organisations affirms the benefits of bilateral skills transfer that should prioritise the fundamental needs of South African psychiatric patients. For example, areas of mutual benefit are neurovirology (cognition in HIV/AIDS), substance-use disorders (alcohol, methamphetamine and tetrahydrocannabinol), risk behaviour modification, and child and adult trauma. The utility of telemedicine and web-based services for education and consultation may also be evaluated, as well as diagnostic interviews and symptom-rating scales.

Family intervention for schizophrenia: An exploratory qualitative study

Laila Asmal, S Mall, B Chiliza, R Emsley, L Swartz
Stellenbosch University
laila@sun.ac.za

Background. Family interventional programmes are shown to be effective adjuncts to pharmacotherapy in patients with schizophrenia. However, there is almost no research to inform the design and content of family interventional programmes for the South African context.

Method. Twenty patients with first-episode schizophrenia in remission were recruited with 1 family member to attend 6 multifamily focus-group discussions. A mental health nurse trained in qualitative research facilitated the expression of participants' understanding of schizophrenia and its treatment. The applicability of internationally studied methods of family therapy for schizophrenia in the context of the local health system was explored. Data were analysed using a thematic analysis.

Results. Patients listed stigma within communities, lack of job opportunities, substance abuse and loneliness as major concerns. In addition to ongoing substance abuse, hostile behaviour and negative symptoms displayed by the patient, family members identified poverty, lack of support from other family members and community violence as major contributors to the stress of being a carer. Family members and patients regarded substance abuse as a precipitant of the initial psychotic breakdown and a significant contributor to ongoing symptoms. Communities were seen as a source of

external support for family members, as well as a source of stigma. Transport difficulties, negative symptoms (patients) and work obligations (family members) were the primary reasons for non-attendance.

Conclusion. The multifamily group format implemented by a mental health nurse is a relatively low-cost method of family intervention. Internationally studied principles of family therapy, such as empathy, problem-solving and psycho-education, were found to be suitable in a local context. Modification of traditional models of family therapy should be considered to include factors such as poverty and violence, limited access to mental healthcare during crisis and substance abuse.

Religion and spirituality in psychiatry

M W Bohmer
Department of Psychiatry, University of Pretoria
mwbohmer@absamail.co.za

Psychiatrists show increasing interest in spirituality, reflected in the growth of this special interest group. There are, however, very diverse opinions and definitions of spirituality and religion. The ideas of the psycho-analyst Neville Symington and the eminent theologian Paul Tillich are introduced as 2 points of view in this debate. Symington claims that traditional religion is not relevant to modern man, but that psycho-analysis is, since it is a mature religion with a spiritual goal. Through interpretation, the patient can come to know him/herself and start the process of reconstructing his/her inner and outer world. The goal is to help the patient change destructive into constructive emotional action. Tillich understands existence as separation – estrangement from that to which we essentially belong. He believes that our real enemy is selfishness and self-hate, and that all our Pelagian attempts to 'muster up' self-love are doomed to fail. Tillich acknowledges the importance of psycho-analysis for theology, but follows Luther (whom he described as a psychologist of profound depth) in believing that salvation and self-affirmation results exclusively from the grace of God. In this presentation, it is argued that psycho-analysis is of great importance to the understanding of the human situation and in providing the tools necessary for this spiritual journey. For the existential questions and anxieties, a religious answer is, however, necessary. The polarisation of religion and spirituality hinders this journey, since the result is an impersonal religion frozen in time and a spirituality lacking a sacred core.

Early intervention in schizophrenia in developing countries

Bonginkosi Chiliza, Laila Asmal, Robin Emsley
Stellenbosch University
bonga@sun.ac.za

Background. Early intervention services are based on the premise that untreated psychosis may have a deleterious effect on outcome, particularly in the early years of illness. Besides causing unnecessary suffering and negatively affecting social and occupational functioning, there is some evidence that untreated psychosis may have 'neurotoxic' effects on the brain.
Method. The majority of early intervention studies have been conducted in developed countries; therefore, we focused on publications from developing countries. We reviewed studies that examined the duration of untreated psychosis in first-episode psychosis cohorts and those that reported the outcome of first-episode psychosis, focusing on remission as the recently identified 'gold-standard' measure of outcome.

Results. The duration of untreated psychosis is longer in developing countries, and is also associated with poor outcome, whereas remission rates following treatment of first-episode psychosis in developing countries appear to be higher than in developed countries.

Conclusion. These findings strongly argue for the establishment of early intervention services for schizophrenia in developing countries.

Attachment theory and early developmental trauma in the genesis of the South African serial murderer

Giada Del Fabbro
University of the Witwatersrand, Johannesburg
delfabbrogiada@gmail.com

Background. Attachment theory describes how early relationships and bonding between caregiver and infant/child play a central role in the development of key psychological functions in adults. Impingements or failures in the bonding between infant and caregiver affect the development of these functions (such as the capacity for emotional regulation, empathy and healthy interpersonal relationships) in the child. Early developmental traumas can also interfere with the development of a healthy attachment style. Serial murder has been studied from numerous and varied perspectives; for example, psychodynamic theory, systemic theory and feminist perspectives. Individuals who commit serial murder generally have poor capacity to sustain emotional intimacy in interpersonal relationships, lack empathy and struggle to regulate their emotions.
Objective. To attempt to understand serial murder in terms of attachment and early developmental trauma and investigate how these 2 factors contribute to the criminal behaviour and psychopathology of a sample of South African serial murderers.

Method. The sample consisted of 5 individuals of mixed ethnic and cultural backgrounds, currently incarcerated in prisons throughout Gauteng Province, who were convicted of multiple murders and met the criteria for classification as serial murderers. The research design was qualitative and exploratory. Data were collected from interviews with the sample individuals, and the collection of collateral information from family members, prison officials and archival data. Thematic analysis of the interview data was focused on the areas of attachment and early developmental traumas, psychological areas of functioning such as empathy and capacity to form relationships, and perceptions of and relationships with significant others in the individuals' lives, as well as with their victims.

Results. The individuals in the sample displayed poor attachment styles and capacity to form interpersonal relationships. Most notably, early developmental traumas at the hands of significant caregivers impacted on the individuals' perceptions of significant others, and specifically on their choice of victim. Across the sample, individuals had undergone considerable abuse and neglect at the hands of their caregivers which yielded themes

of rage, shame, humiliation and a desire for revenge. In addition, the lack of capacity to bond with another could be linked to themes of a lack of empathy, inability to sustain emotional intimacy in interpersonal relationships (frequently manifested as an objectification of significant others and victims) and poor capacity to regulate emotions.

Conclusion. This study provided an alternative way of understanding serial murder in terms of attachment theory, and demonstrated how early attachment relationships and early developmental trauma, such as abuse and neglect, can affect the development of key psychological functions including capacity for empathy, emotional intimacy and emotional regulation.

A quest for an integrated understanding of childhood trauma

Wendy Duncan
University of the Witwatersrand, Johannesburg
wendy.duncan@wits.ac.za

This work was intended to examine salient knowledge in the field of childhood trauma, to obtain an integrated understanding thereof and debate the difficulties and challenges embedded in the treatment, research and policy planning of child and adolescent trauma in South Africa. Childhood trauma is an all-too-common phenomenon and assumes various guises, including: exposure to protracted medical procedures; growing up in communities/families beset by crime and conflict or societies at war; and, the most pernicious of all, child maltreatment. The latter takes the form of the 'silent trauma' of neglect and physical, emotional and sexual abuse. It is well documented that early trauma gives rise to a plethora of emotional, behavioural and psychiatric sequelae requiring various levels of intervention. Current classification systems in psychiatry rely on the categorical definition of symptoms in accordance with the DSM-IV-TR and ICD-10; these are notably cumbersome and imprecise in the realm of child psychiatry, where a dimensional understanding of the child's presentation would seem to be more relevant. The challenge remains as to how clinicians, child healthcare workers and researchers adequately capture the multiform and variegate strata of early-life trauma; not only insofar as understanding outcome, but also in taking cognisance of the nature of the trauma, the biological determinants, developmental consequences and the legion of mediating and moderating factors. There is also a need to integrate clinical information and research on child and adolescent trauma from the varying specialist fields and academic territories that often present valuable but isolated contributions. The current paper will review the salient research and knowledge in the field and use case vignettes to give a more complex and nuanced understanding of child trauma and hopefully contribute to a less formulaic or narrow approach to treatment interventions. As clinicians and researchers in the field of child and adolescent psychiatry, it is crucial that we apply our minds to the area of trauma in South Africa to ascertain what interventions and treatments are efficacious, and where to locate services for these patients. By understanding the complexities involved in childhood trauma, we are better placed to determine training and research priorities, and to advocate and expedite appropriate shifts in social and health policy within the context of ever-diminishing resources.

The clinical examination and the role of belief systems in formulating an understanding of our patients

Lennart Eriksson
G J Crooks Hospital and private practice, KwaZulu-Natal
lennarte@iafrica.com

The integrated bio-psycho-social is a generally accepted scheme for understanding mental illness. The scheme is useful in the clinical setting, when formulating an understanding of an individual's psychopathology. The bio-psycho-social system, however, does not demand inclusion in the scheme of an individual's spiritual beliefs. The author will argue that the bio-psycho-social scheme, without specifically exploring and noting an individual's spiritual beliefs, is an incomplete examination. Designating the common area of the 3 integrating bio-psycho-social circles to describing the spiritual beliefs will give designated attention to this important aspect of an individual's mental status. The author will illustrate the need for the proposed inclusion of spiritual beliefs in the standard bio-psycho-social scheme, from case material. The inclusion and specific focus on spiritual beliefs is an important and necessary part of both the clinical examination and the final formulation, for the examiner to reach a better understanding of the mental status of an assessed individual.

Practical, clinical and ethical issues which may arise in the issuing of off-work certificates and psychiatric reports: An update

Mike Ewart-Smith
Division of Psychiatry, University of the Witwatersrand (Honorary), Johannesburg
mesmith@mweb.co.za

There has been a dramatic increase in the number of working days lost to 'psychiatric' illness. Patients' demands for off-work certificates are more pressing and perhaps doctors' resistance to issuing certificates and supporting reports is lower. However, this is associated with potential conflicts between 'benefiting' the patient and maintaining professional and clinical integrity in certificates and reports. Pension funds and insurance companies have expressed concern about the problems that this creates in the settlement of claims for disability benefits. There are very few guidelines available on the issuing of off-work certificates, and yet it is an inherent part of everyday clinical practice and patient care. Unfortunately, there are adverse effects of being off work which commonly seem to be left out of the decision-making process.

BDNF Val66Met and DRD2 Taq1A polymorphisms interact to influence PTSD symptom severity: a preliminary investigation in a South African population

Sian M J Hemmings, Lindi I Martin, Marisa Tait, Lize van der Merwe, Lisa Aitken Erika de Wit, Gill F Black, Eileen G Hoal, Gerhard Walzl, Soraya Seedat
Department of Psychiatry, Stellenbosch University
smjh@sun.ac.za

Background. Post-traumatic stress disorder (PTSD) is a psychiatric disorder that may develop following exposure to a traumatic event. Genetic and environmental factors have been found to contribute to the development

of the disorder. Although numerous environmental risk factors for PTSD have been elucidated, no genetic variant has been reported as being unequivocally involved in the development of the disorder, and a number of significant genetic associations remain unreplicated. One reason for the inconsistent results may be that it is only recently that genetic association studies have accounted for environmental factors that may influence PTSD development. To date, no studies have investigated the effects that epistatic interactions between candidate genes may have on susceptibility to PTSD in at-risk individuals.

Objective. To evaluate the role that selected variants in serotonin transporter (*5-HTT*), dopamine receptor 2 (*DRD2*) and brain-derived neurotrophic factor (*BDNF*) genes may play in PTSD symptom severity in a South African coloured population at high risk for tuberculosis and PTSD. We investigated the interaction between the genetic variants to determine whether these variables and the interactions between variables influenced PTSD symptom severity.

Method. The sample comprised 150 South African coloured individuals, all of whom were household contacts of confirmed smear-positive pulmonary tuberculosis (TB) cases. PTSD symptoms were quantitatively assessed using the Davidson trauma scale (DTS). All participants were genotyped for the *5-HTT* insertion/deletion promoter (*5-HTTLPR*) polymorphism, and *DRD2 Taq1A* (rs1800497) and B*DNF Val66Met* (rs6265) polymorphisms. Gene-gene interactions were investigated using various linear models. All analyses were adjusted for age, gender, major depressive disorder diagnosis, level of resilience, level of social support and alcohol dependence.

Results. No main effects of the *BDNF Val66Met* and *DRD2 Taq1* A polymorphisms were observed on the DTS score. However, a significant interaction effect between the 2 variants was observed (p=0.001). On the background of the *BDNF Val66Val* genotype, it was found that the DTS score increased significantly with the addition of a *DRD2 Taq1A A1*-allele. However, upon the *BDNF Met66*-allele background, the addition of an A1-allele was found to reduce total DTS score significantly.

Conclusion. This study provides preliminary evidence for an epistatic effect between the *BDNF Val66Met* and *DRD2 Taq1A* polymorphisms on the severity of PTSD symptoms. The interaction between the 2 polymorphisms may mediate the development of a U-shaped curve in the context of PTSD symptom severity and dopaminergic levels, where both a deficiency and excess of dopamine can result in increased PTSD symptom severity. This is, to our knowledge, the first study to investigate epistasis between *BDNF Val66Met* and *DRD2 Taq1A* polymorphisms and PTSD, providing preliminary evidence of their involvement in PTSD development.

Spirituality and psychiatry: Guidelines for South African practice and training

Bernard Janse van Rensburg, Christopher P Szabo, Marie Poggenpoel, Chris Myburgh

University of the Witwatersrand, and University of Johannesburg, Johannesburg

grasontwerp@mwebbiz.co.za

Background. The current bio-psycho-social approach to the practice and training of psychiatry in South Africa refers to Engel's extended model of healthcare, and forms the basis of the existing multidisciplinary collaboration in mental healthcare between medicine, nursing, psychology, occupational therapy and social work. South African mental healthcare and psychiatry, as a specialist medical discipline, however, also has to bridge the multi-cultural, multi-religious and diverse spiritual reality in which everyday practice occurs. While, in an international context, the World Psychiatric Association's Section on Religion, Spirituality and Psychiatry is in the process of drafting a position statement on 'crossing the boundaries' in this regard, it has become important also to establish locally how, within accepted professional boundaries, spirituality should be incorporated appropriately into the current model for practice and training.

Method. In-depth semi-structured interviews were conducted with individual academic specialist psychiatrists as part of a descriptive phenomenological qualitative investigation. The interview content was analysed and compared with the international medical literature. Referring to the theory development methods of Chinn and Kramer, the elements of a defined core concept were identified from the data and were used to construct an analogous, practice-orientated model for local practice.

Results. Appropriate training guidelines for local postgraduate students in psychiatry should address: the definition of concepts and terminology; the existing inclusion of spirituality in the diagnostic systems; relevant theories and related models by, for example, Cloninger, Vaillant, Anandarajah and Koenig; sociological and anthropological views on religion and spirituality; evidence of the saliency of spirituality and religion, as well as its role in psychopathology; a comparative overview of different faith traditions and belief systems relevant to health and mental health; the inclusion of spirituality in clinical assessment; personal growth and development of students and their teachers/mentors; and self reflection as an attitude objective. Considering spirituality in local practice, while remaining within the professional scope of the discipline, would require continued medical education and professional development opportunities, as well as structures for peer review and remedial procedures. Practice guidelines should address: definitions and terminology; social, cultural and spiritual competency; diagnostic formulation and categories; psychotherapy; medical aid and insurance benefits; and health education for patients on evidence-based practice. Referral guidelines to spiritual or religious workers should address: definitions and terminology; an interpretation of the role of spirituality, religion and culture in the community; perspectives of different faith traditions and belief systems on health and mental health; evidence-based management of serious psychiatric conditions; compliance; stigma; outcome of psychiatric treatment and implications of the delay of treatment.

Conclusion. This model may contribute to the participation of local role-players in the discourse on the place of spirituality in South African psychiatry, and their acknowledgement thereof.

Vascular factors in Alzheimer's disease: An update

Raj N Kalaria
Newcastle University, United Kingdom
raj.kalaria@ncl.ac.uk

Background. Despite mortality due to poverty, communicable diseases and human conflicts in the developing world, the number of dementia cases are destined to increase in tandem with the ageing population.

Method. Relevant articles published prior to December 2011 were reviewed from popularly used databases including PubMed and the Cochrane Database.

Results. Current evidence suggests that all subtypes of dementia exist at an overall estimated prevalence of 3% in those aged >65 years in developing regions including sub-Saharan Africa. Whereas Alzheimer's disease (AD) accounts for 60% of all dementias, 30% results from cerebrovascular disease, which appears to be on the increase even in traditionally not-at-risk populations. Isolated studies from Asia and Latin America suggest that cognitive impairment (without dementia) occurs in 10 - 15% of those aged ≥65 years. These estimates may be even higher if executive dysfunction alone is considered. Not surprisingly, old age is the strongest risk factor for dementia, which is strongly associated with increased mortality and disability or frailty in developing countries. In addition to the cardiovascular system, several cerebrovascular mechanisms are inherently in place for the maintenance of the neurovascular unit, the integrity of which is crucial to the protection against cognitive decline. Recent clinical and epidemiological studies suggest that there may be a substantially increased risk (≥3-fold) of acquiring age-related cognitive decline, particularly AD, after a stroke episode or transient ischaemic attack, or with a previous history of hypertension, diabetes, high cholesterol, obesity or certain forms of cardiovascular disease. The exact mechanisms involved in cognitive decline after stroke or prolonged exposure to vascular disease risk remain unclear, but hypertension is one of the strongest risks.

Conclusion. Further measures to reduce systemic vascular insults, including the use of statins, have been advocated for reducing risk worldwide. Exploitation of traditional diets (enriched in fibre and anti-oxidants) and medicinal plant extracts would also aid prevention and treatment. Strategies that clearly improve the dynamics of the cerebral macro- and microcirculation and alleviate chronic hypoperfusion of the brain during ageing would be rational targets for stroke and dementia.

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How can telepsychiatry assist forensic mental health services in South Africa?

Sean Kaliski
University of Cape Town
sean.kaliski@uct.ac.za

Background. Forensic mental health services will always be centralised in specialised hospitals in South Africa, even though the courts and residences of state patients are scattered over large – sometimes almost inaccessible – areas. Nevertheless, much forensic practice requires personal interventions including assessing defendants referred by the courts, testifying in court, consulting with legal counsel, providing advice and evaluating the mental state of state patients on leave. Most of these functions can currently only be performed if either those needing or those providing services have to travel to a venue, which is often time- and resource-consuming. Telepsychiatry can provide personal contacts over great distances, at a fraction of prevailing costs. It also offers opportunities not currently pursued, such as providing outreach support to under-resourced areas, support to prisons, and training of health and juridical personnel. The equipment, namely live video feed from all locales, can easily be installed.

Recommendation. The South African Society of Psychiatrists (SASOP) should lobby the national Department of Health to accept telepsychiatry, especially for implementation of forensic mental health services, as policy. All that remains is to persuade those who would benefit from this service to commit to accepting and developing it.

Conclusion. Telepsychiatry can build capacity for our forensic mental health services, will probably save resources in the long term and is actually more efficient than our current system.

Pollyanna syndrome in psychotherapy – or pseudotherapy

B Latecki
Empangeni Garden Clinic, and Department of Philosophy, University of Zululand
bogdanschrink@gmail.com

Pollyanna syndrome describes the situation when a person insists on being optimistic and 'positive' at all costs, against reality and with a biased, sometimes blind, attitude. Such a situation is often encountered in psychotherapy, with the patient expecting that 'I must be strong' and the therapist insisting that 'things are not going to be so bad'. This paper discusses how to console reliably, be credible in conducting supportive psychotherapy, involve the elements of existential and Ericksonian approach and implement the theory of 'facts versus values' from philosophy of psychiatry into communicating with patients. Adherence to the discussed principles is practical, not only when psychotherapy is conducted, but also in everyday doctor-patient relationships.

Prevalence and patterns of medication use in children and adolescents with autism spectrum disorders in the Western Cape

Kerry-Ann Louw, Judith Bentley, Katherine Sorsdahl, Colleen Adnams
Department of Psychiatry and Mental Health, University of Cape Town
kerrylouw@gmail.com

Objective. To investigate the prevalence and patterns of medication use among a sample of school-going children and adolescents with autism spectrum disorders (ASD) in the Western Cape.

Method. This was a descriptive, quantitative, analytical study. A survey questionnaire and the Nisonger Child Behaviour Rating Form (NCBRF) were utilised to collect relevant data from parents of children and adolescents

recruited from 2 schools for children with ASD in Cape Town. Participants were also recruited from the Autism Action database.

Results. A total of 24.6% of 65 children used psychotropic medications. Antipsychotics were the most commonly prescribed psychotropics, followed by stimulants, antidepressants and mood stabilisers. Risperidone was by far the most commonly reported prescribed psychotropic medication, used by 15.4% of children for a range of difficulties including problem behaviour, sleep difficulties, anxiety symptoms, attention problems and mood symptoms. Of the children taking physical or psychotropic medications, 29.6% reported current side-effects on treatment. Complementary and alternative medications were also commonly used, with 40% of children using over-the-counter (OTC) medications and 15.4% being on a special diet for autism. Of the total number of children, 9.2% were taking ≥3 OTC preparations. Children of black or coloured ethnicity were less likely to use OTC medication than white/Asian children. The majority of medications and OTC preparations were prescribed or recommended by psychiatrists, followed by general practitioners, paediatricians and self-prescriptions.

Conclusion. In keeping with international studies, this sample of children with ASD was a highly medicated group. The findings of this pilot study were limited by the sample size. Nevertheless, the study provided valuable insight into medication use in the South African ASD population.

A clinical audit of pre-schoolers referred for psychiatric services at the Charlotte Maxeke Johannesburg Academic Hospital

Lavinia Deborah Lumu
University of the Witwatersrand, Johannesburg
ldlumu@yahoo.com

Background. The study was a retrospective clinical audit of pre-schoolers aged ≤6 years referred to the Child, Family and Adolescent Unit of the Charlotte Maxeke Academic Hospital, Johannesburg, for psychiatric intervention between 1 January 2006 and 31 December 2010.

Method. Demographics and characteristics of the participants were described and analysed. Several psychiatric conditions and interventions were also evaluated.

Results. Of the 149 pre-schoolers aged ≤6 years who presented to the Unit, the majority were male and the mean age of presentation was 54 months. The majority were referred to the Unit by medical professionals. Attention deficit hyperactivity disorder (ADHD) was the most common presenting condition and psychological intervention was by far the most utilised form of intervention overall. Pharmacological intervention was found to be within the norms and practice parameters used internationally. Girls were more likely to present with anxiety disorders and reactive attachment disorder, and boys were more likely to present with autism spectrum disorders. The defaulting rate after the initial assessment was high.

Conclusion. The sample size, although small, highlighted the frequency of psychiatric illness in pre-schoolers, necessitating the need to conduct further research in this vulnerable age group at other clinical sites.

Developing telepsychiatry services in KwaZulu-Natal: Education and clinical outreach

Thebe Mdigoe, J Chipps, S Ramlall, H King, M Mars
Department of Psychiatry, University of KwaZulu-Natal
thebe.madigoe@kznhealth.gov.za

Background. In 2009 the Departments of Psychiatry and Telehealth at the University of KwaZulu-Natal (UKZN) initiated a 3-year project to develop, implement and evaluate an educational and clinical telepsychiatry service in KwaZulu-Natal. This paper describes the findings of the project.

Methods. An action-research framework with a mixed qualitative and quantitative design was adopted. For the educational component, 6 DVD lectures addressing common mental health challenges at a district hospital were developed and distributed to 2 rural hospitals for viewing and subsequent discussion with a consultant by video-conference. 'Pre' and 'post' content evaluation questionnaires for the DVD lectures were completed. For the clinical component, guidelines for clinical telepsychiatry and standard operational procedures were developed and circulated. The tele-outreach service was initiated in 3 rural district hospitals, 1 linking to a major psychiatric hospital, and the other 2 linking to a regional hospital. For each telepsychiatry session, an audit of the consultation process and technical quality of the transmission was completed. A follow-up qualitative interview was conducted with 3 consultants and a medical officer who participated in the clinical consultations, using a semi-structured interview schedule.

Results. Eight of 12 participants completed the evaluations for the tele-educational sessions. The DVD lecture format was deemed satisfactory, but it was reported that greater flexibility and simplicity were required. There were significant or near-significant increases in knowledge in 5 out of the 6 post-DVD session evaluations. A total of 31 clinical telepsychiatry sessions were conducted. Significant benefits of the sessions, in terms of psychiatric diagnosis, management and clinical supervision, were reported. A number of challenges were reported, arising from the administrative and technical aspects of the service.

Conclusion. This paper presents a case study in an attempt to develop and implement a telepsychiatry service in an under-resourced rural setting in South Africa. Its findings highlight the significant opportunity that telepsychiatry provides in improving access to specialist mental health services and education to such communities, and identify key obstacles that still need to be overcome in that endeavour.

HIV serodiscordance unpacked

Sibongile Mashaphu
Nelson R Mandela School of Medicine, University of KwaZulu-Natal
mashaphus@hotmail.com

Background. From the beginning of the HIV epidemic, relationships made up of one HIV-positive partner and one HIV-negative partner have been fraught with challenges. This couple type, termed 'serodiscordant', is a challenge for the couple themselves as well as their care providers, counsellors and loved ones. Serodiscordant relationships often are riddled with stress, anxiety, fear

and concern. HIV discordance is common within couples in Africa, prevalent in 3% - 20% of the general population and 30% - 51% in couples in which one partner seeks HIV care services. The needs and challenges of HIV-discordant couples have received insufficient attention in the research and policy agenda. Most interventions for HIV prevention, treatment, care and support are directed at individuals and there are few interventions for couples.

Method. This is an exploratory case study of 4 serodiscordant couples who sought private psychiatric care in Durban to assist them with their psychological challenges, fears, sexual health needs, reproductive desires, and possible explanations for the discordance.

Conclusion. Participants reported that there was a shortage of information, educational materials and support services for discordant couples. Included in this presentation is a brief overview of the different theoretical explanations for the 'mystery' of discordance in couples who are in long-term relationships. Written informed consent was obtained from all participants. All participants were diagnosed with a mood disorder.

Antidepressants versus interpersonal psychotherapy in treating depression in HIV-positive patients

M Y H Moosa, F Y Jeenah
University of the Witwatersrand, Johannesburg
yusuf.moosa@wits.ac.za

Objectives. Despite the HIV/AIDS prevalence in South Africa reaching pandemic proportions, very few studies have been published on co-morbid depression. This study at Chris Hani Baragwanath Academic Hospital was conducted on a group of HIV-positive patients with depression who were receiving antiretroviral therapy (ART). The aim of the study was to describe their response to treatment with either an antidepressant or psychotherapy.

Method. The study was prospective, randomised and controlled. The sampling was convenience sampling, as it included patients attending the HIV clinic. At entry to the study, a clinical diagnostic evaluation and the Hamilton Depression Rating Scale (HAMD) were performed on all subjects by the investigator. The depressed patients were randomly assigned to receive either an antidepressant (citalopram) or psychotherapy (interpersonal psychotherapy (IPT)). The HAMD was repeated at the study endpoint of 8 weeks.

Results. Sixty-two HIV-positive persons receiving ART participated in this study; 30 were not depressed and served as controls, and 32 were depressed. There were no significant differences between the controls and the patients (either receiving pharmacotherapy or psychotherapy) in respect of any of the socio-demographic characteristics evaluated ($p>0.05$). Approximately 60% ($n=19$) of the depressed patients were randomised to receive pharmacotherapy, while 40.6% ($n=13$) received IPT. The mean HAMD scores of the patients on pharmacotherapy decreased from 25.7 to 6.2 from entry to completion of the study, and those for patients receiving psychotherapy decreased from 22.5 to 8.2. The decreases in HAMD scores in patient groups receiving either pharmacotherapy or psychotherapy were not significantly associated with any socio-demographic variables ($p>0.05$).

Conclusion. Pharmacotherapy and psychotherapy may be equally effective in the treatment of depression in HIV-positive patients. The choice of treatment will be influenced by factors such as adverse effects of antidepressants and adding another medication to an already complex ART regimen. In such cases, IPT may be particularly beneficial.

The forensic mental health profile of accused persons referred to Fort England Hospital between 2005 and 2011

Mo Nagdee, Helmut Erlacher
Fort England Hospital
mohammed.nagdee@impilo.ecprov.gov.za

Background. Fort England Hospital in Grahamstown in the Eastern Cape is the provincial referral centre for accused persons (*observanda*) referred by courts for assessment in terms of the Criminal Procedure Act no. 51 of 1977.

Objectives. To investigate the demographic, clinical and forensic profile of such *observanda*.

Methods. A descriptive, retrospective analysis of the forensic and clinical records of all *observanda* referred to Fort England Hospital between 1 January 2005 and 31 December 2011 was conducted.

Results. A total of 1 712 *observanda* records were reviewed. The majority were male (96%) and aged 18 - 40 years (75%). The majority of charges (61%) were violent and serious offences committed against the person, comprising sexual offences (26%), assault with intent to do grievous bodily harm/attempted murder (19%) and murder/culpable homicide (16%), respectively, while alleged offences against property comprised 26% of total charges. Of those with at least 1 Axis I diagnosis (80% of *observanda*), psychotic-spectrum disorders (34%) and substance-related conditions (34%) predominated. Approximately 70% of cases had either no diagnosis or diagnosis deferred on Axis II, with intellectual disability (including borderline intellect and mental retardation) found in 16%, and personality disorder in 4% of all cases. Almost 72% of cases had no Axis III diagnosis stated on the final court report. Almost half the cases were found to be both fit to assist in their own defence and to have full criminal responsibility; 40% were found to lack both fitness and criminal responsibility; and 11% were judged to be either not fit at the time of observation or not responsible for their actions at the time of the alleged offence(s). Recommendations to the courts included: the law should take its course (48%), diversion as a state patient (39%), and diversion as an involuntary patient (11%).

Conclusion. The majority of *observanda* referred by courts to Fort England Hospital for assessment between 2004 and 2011 were relatively young males who allegedly committed serious and violent offences. Despite the relatively high prevalence of Axis I diagnoses, almost half the cases were reported to be both fit to stand trial and criminally responsible for their alleged actions, with associated recommendations to the court that the law take its course. There is a complex relationship between mental disorder, as conceptualised in the law and current classification systems, and offending behaviour. Any attribution of causality should be individualised (in respect of the

phenomenology of the accused and the specific circumstances and details of his/her alleged offence(s)) and approached with caution.

African time, African tales: Possibilities for preferred directions of psychotherapy in South Africa

Thirusha Naidu
University of KwaZulu-Natal
naidut10@ukzn.ac.za

Poverty, political instability and seemingly insurmountable social problems in Africa create mental health problems and create a context in which it is difficult to address them. People in Africa have historically conformed to prescriptions of 'normal' with regard to mental health as imposed by external (foreign – usually Western) others. The use of mental health diagnostic taxonomies as exemplified by the DSM and ICD systems inculcate this Western-influenced approach into discourse in African mental health practice. This has had implications on the practice of psychotherapy on the continent, the approaches to which are heavily influenced by Western world-views . The treatment of mental problems is a luxury for most. Unmodified Western-based modes of psychotherapy are the norm despite the lack of resonance with African conceptualisations of self, world and other. The result is generally poor compliance and response to psychotherapy in public health settings. Which direction should be taken with psychotherapy in Africa? A new conceptual framework, preferably with a postmodern perspective, must be adopted. A social constructionist approach to psychotherapy that considers how social phenomena or objects of consciousness develop in social contexts is a viable option. In this paper I make a case for the benefits of postmodern approaches to psychotherapy in Africa, with emphasis on a social constructionist perspective. This is followed by a short exposition of leading postmodern approaches to psychotherapy.

Neuropsychiatric manifestations of HIV in children and adolescents receiving highly active antiretroviral therapy (HAART)

Rene Nassen
Stellenbosch University
rnassen@sun.ac.za

Background. The highly active antiretroviral therapy (HAART) era in the mid-1990s signalled a dramatic change in the long-term outcome of HIV. Many children have shown significant neurological benefit and, in particular, a decline in the incidence of HIV encephalopathy. As increasing numbers of children have survived into adolescence and early adulthood, new challenges have arisen, such as the detection and characterisation of milder forms of HIV-associated neurocognitive deficits in children previously thought to be asymptomatic.

Method. A systematic review of the literature was performed, with a view to compare local findings with the published literature, and to consolidate the reported neurocognitive and neuropsychiatric manifestations of HIV-infected children.

Results. The reviewed literature reports that central nervous system involvement and neurocognitive deficits are common and occur early in untreated HIV-positive children. HAART has significantly reduced the incidence of severe forms of HIV-associated neurocognitive disorders, especially HIV encephalopathy, but mild to moderate problems persist. Despite improvements in scores of broad-based IQ tests, children continue to present with executive functioning deficits on neuropsychological testing, as well as with significant learning problems. Higher rates of psychiatric disorders (mainly attention deficit hyperactivity disorder (ADHD), depression and anxiety), prescriptions of psychotropic medications and hospital admissions, were evident compared with the HIV-negative population.

Conclusion. While a considerable reduction in disease progression and deaths has occurred in children treated with HAART, behavioural and scholastic difficulties continue to negatively affect overall functioning and quality of life of HIV-infected children. While early initiation of HAART is advocated, and may reduce the risk of severe forms of neurologic and neurocognitive disease, there needs to be ongoing assessment and management of the minor neurocognitive and behavioural problems, as these may exert deleterious effects on long-term survivors of HIV, some of whom are now surviving into adulthood. Preventative and holistic models of care need to be explored, to enhance early detection and management of neuropsychiatric problems in HIV-positive children and adolescents.

Chess and psychiatry ... from Freud to cognitive science

Hemant Nowbath
Private practice, Durban
hemant@saol.com

Chess, like psychiatry, combines elements of both art and science. This paper seeks to explore the common threads between a 'mere game' and psychiatry. It reviews the current literature, examines the parallel ideas and possible therapeutic value of chess, and probes the potential for future research. Logical calculation, creative intervention, imagination, unexpected surprise and the ability to develop human potential are common to both chess and psychiatry. In both disciplines there is a fund of theoretical knowledge that underpins practical application. Skills in chess are measurable and open to study. Ratings are used to classify players of different strengths. Hence chess has contributed much towards psychological research and has served as a test for theories of thinking. Chess has been recognised as the *Drosophila* of cognitive science. Chess has provided insight into human thought processes and helped to advance the development of artificial intelligence programmes. The threads run from Binet's (1894) observation of blindfolded chess players, to investigate memory, to Fine's (1956) psycho-analytic analysis, and Saariluoma's (1995) cognitive approach to explore spatial relationships in chess. Numerous studies show that chess improves cognitive development, organisational skills, reasoning, imagination and self-esteem. It has been postulated that the enhancement in cognitive function may stem from the growth of new synaptic connections. Other similarities and shared goals between chess and psychiatry include exposure to problems, persistence, calculated risk-taking, the ability to analyse and a positive social impact. As does the holistic practice of psychiatry seek to address social issues, chess has been used as the means to improve the lives of inner-city children and rescue them from gangs and drugs. Siitonen and Pihlstrom (1998) have explored the relationship between chess and philosophy.

Chess may shed light on features of philosophical problem analysis and argumentation. Philosophical insights inspired by chess may transform views about complex human phenomena including ethical reasoning. The Tao of chess shows how the game reveals underlying truths that may be adapted from the chessboard to every aspect of life. There are additional therapeutic benefits: games may help to create a therapeutic alliance and serve as a diagnostic and assessment tool; chess has been used to help treat patients with both psychotic and mood disorders; and it provides for the inhibition and sublimation of aggression. The future too holds promise: the further unravelling of the anatomical substrates of thought process and memory, the development of more structured therapies and an examination of the affect of personality and gender variables.

Exercises in stigma and ethics

Samuel O Okpaku

Center for Culture, Health, and Society, Nashville, Tennessee, USA

indtiger@aol.com

The stigmatisation of mentally ill individuals is a major obstacle to the provision of services in mental illness and its treatments. A variety of attempts have been made in the past 2 decades to reduce such stigmatisation. This has included the depiction of mental illness as a brain disease. Last year, there were several exposés of the treatment of mentally ill individuals in Asia and Africa. Photographing patients has been a long tradition in medicine; it is used to describe a condition and the progress of that entity. With globalisation, many more people travel, and many bring home pictures and documentaries of their experiences. However, when these pictures are of mentally ill individuals, some questions may be raised as to whether these pictures can be taken with or without the subject's consent. In this lecture, I will discuss the power of photographs and their use in the last 50 years, and the need to be sensitive, especially in relation to mentally ill subjects. Does the photographing of mentally ill patients in low- and middle-income countries enhance or reduce stigma? At the end of presentation 1, participants will become more familiar with the definition of stigma and ethics. At the end of presentation 2, they will be more sensitive to issues relating to the privacy of mentally ill patients. A review of literature and images from the Holocaust, including pictures of mentally ill individuals from Africa and Asia, will be presented to illustrate various aspects of stigma and ethics. In summary, photographs of mentally ill individuals may be used for advocacy; however, for mentally ill individuals there are considerable ethical issues.

Towards a recovery framework in South African mental health

J S Parker

Department of Psychiatry and Mental Health, University of Cape Town and Lentegeur Hospital

jsparker@pgwc.gov.za

Throughout the world, the historical design of mental health services was based largely on the assumption that most people with severe mental illnesses will not recover; this is reflected in current services in South Africa. A range of long-term outcome studies and systematic reviews of these studies would, however, suggest that this is not the case, particularly with regard to schizophrenia. This, together with the voices of mental health consumer movements in a number of countries, particularly the USA, led to the development of new concepts of recovery which have fundamentally changed the way that services are designed. The aim of a recovery-orientated approach to mental health service delivery is to support people to build and maintain a (self-defined and -determined) meaningful and satisfying life and personal identity, regardless of whether or not there are ongoing symptoms of mental illness. Thus, a recovery-orientated approach represents a movement away from a primarily biomedical view of mental illness, to understanding this as a multidimensional interplay between people's experience of their mental health and their circumstances – including the health system, society, where they live, employment opportunities, and social support, to name a few. The adoption of a recovery framework holds the potential for a radical transformation of mental health services in South Africa. This will occur by empowering consumers through the adoption of a set of values that emphasises the principles of person-centeredness, self-determination and self-management in a positive atmosphere of hope. Essential steps for the adoption of a recovery framework include: *(i)* the promotion of recovery awareness in all aspects of services, with the establishment of recovery outcome measures as the universal standards; *(ii)* the institution of active measures to combat discrimination against individuals with psychosocial disability, both within services and on a societal level; *(iii)* the institution of progressive programmes in all services to establish and develop consumer involvement in service feedback, planning and delivery; *(iv)* improved access to the wide range of treatment and support services that are required for recovery; and *(v)* strengthening of primary level and community-based mental health services to improve prevention, rehabilitation and restoration of social roles. In the last 2 years there has been significant progress towards the attainment of these goals, but substantial challenges remain.

South African military veterans: Mental health assessment

Thabo Rangaka

South African Military Health Services: Veteran Affairs

rangaka@iafrica.com

'Pride, prejudice and promise – from origins to outcomes', pertaining to the South African liberation struggle military veterans (LSMVs) over the 60 years of the existence of the South African Society of Psychiatrists (SASOP), makes for fascinating reading indeed! The year 1948 saw the introduction of the nationalist government apartheid struggle for white supremacy, and in 1952, the SASOP predecessor was born. The liberation struggle for the eradication of apartheid and the introduction of a non-racial, non-sexist, unitary sovereign state of South Africa for all also was intensified in 1952. At the end of the Nationalist rule and the replacement of apartheid with the new democratic state of South Africa in 1994, the challenge arose for erstwhile foes on the battle fields and streets of southern Africa to get together, shake hands and collaborate in love and mutual respect to build the South African National Defence Force, and parallel to that, a unified South African Military Veterans Association. The diversity in the nature of South Africa military veterans – compared with those of the United States of America, for example – requires meticulous analysis. This is essential

to the evaluation of the psychopathology, socio-economic status and planning for the care, treatment and rehabilitation of all South African LSMVs. I have performed in-depth interviews of more than 50 South African LSMVs as they applied for a 'disability pension' under the regulations of the 1976 Military Pensions Act. The Act came into being before the existence of the diagnostic category called 'post-traumatic stress disorder' (PTSD). Many general practitioners who also saw the veterans after 1994 correctly diagnosed PTSD. The administrators of the Government Employees Pensions Fund (GEPF) questioned the competence of general practitioners to diagnose PTSD, especially because almost all LSMVs were diagnosed with significant PTSD. I assessed some of the South African LSMVs using the long psychiatric interview and the adapted military PTSD checklist (PCL-M) used by the USA Department of Defense/Veteran's Administration. The findings showed that PTSD had multiple co-morbid psychosocial conditions which affected the resilience of the veterans and were to be taken into account by the GEPF compensation commissioner in determining the compensation quantum. It must be considered how the Military Veterans Act no. 18 of 2011 influences the psychosocial management of South African LSMVs, and how SASOP can contribute to their care.

The impact of a problem-based learning curriculum on the psychiatric knowledge and skills of final-year students at the Nelson R Mandela School of Medicine

S Saloojee, J van Wyk
University of KwaZulu-Natal
saloojees1@ukzn.ac.za

Background. In 2001 a 5-year problem-based learning (PBL) curriculum replaced the traditional didactic 6-year lecture-based curriculum (LBC) to improve students' learning in the undergraduate programme at the Nelson R Mandela School of Medicine of the University of KwaZulu-Natal. To evaluate the effect of the PBL curriculum, we assessed the students' performance in the final psychiatry examinations, in comparison with those enrolled in the LBC curriculum, over a 9-year period.

Method. A retrospective analysis was undertaken of the 3 components of the final psychiatry examination marks from 2001 to 2009. The records reviewed included the students' performance in the long case examination (competence in clinical skills), the case vignette (problem solving skills), and the oral examination (a knowledge-based assessment).

Results. The records of 936 PBL curriculum students were compared with those of 771 LBC curriculum students. There were no significant differences in the mean examination marks for the long case examination between the 2 groups. Students in the PBL group performed significantly better in the case vignette examination (m=65; SD ±11.9; p=0.019). However, in the oral examinations the mean mark for the PBL group was lower than that of the LBC group (statistically significant; p=0.049). Regardless of the curriculum, students from 3 categories performed better than their counterparts: females (v. males), generally younger students (v. older students) and those who entered with higher average matriculation admission scores (v. lower matric admission scores).

Conclusion. The shorter duration of study and the revised curriculum did not have a negative effect on medical students' knowledge or clinical skills in psychiatry. Overall, students in the PBL programme were not disadvantaged. Rather, in 2 of the examination 3 components, the PBL students performed as well as, if not better than, their counterparts who trained in the longer didactic programme.

The intriguing inter-relationship between vascular disease, depression and dementia

Ingmar Skoog
Neuropsychiatric Epidemiology Unit, Sahlgrenska Academy, Gothenburg University, Sweden
ingmar.skoog@neuro.gu.se

Psychiatric disorders, such as dementia and depression, are common in elderly populations. After age 85 years, the prevalence of dementia and depression is 30% and 10%, respectively. The lifetime prevalence of depression approaches 50% in women and 25% in men. There is controversy as to whether depression is a risk factor for dementia. Furthermore, dementia may increase the risk for depression. Cerebrovascular and other cardiovascular diseases are also common in the elderly. The 2 most common cerebrovascular diseases are stroke and ischaemic white matter lesions. Stroke increases the risk of both dementia and depression. Silent infarcts and ischaemic white matter lesions are also common in the elderly and also increase the risk for dementia and depression. The latter is a reason for the introduction of the concept of vascular depression in the elderly. However, most depressions in the elderly are not related to vascular disease. Hypertension is the main risk factor both for ischaemic white matter lesions and stroke. Vascular risk factors, including hypertension, hypercholesterolemia, overweight, coronary heart disease, hyperhomocystaemia and diabetes mellitus have been suggested to be risk factors for dementia disorders, including Alzheimer's disease. Several of these diseases are also risk factors for depression. Adding to the complexity, associations between cerebrovascular and mental disorders may also point in the opposite direction, as several studies report that depression may increase the risk for stroke, as well as myocardial infarction. There is thus a complex interaction between depression, dementia and vascular diseases.

Emerging adulthood: Extended adolescence or new developmental stage?

Cora Smith
University of the Witwatersrand, Johannesburg
cornelia.smith@wits.ac.za

I aim to address the recognition of a developing trend among youth who fail to launch from their parental home, and the concomitant psychological and psychiatric difficulties resulting from this pattern of behaviour. A new developmental stage called the 'quarter-life stage' or 'emerging adulthood' has been proposed, extending adolescence from approximately 18 to 29 years of age (Arnett, 2004; Attwood and Scholtz, 2008; Robbins, 2004). The emergence of this developmental stage, fiercely debated in the literature, is thought to be the result of several contemporary social, economic and historical factors that have occurred globally. The behavioural

manifestation will be discussed, with reference to: delay in leaving the parental home; increased specialist education to survive in an information-based economy; fewer entry jobs despite extensive education; effect of globalisation on economy, societies and social roles on youth; effect of digital culture on youth identity development; and change in traditionally accepted markers for adulthood. The merits of this developmental stage, its antecedents and its applicability in the South African context will be debated, with reference to youth statistics, home-leaving trends and unemployment figures among South African youth. The clinical implications for mental health professions in child, adolescent and family psychology and psychiatry in dealing with the consequences on these youth and their families will be discussed. In addition, the implications for academic curricula, training and policy initiatives will be discussed to address the scale of the difficulties related to the South African youth's observed failure to launch.

Self-mutilation in hospitalised adolescents: South African findings

V Stancheva, L Albertyn, E Libhaber
Division of Psychiatry, University of the Witwatersrand, Johannesburg
stanchevig@mweb.co.za

Self-mutilation is a pathological behaviour that has become more prevalent in adolescents worldwide. Superficial self-mutilation is the most prevalent type in adolescents. In the diagnostic and statistical manual of mental disorders (DSM version IV-TR), the only mention of self-mutilation is as a symptom of borderline personality disorder. Although research findings are consistent with this, studies in adolescents have also indicated that self-mutilation occurs across a wide variety of psychiatric disorders such as major depressive disorder, bipolar mood disorders, anxiety disorders, adjustment disorders, post-traumatic stress disorder, psychotic disorders and eating disorders. A variety of factors have been shown to be associated with this behaviour: demographic factors, social and family factors, academic difficulties, substance use, psychiatric illness and sexual orientation. Most studies were performed in countries with predominantly white populations and in community settings. Only one early study looked at hospitalised adults with mental illness who self-mutilated. In South Africa, no study was conducted on hospitalised adolescents with mental illness who self-mutilated.

Although self-mutilation is under-reported and under-recognised, a prevalence of 54.8% was reported in this study population, with a mean age at onset of 13.6 years. Differences were found with previously published studies with regard to contributory and precipitating factors, methods used and response to self-mutilation. More studies are needed to address the prevention of this pathological behaviour in adolescents, which has been shown to be associated with a 5% suicide rate in later life.

Depressive and post-traumatic stress symptoms following termination of pregnancy in South African women: The impact of chronic burden, crisis support and resilience

Ugash Subramaney
University of the Witwatersrand
ugasvaree.subramaney@wits.ac.za

Background. The dismantling of apartheid laws in 1994 created a unique opportunity for new laws and policies to be passed in South Africa (SA). Despite a progressive and comprehensive health policy and laws that underwrite them, such as the Choice of Termination of Pregnancy Act of 1997, gaps remain in the implementation of reproductive health policies and in service delivery. The diversity of SA is evident in its racial distribution and wide array of cultures and ethnicities. Blacks constitute the majority of the nation (79.5% of the population). SA is a multilingual country, with Christianity being the predominant religion.

Objectives. To examine the characteristics and circumstances of women in SA who perform termination of pregnancy (TOP) and their reasons for doing so; and to determine their psychological responses over time with regard to depressive and post-traumatic stress disorder (PTSD) symptoms.

Method. Fifty-one women who attended TOP clinics at 2 distinct socio-economic sites in Johannesburg, South Africa, were evaluated for depressive symptoms using the Beck Depression Inventory (BDI). Chronic burden, resilience and crisis support measures were also measured at baseline. BDI and PTSD (revised Impact of Event Scale (IES-R)) measurements were repeated at 1 and 3 months after the procedure. Statistical analyses were conducted with SAS software (version 1). The 2 groups were compared on primary outcome measures using chi-square tests (for dichotomised variables) and Student's *t*-tests (for continuous measures). For all analyses, statistical significance was set at $p<0.05$, and all tests were 2-tailed. Bivariate analyses were conducted to ascertain whether any demographic, reason for TOP, number of previous TOPs, chronic burden, crisis support or CD-RISC had an effect on depression. A multiple regression model for PTSD and depression was then employed.

Results. Scores for depression and PTSD were low at baseline for both groups. Resilience scores were significantly higher in the higher socio-economic group. Scores for depression and PTSD decreased significantly over time for both groups. Religion and chronic burden emerged as significant factors that affected clinical outcome.

The effectiveness of a telephonic wellness coaching intervention in weight reduction and wellness improvement in a community-based sample of persons with serious mental illness

Henk Temmingh, Amanda Claassen, Sandi van Zyl, Henri Carrara, Nyameka Matross, Lanndon Myser, Dan J Stein
Department of Psychiatry and Mental Health, University of Cape Town
henk.temmingh@uct.ac.za

Background. Obesity and metabolic syndrome frequently occur in persons with serious mental illness (SMI) and are associated with increased disability and poor outcomes. The association between weight gain and psychotropic medication, atypical antipsychotics in particular, is well established. Whereas psychosocial interventions in persons with SMI and telephonic interventions in non-psychiatric occupational samples have been shown to be effective in weight reduction, there remains a paucity of research in psychiatry on telephonic interventions.

Objective. To evaluate the effectiveness of a telephonic wellness coaching intervention forming part of the Lilly Wellness Plus Programme.

Method. A total of 761 persons with SMI living in the community were prospectively followed up over a 12-month period. Participants received weekly telephonic wellness coaching sessions based on motivational interviewing principles for the first 3 months and monthly thereafter. At each visit, participants self-reported their weight and waist circumference and rated their overall general wellbeing. For longitudinal data, mixed-effect regression modelling was used and adjusted for baseline covariates to determine the change in weight, waist circumference and general wellbeing over time. We constructed a multivariate logistic regression model to determine predictors of attrition.

Results. Of the 761 participants, 61.4% completed the full 12-month programme. The majority of participants were female (72%) and had a diagnosis of bipolar mood disorder (56.8%) followed by schizophrenia spectrum disorders (19.7%), unipolar mood disorders (18.5%) and other mental disorders (5%). Of all the participants, 75.7% were prescribed atypical antipsychotics. A total of 84.2% of participants were overweight and the prevalence of metabolic syndrome as defined by International Diabetes Federation (IDF) criteria was 28.1% (95% confidence interval (CI) 24 - 31%). In the completer group, there was a statistically significant reduction of weight (p<0.001), waist circumference (p<0.001) and a significant increase in overall wellbeing over time (p<0.001). Participants with metabolic syndrome at baseline were significantly more likely to drop out of the programme (OR 1.74, 95% CI 1.22 - 2.46), as were participants with recent acute or chronic illnesses and those with mood disorders. Older participants and those who nominated a treatment partner in the form of a spouse or child had significantly lower odds of dropout.

Discussion. The use of a telephonic lifestyle coaching intervention was well received in a group of persons with SMI, with over 60% of participants completing the programme. Similar to other studies, we found small to moderate, yet significant, reductions in weight over time. Participants who had established metabolic syndrome at baseline, in particular younger patients, were more likely to drop out. Clinicians may need to consider more intensive interventions in this group. Limitations include bias due to self-reporting and lack of control for medication changes over time.

HIV and mental health: A pilot project to implement mental healthcare into antiretroviral therapy (ART) treatment sites in Tshwane-Metsweding District, Gauteng Province, South Africa

Rita Thom
University of the Witwatersrand, Johannesburg
rita.thom@wits.ac.za

Objective. To describe a pilot mental health intervention in public sector HIV treatment services.

Method. A situational analysis was conducted to determine the context of HIV treatment services in the Tshwane-Metsweding district, in facilities supported by the Foundation for Professional Development. A review of relevant literature as well as of best practice projects, locally and internationally, was conducted. The intervention consisted of training in modules for all levels of staff working in selected HIV treatment services and selected mental health services. This was followed by on-site mentoring and further training. Liaison with health service managers took place throughout the project to facilitate the project. Various aspects of the intervention were evaluated to determine whether it could be sustainably implemented in other districts.

Results. Although health information systems did not record important mental health data, a retrospective record review and a patient survey demonstrated that up to 30% of patients had symptoms of possible mental disorder, but less than 4% of reviewed records documented the presence of such symptoms. Approximately 100 staff members in the Tshwane District Health Service (DHS) received training in various aspects of HIV and mental health. These included training in screening for and identifying common mental disorders, HIV dementia and serious mental illness in people living with HIV who attended the DHS; training in the management of people living with HIV and AIDS (PLWHA) with mental disorders; training in the management of HIV and TB in people with mental illness; training in basic counselling skills, as well as psychotherapeutic interventions for PLWHA and mental disorder. Assessment of knowledge before and after training demonstrated that participants increased their knowledge and, in the case of HIV doctors and nurses, retained that knowledge over a 6-month period. On-site mentoring was provided to a limited number of participants only. However, there was an improvement in the clinical skills of participants who attended mentoring sessions.

Conclusion. There were significant challenges in implementing the intervention. Many of these are health-system-related or due to the heavy workload and inadequate resources in the DHS. It is therefore not possible to implement such an intervention in the current circumstances without dedicated staff to advocate for such interventions and to provide training and support to staff in the DHS.

Challenges to mental healthcare service delivery in the Eastern Cape

S van Wyk, Z Zingela, M Nagdee, H Erlacher, M Morales-Herrera, O Alonso-Betancourt, H Uys, K Sukeri
Walter Sisulu University
stefanovw@gmail.com

Background. Eastern Cape Province (EC) continues to face serious challenges in providing adequate mental healthcare services. A brief description explaining the current state of affairs with a specific focus on infrastructure and psychiatry is provided.

Method. A brief literature review was performed and epidemiological estimates were calculated. Authoring psychiatrists from 5 main EC psychiatric centres analysed local mental healthcare services. The summary will be presented, sometimes with accompanying photographic evidence. General challenges are summarised and solutions proposed.

*Results and discussion. T*he 2011 EC mid-year population was 6.83 million; 2.24 million aged <15 years (32.8%) and 4.54 million aged ≥15 years (67.2%).

The number of persons with severe mental disorders expected over 12 months in the population aged ≥15 years was nearly 700 000 (excludes personality disorders, obsessive-compulsive disorder, and medically or substance-related mental disorders). In mid-2012, the EC had 11 private and 15 government-employed psychiatrists (1:260 000 psychiatrist to population ratio; an improvement of 7.5% compared with 2010). Eight psychiatrists have joined the EC since 2010; 2 left and 1 retired – a gain of 7. However, 5 psychiatrists are close to or past retirement age. Only 3 (11.5%) have isiXhosa as their mother tongue, although 83.7% of the population is isiXhosa-speaking. State mental healthcare services for adults remain strained, with serious shortages in acute and rehabilitation beds, often causing overcrowding. Human rights are under threat in a number of instances. Community mental healthcare services are being developed, but remain severely deficient in rural areas. The EC has no formal government substance abuse rehabilitation programme, except for a 20-bed rehabilitation ward at Fort England Hospital in Grahamstown. The only comprehensive forensic psychiatry service is also at Fort England Hospital. No dedicated mental healthcare services for children and adolescents (CAMS) or elderly persons exist in the EC. The EC Department of Health has 4 properly functioning electroconvulsive therapy (ECT) machines, an increase of 2 machines over 2010. Mental healthcare services in the private sector are better off, with good infrastructure, despite inadequate capacity.

Conclusion. By mid-2012, the infrastructure for mental healthcare services in the EC remained in need of urgent reconditioning and expansion, with a large shortage of mental health practitioners. We recommend: increasing the budget for mental healthcare services; creating a dedicated directorate of mental healthcare services, with all services under its auspices (primary, secondary and tertiary); establishing a board of clinical advisors to the directorate which includes psychiatrists from the South African Society of Psychiatrists (SASOP); establishing a minimum of 1 community mental health team per health district; increasing provincial psychiatric bed capacity – especially acute beds in general hospitals; urgently developing CAMS; purchasing at least 2 more ECT machines; increasing and retaining personnel; and appointing a chief psychiatrist for each major psychiatric facility.

Psychiatry and end-of-life decisions

Chris Verster
Department of Psychiatry, Stellenbosch University
chrisv@sun.ac.za

End-of-life decisions have recently enjoyed substantial prominence in the local and international media. Current debate is mostly focused on assisted suicide and euthanasia, and psychiatry plays an important role in the discussions and suggested guidelines regarding these controversial and emotive issues. These issues are explored in the context of current proposed legislation and the ethical debate that it demands. The practising psychiatrist is often also confronted with patients whose decisions to end their lives are unrelated to terminal illness or severe physical pain or incapacity. The psychiatrist may be forced to act contrary to the wishes of the patient and be confronted with the debate around paternalism v. patient autonomy. Various arguments, as proposed by philosophers and ethicists since the time of Plato and the Stoics, are examined and this is followed through to the libertarian view of the anti-psychiatry movement and the contributions of bioethics. Finally, the role of the psychiatrist in 'contingent' or 'instrumental' suicide, where a threat of suicide may be linked to an admission decision and often recedes after the decision is made, is also discussed. Guidelines on these situations are scarce and although the concept of the virtuous doctor (and psychiatrist) is widely debated, the relatively unknown concept of patient virtue in this context is explored.

POSTER PRESENTATIONS

Outcome and predictive value of variables in the inpatient treatment of anorexia nervosa at Tara Hospital

A Abrie, A B R Janse van Rensburg
University of Pretoria
anina.abrie@mweb.co.za

Background. Eating disorders are severe chronic mental illnesses with high mortality and morbidity. There are no clear data on optimal treatment. The current study aimed to contribute information to the prediction of successful outcome. Weight restoration (weight and body mass index (BMI)) and length of stay were determined to assess the short-term outcome of the Tara programme. Predictive variables, documented on programme admission and discharge, were explored to determine differences between completers and non-completers, as well as whites and non-white patients.

Method. A retrospective record review was performed of all 49 patients meeting the criteria for diagnosis of anorexia nervosa between January 2005 and December 2008. Outcome was recorded as weight change and length of stay. Demographic, clinical and therapeutic variables were used to compare treatment completers with non-completers; and white with non-white users.

Results. A high level of chronicity was found in the cohort, with 7 of 49 patients re-admitted (14.3%), and 42 patients (85.7%) previously treated for anorexia nervosa, with a high level of co-morbidity. Past treatment for an eating disorder was reported for 28.3% of first- and second-degree relatives. Most patients gained weight on the programme (mean gain 6.16 kg; standard deviation (SD) ±4.596). The average admission BMI was 14.2 kg/m^2 (SD ±1.20) and average discharge BMI was 16.5 kg/m^2 (SD ±2.97); i.e. an average weight change per patient of 2.3 BMI units (SD ±1.77). The outcome measured on Couturier and Lock's criterion of =95% of desired BMI (18.5) was an average of -3.11 kg (SD ±7.56) per patient. Re-admission and non-completion of the programme were associated with poor weight gain. Compared with completers, non-completers were more likely to be scholars (unemployed v. being a scholar; odds ratio (OR) 2.91; employed v. being a scholar; OR 19.2), have a history of substance abuse (OR 3.14), be non-white (OR 0.59), and have the personality variables of passivity (OR 2.5), dependency (OR 2.92), mood stability (OR 0.19), and consideration for the consequences of their actions (OR 0.20). The small sample size of 12 of the 49 datasets of non-white users precluded meaningful statistical analysis. Ninety-two per cent non-white v. 59% white had the restricting subtype. Non-whites had fewer mood swings (43% v. 71%), less self-destructiveness

(14% v. 56%), lower impulsivity (11% v. 40%) and a lower occurrence of an external locus of control (11% v. 41%) than whites. More scholars were non-white (50% v. 41%). Differences in home language and religion could be ascribed to selection bias in the small sample set.

Conclusion. Mean weight gain per patient was 6.16 kg (a BMI increase of 2.3 units) on the Tara programme, with re-admission and non-completion associated with poor outcome. As in similar studies, few predictive variables were identified with completion of the programme. Non-whites could not be reliably differentiated from whites due to the sample sizes.

A qualitative study of the views of patients with HIV and childhood trauma in South Africa on the consent process for a cohort study

Helen Laetitia Phae Bates, Soraya Seedar, Helen Lester
Department of Psychiatry, Stellenbosch University, and University of Birmingham, Birmingham, United Kingdom
hlb959@bham.ac.uk

Objective. To investigate the experiences of the consent process for a cohort study involving women with HIV and childhood trauma.

Method. This was a qualitative semi-structured interview study conducted in a secondary care setting in the Western Cape of South Africa. The participants were 25 women involved in a cohort study on neurocognitive outcomes in HIV and childhood trauma, who agreed to participate in an interview immediately following their final cohort study appointment. Interviews were conducted using an interpreter and were digitally recorded. The English sections were transcribed. Transcripts were analysed according to the Ritchie and Spencer (1994) framework analysis.

Results. The overarching finding was that of therapeutic misconception: participants expected, and highlighted as incentives for participation, health benefits that the cohort study never aimed to deliver. This was mostly encountered in discussion of the MRI scan although it also permeated the discussion of cognitive testing and counselling. A minority of participants reported discomfort because of questions concerning their traumatic experiences. Despite this, the consent process was well received and there was good understanding of confidentiality and the voluntary nature of the research.

Conclusion. Care must be taken during the informed consent process not to create false or misleading expectations of benefit. This is particularly important for participants with HIV who appear to participate because of perceived health incentives. Informing participants that questions about traumatic experiences will be asked may improve the experiences for participants. Overall, the consent process was regarded as successful. Thus, if these aspects are addressed, it can be concluded that a careful generic consent process is suitable for a group with both HIV and childhood trauma.

Deception explored: Evolution, lies and reward

Indhrin Chetty
Private practice, Umhlanga Medical Centre, Durban
indh@hotmail.com

Deception is an extremely widespread aspect of human behaviour. It permeates various areas of human social interaction. Evolution favours those behaviours that lead to advantage and, ultimately, survival. Various theories have been advanced to explain man's ascendancy in the evolutionary race. One of these is that the ability to deceive, which in humans has developed to a highly efficient degree, has afforded man a distinct advantage in his ascendancy over other species. Deception is not, however, confined to humans, and has been widely documented and explored in non-humans (primates and non-primates). What distinguishes man's deception from the rest is his ability to deceive more effectively and convincingly. Many animals (and possibly plants) deceive. The goal may be gaining basic advantage and thus survival. This is reflected in the competition for food and mating rights. If deception affords an advantage in this competition, then it is a behaviour that is likely to be favoured by evolution. Deception in man has developed to a much more efficient level. It is a common phenomenon in daily human interaction. The lies we tell differ in their quality and intent. Our deception can be directed at others or at ourselves (self-deception). The general underlying goal is to gain some advantage. Humans are highly social beings, with the aim to gain advantage in social interactions. Even our self-deception is translated to deception in our social interactions. One theory suggests that the ability to deceive so efficiently, that has developed over time, is related to neocortical enlargement. Deceptive behaviour is inherent in social interaction and the ability to carry this out convincingly and advantageously is related to neocortical size. Herein lies the advantage that humans possess over other animals. Lying and deception reach far back into the evolutionary cycle. The ability to lie skilfully has contributed to the development of our intelligence. There are many conflicting ideas about deception, encompassing the different influences and factors involved. What is clear is that it pervades human interaction and has afforded humans a significant advantage in the evolutionary race.

A visual depression-screening instrument for use in settings of low literacy

Akena Dickens, John Joska, Dan J Stein
University of Cape Town
akenadickens@yahoo.co.uk

Given the high prevalence of depressive disorder in primary healthcare (PHC) settings, the use of screening instruments has often been recommended. The majority of depression-screening instruments, including the patient health questionnaire-9 (PHQ-9) and the Center for Epidemiologic Studies Depression scale (CES-D), have been developed as self-administered instruments in high-income countries. Clinic attendees at many PHC sites within Africa have unique challenges including low rates of literacy; therefore, expecting patients to use self-administered instruments may be inappropriate. Literature regarding the validity of depression-screening instruments specifically developed for use in settings of low literacy like Africa, remain scanty. We aimed to develop and validate a visual depression-screening instrument across different populations in Africa. We hypothesised that clinic attendees could self-administer this instrument irrespective of their literacy level. In previous work, we developed and validated a visual depression inventory (AVIDI) against a gold standard (MINI) in 92 HIV-positive participants in Uganda. The AVIDI demonstrated good properties; the area under curve (AUC) was 0.82. The AVIDI sensitivity and specificity

at a cut-off score of 10 were 75% and 71%, respectively. The positive and negative predictive values were 50 and 83.5, respectively (article in press). In a new project, we have engaged the help of a professional fine artist to improve previous work and develop the AVIDI into a scale that can rate depressive disorder severity. The refined AVIDI will be validated in 2 700 participants across different sites in Kampala, Uganda, and Cape Town. The study participants will include clinic attendees at general PHC and HIV-PHC settings, as well as children and adolescents. The 2 study settings provide a unique blend of differences in cultures and literacy levels, increasing the chances of our findings being generalisable to the African population. For quality-control purposes, we will pair the AVIDI with traditional screening instruments (either the PHQ-9 or CES-D). TATA-11.2 will be used to compute the test characteristics (AUC, sensitivity, specificity, predictive values and likelihood ratios) of AVIDI relative to the MINI. We will conduct pair-wise correlations between the AVIDI and the PHQ-9 and CES-D, assessing its performance against traditional screening instruments. We will compare the AUC scores across the study populations (Ugandan v. South African populations, literate v. illiterate populations, HIV-positive v. -negative, and adults v. children and adolescents). The AVIDI will be one of the first instruments developed for use in Africa, specifically to address the problems of low literacy. Clinicians and policy makers who intend to institute routine screening of depression may adapt the use of the AVIDI regardless of whether clinic attendees can read/write or self-administer a scale.

Maternal mental health: The role of early intervention

E du Toit, B Vythilingum, D Niehaus, L Koen
Sophia Maternal Mental Health Clinic, Panorama Psychiatry and Memory Clinic, Division of CL Psychiatry, University of Cape Town;, and Maternal Mental Health Clinic, Stikland Hospital and Stellenbosch University
elsadutoit1@gmail.com

Women in sub-Saharan Africa have a 1 in 16 chance of dying during pregnancy and childbirth, according to the World Health Organization. Maternal mental illness contributes significantly to these increased mortality and morbidity rates. The majority of these women discontinue their treatment and, for example, relapse of illness occurs in more than 75% of pregnant females with major depressive disorder. As psychiatric illness during pregnancy is associated with poor antenatal care and poor obstetric outcomes, the risks also transfer to the infants. Indeed, several studies suggest that maternal depression is associated with developmental delays. Early intervention is thus essential in reducing the mortality and morbidity of both mother and child. Maternal care should ideally include *(i)* planning around possible future pregnancies and *(ii)* focus on protective factors such as social support, access to resources and optimal antenatal and postnatal care. We report on possible options for early intervention services in sub-Saharan Africa, including the need for research into the appropriateness and effectiveness of these interventions.

The prevalence of undiagnosed metabolic syndrome in clozapine users of Xhosa descent

N Faasen, D J H Niehaus, E Jordaan, L Koen
Stellenbosch University
14316684@sun.ac.za

Background. Clozapine is an atypical antipsychotic drug that shows a higher efficacy compared with the typical antipsychotics, and is mostly indicated in cases of treatment-resistant schizophrenia. It has long been known that clozapine is associated with weight gain and, more recently, an increased risk has been shown among clozapine users for the development of the metabolic syndrome.

Objectives. To establish the prevalence of metabolic syndrome in schizophrenia patients of Xhosa descent.

Method. Twenty-nine Xhosa schizophrenia outpatients (according to the diagnostic and statistical manual of mental disorders, edition IV (DSM-IV)), receiving at least 1 year of clozapine treatment, were selected from a large genetics study performed in the Cape Metropole (Niehaus *et al.*, 2005). Demographic data, family history, treatment duration and dosage were recorded. Subjects were evaluated for metabolic syndrome according to International Diabetes Federation (IDF) criteria.

Results. The participants had all received clozapine for at least 1 year (average 319.8 mg/day; standard deviation (SD) ±158.3). Mean treatment duration was 6.7 years (SD ±4.2). The mean age of the subjects was 40.1 years (SD ±9.9), and 90% were male. A family history of cardiovascular disease was present in 69% of the patients. The prevalence of the metabolic syndrome was 44.8% (95% confidence interval (CI) 26.7 - 62.9). The mean waist circumference was 95.6 cm (SD ±17.2) and the mean body mass index (BMI) was 26.4 kg/m2 (SD ±4.4). The mean fasting glucose was 5.8 mmol/l (SD ±1.7) and the prevalence of undiagnosed diabetes mellitus (fasting plasma glucose ≥7.0 mmol/l) was 13.8% (95% CI 1.24 - 26.34). There was a statistically significant association between the metabolic syndrome and BMI (p=0.005359).

Conclusion. The findings regarding metabolic syndrome from this study are consistent with those from previous research in other ethnic groups. These results reiterate the necessity to monitor weight and BMI in patients receiving clozapine. The relatively high prevalence of undiagnosed diabetes mellitus in this group may further point to a need to monitor glucose levels on a regular basis in these patients.

Relationship between industry and profession – then, now and where to?

Althea Fordyce
Pharmaceutical industry
altheaf@mweb.co.za

The relationship between the pharmaceutical industry and the medical profession is a long and intertwined one, beginning with mass manufacture and marketing of key discoveries such as insulin and penicillin in the late 19th and early 20th centuries. The industry remained relatively small and uncluttered until the 1970s, when rapid expansion led to the eruption of a highly competitive market. By the mid-1980s, larger pharma companies invested into buying out smaller organisations, leading to fewer and dominant global companies. The goal of pharma companies is to maximise sales and, as the major funders of research, re-coup the costs incurred while

developing new molecules. The medical profession, by virtue of the right to prescribe, is the main target of pharma companies. Strategies set include cultivating relationships with the highest prescribers in order to sell more product, relying on the influence that these prescribers offer. Development of these relationships may start with small gifts, such as pens, pads etc.; changing to more elaborate offerings such as trips, consulting fees and research grants. Though used as support and branding visibility by the industry, an element of entitlement has grown among some prescribers and these 'gifts' have become expected, with some prescribers putting sales and marketing teams under pressure to provide such. The addition of 'self-regulation', i.e. Marketing Code of Practice and the Health Professions Council of South Africa (HPCSA) aligning their principles has, to a degree, reduced the element of entitlement and attempted to re-level the playing field. It is still a unique challenge for the industry and the profession to establish boundaries that support ethical prescribing practices.

Proneness to accidents in children with ADHD: A case report

Ricardo Jose Gonzalez Vergara, Gaby Mendez Gonzalez
Dora Nginza Hospital, Port Elizabeth Hospital Complex, Port Elizabeth
vergara@telkomsa.net

Background. Parental reports indicate that children with attention deficit hyperactivity disorder (ADHD) are more likely to suffer a variety of accidental injuries. Up to 57% of hyperactive-type ADHD children are reported to be accident-prone by their parents, compared with only 11% of children from the general population. Children with ADHD have an approximately 3-fold increased likelihood of accidental poisoning. Studies have shown that 15.6% of hyperactive children have had at least 4 serious accidental injuries, including broken bones, lacerations, head injuries, severe bruises and lost teeth, compared with only 4.8% of children in the general population. At the same time, 68.4% of children with ADHD (v. 39.5% of children in the general population) have experienced physical trauma sufficient to warrant sutures, hospitalisation or extensive/painful procedures.

Methods. We reviewed the medical records of a 6-year-old boy treated at Dora Nginza Hospital over a 9-month period. The patient sustained critical injuries due to a domestic accident, and was treated and investigated by a team of surgeons, anaesthetists, paediatricians, child psychiatrists, psychologists, physiotherapists, occupational therapists, dieticians, prosthesis specialists and social workers. During this prolonged hospitalisation, we observed the hyperactive behaviour of the patient, who, after a relatively short recovery period of initial acute illness, engaged in wild social activity with hospital personnel and patients. The patient was referred to child psychiatry consultation and was diagnosed with ADHD.

Case presentation. A 6-year-old boy presented to the emergency room of Dora Nginza Hospital, Port Elizabeth, with serious injuries in the right lower abdomen and upper right thigh. The child sustained the injuries while running around the house, when he turned a corner and was faced with a family member cutting wood with a chainsaw. The child was initially assisted at the local hospital in Craddock, and then rushed to Livingstone Hospital, Port Elizabeth, where he was resuscitated and transferred to theatre for surgery. The massive disembowelment was replaced to the abdominal cavity and vascular injuries in the femoral artery and femoral vein were sutured. The patient recovered, but unfortunately the right leg had to be amputated below the knee due to the lack of blood supply for a period of time between the injury and the surgical repair. After several operations to refashion the stump and comprehensive recovery, a psychiatric and psychological evaluation was performed and the patient was diagnosed with ADHD.

Conclusion. The correlation between ADHD and accident proneness is clearly evident. We experienced a very touching case of a patient who lost a limb due to an accident that, we believe, was associated with the condition ADHD, as diagnosed after the accident. Everybody loved him during the prolonged hospitalisation and recovery.

Recurrent psychotic mania: Does bipolar mood disorder present differently in Africa?

Christoffel Grobler
Elizabeth Donkin Hospital, Port Elizabeth
dr.stof@mweb.co.za

Background. The issue of unipolar mania as a clinical entity remains unresolved and research suggests that it is a rare occurrence.

Objective. To investigate and describe the course of illness and clinical features in a cross-section of patients with a history of mania attending public hospitals in the Limpopo Province, with the intention to examine the rate of a recurrent unipolar manic course.

Method. A purposeful sample of 103 patients presenting with a history of mania between October 2009 and April 2010 to 3 hospitals in the Limpopo Province were selected and interviewed using the affective disorders evaluation.

Results. Fifty-seven per cent (*n*=59) of the patients had only ever experienced manic episodes with 76.7% (*n*=79 reporting ≥4 lifetime number of phases. Mean age was 38 years and 54.23% (*n*=32) were male, compared with the depressive and manic episode group (DAM) (mean age 34.66 years; 31.82% (*n*=14) male). There did not appear to be any significant differences between the 2 groups in terms of marital status, education and employment status; however, significantly more patients in the MO group were receiving a disability grant (57.63% v. 45.45%). There was a higher rate of suicide attempts in the DAM group (40.9% v. 16.95%). There was a trend to prescribe anti-psychotics more frequently to the MO group and mood-stabilisers to the DAM group. Features of mood elevation indicated more psychotic symptoms in the MO group: delusions – 89.83% v. 79.5%; hallucinations – 77.79% v. 63.64%; paranoid ideation – 88.14% v. 61.36%. There appeared to be a higher risk of substance abuse in the MO group: alcohol abuse – 13.56% v. 4.55%; history of cannabis abuse – 25.42% v. 9.1%. A higher rate of co-morbid anxiety disorder was found in the DAM group (43.18% v. 20.34%). The illness was more likely to be rated as 'marked to severe' on the CGI in the MO group (30.5% v. 20.45%).

Conclusion. Considering that 57% of the patients in this sample had only ever had manic episodes, this suggests a much higher rate than the 10 -

20% suggested in psychiatric textbooks. Differences between the 2 groups appear to indicate 2 distinct disorders, one similar to our contemporary understanding of bipolar disorder, the other presenting with a recurrent psychotic manic illness that falls somewhere on the spectrum between schizo-affective disorder and bipolar mood disorder.

Results of a cross-sectional descriptive study of clinical features and course of illness in a South African population with bipolar mood disorder

Christoffel Grobler
Elizabeth Donkin Hospital, Port Elizabeth
dr.stof@mweb.co.za

Background. Bipolar disorder remains poorly researched with regard to course of illness and clinical features in sub-Saharan Africa.

Objective. To investigate and describe the course of illness and clinical features in a cross-section of patients diagnosed with bipolar disorder and attending public hospitals in the Limpopo Province.

Method. A purposeful sample was selected of 103 patients presenting with a history of mania between October 2009 and April 2010 to 3 hospitals in the Limpopo Province – Mankweng, Mokopane and George Masebe Hospitals. Patients were interviewed using the affective disorders evaluation.

Results. Of those interviewed, 55.34% (*n*=57) were female. Patient age ranged from 12 to 73 years (mean 36.6 years; standard deviation (SD) ±11.9). Most subjects were not married (69.9%). Seventy-two (69.9%) were unemployed with 54 (52.35%) receiving a disability grant. Twenty-seven per cent had attempted suicide, with hanging the preferred method (*n*=9), followed by an overdose (*n*=6). A significant finding was that 57.28% (*n*=59) of the sample had only ever experienced manic episodes, with 76.7% (*n*=79) reporting ≥4 lifetime number of phases. The most commonly prescribed psychotropic drugs were valproate (*n*=69), haloperidol (*n*=51) and zuclopenthixol depot (*n*=36). Only 14 subjects were receiving antidepressants. Sixty-six (64.08%) had consulted with faith or traditional healers with regard to their mental illness. While HIV status was unknown to the majority of patients, 9 (8.74%) were HIV-positive. The mean age at onset of first manic episode was 25.17 years (SD ±8.49), and of depression, was 26.15 years (SD ±9.36). The majority of patients experienced their first manic and depressive episode in their 20s, with 23.3% (*n*=24) reporting a first manic episode prior to the age of 20 years. Approximately one-third of the patients were smokers, 39.81% (*n*=41) reported a history of alcohol abuse, and 9.71% (*n*=10) admitted to current abuse. Six patients were still using cannabis and 18.4% (*n*=9) had a history of cannabis abuse. Of the subjects interviewed, bipolar disorder was the primary axis 1 diagnosis in 91.26% (*n*=94), followed by schizo-affective disorder (*n*=7), schizophrenia (*n*=1) and substance-induced psychosis (*n*=1). Fifty-one patients had a co-morbid anxiety disorder.

Conclusion. Bipolar disorder research from Africa remains scarce. Studies such as this one will contribute to a better understanding of the course of illness in Africa and, in particular, clinical characteristics unique to African patients. Considering that international diagnostic criteria are based mainly on research findings from first-world countries, it is high time that the authors of these manuals take notice of the unique illness characteristics such as the high rate of manic-only presentation in the course of bipolar illness in Africa.

Evolution and revolution in psychopharmacology of bipolar disorder

Neil Horn
University of Cape Town
neil.horn@uct.ac.za

Background. This paper reviews the evidence base for putative treatments and new evidence for existing treatments for bipolar disorder. New understandings of the neural basis for disease and recovery are presented.

Method. A literature review was performed.

Results. Progress in trial methodology and neuroscience has brought us closer to understanding the effectiveness of new and older drug therapies, and presents several exciting future treatment options in an illness where substantial resistance to pharmacotherapy by sufferers is problematic.

Conclusion. New tricks work on old dogs.

Guidelines for standards in South African state-sector psychiatric practice

Bernard Janse van Rensburg
University of the Witwatersrand, Johannesburg
grasontwerp@mwebbiz.co.za

Background. The State Employed Special Interest Group (SESIG) of the South African Society of Psychiatrists (SASOP) was established in Durban during the national congress in September 2000. Issues of concern at the time included: suboptimal physical conditions of state hospitals and clinics; stalling of the essential drug list (EDL) review process; and understaffing and difficulties to recruit and retain mental health medical personnel in the state sector. Subsequently, issues on the SESIG agenda also included the Mental Health Care Act no. 17 of 2002 and the responsibility of the state to provide mental healthcare infrastructure. During the past 2 years, attention was given to liaison with the South African Medical Association (SAMA) as medical labour organisation; standards for psychiatric inpatient structures, services and care; and scheduling a national SESIG strategic workshop.

Method. Ethics clearance was obtained for a retrospective quantitative review of the demographic and occupational profile of SESIG's members, as captured by the SASOP database of current and potential members. The investigation also included a review of the policies and process through which strategic activities, priorities and measures for progress were identified within the different areas of SESIG's mandate.

Results. In 2007, only 38% (*n*=144) of the potential total number of 380 state-employed psychiatrists were paid-up SESIG members; and only 53% (*n*=202) of the potential total number of 378 in 2011. The Eastern Cape, Free State and Northern Gauteng sub-groups had the biggest percentage of members per region on 2007, which changed in 2011 to Northern Gauteng, Western

Cape and Eastern Cape. In 2011, 40% of the total members were psychiatric registrars. Presentations and discussions during the first national strategic meeting of state-employed psychiatrists, convened in 2012, covered 6 areas: the scope of state-sector practice; pertaining policies for state practice; planning per region; teaching and research; accepted principles for care; and strategic mobilisation. A number of key issues were identified including: infrastructure for psychiatric infrastructure and human resources; psychiatric EDLs and standard treatment guidelines (STGs); mental health and psychiatric disorders in context of the global burden of disease (including HIV- and substance-related problems); community-centred psychiatric services and referral levels; a recovery framework; culture, mental health and psychiatry; and psychiatry's specialty status and subspecialties.

Conclusion. Eleven position statements were formulated to guide SASOP/SESIG activities during 2012 - 2014, covering: national mental health policy; psychiatry and mental health; infrastructure and human resources; STGs and EDLs; HIV in children and adults; substance abuse and addiction; community psychiatry and referral levels; recovery and re-integration; culture, mental health and psychiatry; and the specialty status of South African psychiatry.

A retrospective descriptive study of female offenders charged with murder or attempted murder of minors referred to Weskoppies Hospital for observation in terms of the Criminal Procedures Act over a 20-year period

K Khoele, P De Wet, H Pretorius, J Sommerville
University of Pretoria, Department of Psychiatry, Weskoppies Hospital.
kwenakhoele@yahoo.com

Background. For many years, women charged with the murder or attempted murder of children have been among forensic observation referrals. Research on these women seems not to have been prioritised; therefore, literature in this field in South Africa is lacking. Solidarity Helping Hand released a report containing shocking statistics regarding South Africa's current levels of child murder, rape and abuse: during 2007 - 2008, about 1 410 cases of child murder were reported – 22% more than the preceding year. The World Health Organization estimated, through the use of limited country-level data, that 53 000 children died worldwide in 2002 as a result of homicide.

Objectives. To describe the psychiatric profile of women charged with murder or attempted murder of children in the region served by Weskoppies Hospital, after forensic observations over a 20-year period.

Method. A record-based descriptive review of clinical and administrative files of 32 female perpetrators was performed. The perpetrators were observed for 30 days at Weskoppies in the period 1 January 1990 - 31 December 2010. The study was focussed on descriptive statistics; analyses were performed with SAS software (version 9.2).

Results. Of the cohort: 62% were aged 20 - 30 years and 37% were aged 31 - 50 years; 46% were married, 6.25% were separated and 43% were divorced; 25% were employed and 72% were unemployed at the time of the crime. The highest level of education among the women included pre-school (28%), secondary school (40%), tertiary education (3%) and technical education (3%). The most commonly used methods for the crime included weapons, drowning and poisoning. A common reason cited for the crimes was relationship problems with partners. Mental illness was diagnosed in 53% of the women, and substance use disorders in 6.25%. No mental illness was found in 41% of cases. Twenty-eight per cent had a psychotic disorder and 25% had a mood disorder. There were more male than female victims. In 93% of cases, the perpetrators were mothers to the victims. Sixty-eight per cent of the women were charged with murder and 22% with attempted murder. Sixty-eight per cent were suitable to stand trial and 56% were accountable for the crimes at the end of the observation period.

Conclusion. International reviews show a high frequency of depression, suicidal behaviour and malingering among mothers who commit child homicide. However, this study showed a high frequency of psychotic illness, less suicidal behaviour and no mental illness in 41% of cases, although malingering was not diagnosed.

Drug utilisation: Review on antidepressants

Safiyyah Laher, Shirra Moch
University of the Witwatersrand, Johannesburg
safiyyah.laher@gmail.com

Background. The introduction of selective serotonin re-uptake inhibitors (SSRIs) has lead to a considerable increase in global antidepressant prescriptions. This increase has created substantial controversies. Questions have been raised on the efficacy of treatment of depression and anxiety, suicidality rates and tolerability of drugs. This research aims to shed light on current antidepressant prescriptions and compare these with treatment guidelines. Differences in usage between antidepressants are also assessed.

Method. Two datasets (A and B) were acquired from different medical data warehousing companies. Each dataset comprised 1 years' medical records from healthcare practitioners subscribed to the respective company (dataset A from 2009, dataset B from 2011). Data included a unique patient number, age, gender, treatment code, ICD-10 code and treatment date. Treatment code was listed as the unique identifier code (National Pharmaceutical Product Index (NAPPI)) which was de-coded to the respective drug name and dosage. Microsoft Excel was used to filter the data and isolate patients treated with an antidepressant. A cluster analysis was performed to group antidepressants. Simple descriptive statistics were determined. Data were analysed using STATA software (version 10.0). Statistical significance was determined using Pearson's chi-square tests, Student's *t*-tests and logistic regression. Significance levels were set at $p<0.05$.

Results. The cohorts for datasets A and B were 9 213 and 1 244 in size, respectively. The most frequently dispensed antidepressant was amitryptiline (for dataset A, 67.49% and $n=6$ 217; for dataset B, 64.06% and $n=797$). The mean age of the patients was 43.86±13.81 years and 46.27±13.07 years for datasets A and B, respectively. The type of antidepressant used was significantly associated with ICD-10 code ($p<0.0001$), psychiatric condition ($p<0.0001$) and gender ($p<0.05$). Age was not associated with the type of drug used ($p=0.6249$). The mean number of antidepressant prescriptions per patient was 2.94±3.77 (dataset A) and 2.57±2.47 (dataset B).

Conclusion. This research shows that amitryptiline accounts for a majority of prescriptions because of its varied indications for use. Compared with earlier studies, there is an increase in the use of newer selective serotonin reuptake inhibitor (SSRI) and serotonin-norepinephrine (SNRI) agents. Patients with a psychiatric condition were more likely to receive a newer antidepressant and patients with a pain condition were more likely to receive an older antidepressant. We discuss reasons for poor adherence to treatment.

Suicidal behaviour in a schizophrenic Xhosa population

M Lückhoff, E Jordaan, L Koen, D J H Niehaus
Stellenbosch University
marlize.l@mweb.co.za

Background. Suicidal behaviour is a large contributor to the mortality and morbidity of schizophrenia. Up to 55% of patients with schizophrenia attempt suicide and approximately 10% succeed. It is thus important to understand the risk factors that contribute to this behaviour. In a previous study in the Xhosa schizophrenia population, we demonstrated that affected sibship status was protective in nature while earlier age of onset of illness was a predictor of suicide attempts. Given the counter-intuitive nature of the sibship finding, we expanded the sample size to explore other factors that can help to clarify the finding.

Objectives. To investigate demographic variables, including affected sibpair status, substance abuse and illness variables, as risk factors for suicidal behaviour in schizophrenia patients of African (Xhosa) descent.

Method. Xhosa subjects with schizophrenia were assessed with the Diagnostic Interview for Genetic Studies and stratified into 2 groups: those with and those without a history of previous suicide attempts. Demographic and illness variables (including lifetime presence of symptoms) were compared across these groups.

Results. Of the total 981 participants, 137 (14 %) had a history of previous suicide attempts. Demographic variables were not found to be predictive of suicide attempts. The presence of bizarre behaviour at assessment or a history thereof was a significant predictor of suicide attempts ($p<0.009$).

Conclusion. These findings raise the possibility that the presence of bizarre behaviour may be used to identify patients at higher risk for suicide attempts.

The prevalence of metabolic syndrome and its associated factors in long-term patients in a specialist psychiatric hospital in South Africa

K S Maaroganye
University of Pretoria
kagisho06@yahoo.com

Objectives. Patients with severe mental illness (SMI) have excessive mortality rates compared with the general population across different settings and over time. Metabolic disorders including the metabolic syndrome, diabetes mellitus, hypertension, dyslipidaemia and obesity have been associated with cardiovascular disease and mortality. Many studies, such as CATIE, have found a significant association between some second-generation antipsychotics (SGA) and weight gain, diabetes mellitus and dyslipidaemia. However, the contribution of other variables including first-generation antipsychotics (FGA), mood stabilisers and antidepressants in the development of metabolic disorders has also been recognised. There is a dearth of knowledge about metabolic disorders and its association patterns in psychiatric patients in developing countries.

Objective. To determine the prevalence of metabolic disorders in long-term psychiatric patients, and the relationship between demographic and clinical factors and these metabolic disorders.

Method. We performed a cross-sectional quantitative study. All psychiatric inpatients aged >18 years who had been admitted for >6 months were invited to participate in the study. Eighty-four patients participated. They were interviewed, examined, measured and blood tests were conducted to determine several demographic and clinical variables including age, gender, weight, blood pressure and fasting blood glucose. Most of the patients were receiving a combination of psychotropic medications; therefore, it was not possible to investigate associations between drugs and metabolic disorders.

Results. The prevalence of the metabolic disorders were as follows: metabolic syndrome – 32%, hypertension – 32%, diabetes mellitus – 8%, cholesterol dyslipidaemia – 32%, triglyceride dyslipidaemia – 29%, low density lipoprotein (LDL) dyslipidaemia – 50%, overweight – 37%, and obesity – 24%. Among the patients with metabolic syndrome, 59% were receiving high-potency antipsychotics, 44% were receiving clozapine, and 52% were receiving sodium valproate. Black and female patients were more likely to have the metabolic syndrome. The obesity prevalence of 24% was lower than that found in the CATIE study. Female patients were more likely to be obese and have cholesterol dyslipidaemia. Ninety-six per cent of patients with dyslipidaemia were newly diagnosed during the study. Hypertension was associated with age, but not with gender. All of the diabetic patients were overweight and 2 were obese. Three out of the 7 previously diagnosed diabetic patients had raised fasting blood glucose levels.

Conclusion. The prevalence of the metabolic syndrome falls towards the lower limits of the expected prevalence rate. Race and gender were moderately associated with the metabolic syndrome. There is a lack of screening for dyslipidaemia in this setting. Diabetic patients should be referred to specialist diabetic clinics for better monitoring and control. Well-designed studies are required to determine the associations between commonly used psychotropic and metabolic disorders in our settings.

Managing the emotional pressure in working with borderline personalities – counter-transference algorithms according to the Masterson tradition

Daleen Macklin, Loray Daws
University of Pretoria
daleen.macklin@up.ac.za

The modern psycho-analytic psychotherapist has come to rely on counter-transference as an invaluable source of information in the treatment of

personality disorders. Historically, classical thinking seemed very aware of its presence, but generally ascribed it to a sign of lack within the therapist and in need of re-education through further personal therapy. Given the initial aims of psycho-analysis as a budding science, such a position may have been necessary for the establishment of procedures unaffected by the 'undesirable' elements of the analyst – elements that seem to hamper psycho-analysis almost surgical ideal. Despite the exorcism- like approach to CT, its presence naturally survived and various changes in the field reclaimed its importance within the bipersonal field. Less demonised CT could finally serve as unique communicative tool – as window and mirror, reflecting back and deepening the therapeutic relationship. Case studies will be provided to illustrate the Mastersonian approach to counter-transference. The current paper will attempt to focus on a Mastersonian approach to CT as found in the treatment of the Borderline Disorder of Self (BDOS). Emphasis will be on 6 patterns found in treating the disorder with possible solutions.

Using the Mastersonian triads in understanding borderline, narcissistic and schizoid personality disorders

D Maleen, L Daws
University of Pretoria
daleen.macklin@up.ac.za

Background. The work of psychiatrist and personality disorder pioneer James F Masterson has spanned over 5 decades and has enabled many clinicians in the treatment of various disorders of self. It is the aim of the current paper to explore the 3 main triads found in the Masterson tradition; i.e. the borderline triad (self-activation leads to anxiety, which leads to defence), the narcissistic triad (vulnerability leads to anxiety, which leads to defence), and the schizoid triad (contact leads to anxiety, which leads to safety defences). Various clinical examples from case studies will be provided in an attempt to illustrate the main triads present in the disorders of the self. It will become evident that the tracking of the triads enables the clinician to focus their interventions more effectively; i.e. clarify and confront the various fears of self-activation experienced by those struggling with the borderline dilemma, interpreting narcissistic vulnerability as narcissists fear vulnerability (pain-self-defense interpretations) , and lastly, with the schizoid attempt consensus matching and interpretation of the schizoid dilemma.

Screening for depression and anxiety in general practice: Psychometric properties of ghq12 and k6

Victor Makanjuola, Mbadiwe Onyeama, Folorunsho Nuhu, Lola Kola, Oye Gureje
Department of Psychiatry, University of Ibadan
vmakanjuola@yahoo.com

Background. Mental disorders have been estimated to occur in one-third of attendees of general practice. Depression and anxiety disorders are the most common mental disorders in primary care settings. These disorders unfortunately often go unrecognised in general practice. Screening for mental disorders in general practice has been shown to improve the rate of recognition and management outcomes of mental disorders. We report on the psychometric properties of 2 brief questionnaires administered in the general practices located in 3 different geopolitical zones of Nigeria (covering the 3 main languages spoken in the country).

Method. Consecutives attendees of selected primary care clinics in Ibadan, Enugu and Kaduna were screened with the GHQ 12 and K6. A predetermined cut-off score of 4 on the GHQ tool was used to select cases and non-cases such that subsequent analysis would have sufficient scope to determine the 'true' cut-off to be used in clinical practice. We selected all cases and 50% of non-cases for second-stage interview. A composite international diagnostic interview was administered by trained lay interviewers.

Results. There were a total of 1 621 respondents in all the centres; 931 (59%) were female. Ninety-seven (6.2%) of the respondents fulfilled the diagnostic criteria for depression, while 144 (9.3%) met the criteria for anxiety disorder. The ability of the K6 tool to detect depression in respondents, as measured by the area under ROC curve, was 0.62, while the value for detecting anxiety disorders was 0.58. However, it has robust internal reliability with a Cronbach's alpha of 0.93. The GHQ 12 at the best threshold of 4 was able to correctly classify 75% of the attendees of the general practices with or without depression. At this cut-off, the sensitivity of the instrument was 72.2%, while the specificity was 75.2%. With regards to generalised anxiety disorder, the GHQ 12 was able to correctly classify 62.9% of the respondents at an optimal cut-off of 3. The sensitivity at this cut-off point was 59% while the specificity was 63.3%. The area under the ROC curve was 0.74 for depression, while that for generalised anxiety disorder was 0.6.

Conclusion. The K6 had remarkable internal reliability in the study population. However, it was unable to discriminate between patients with and without depression and generalised anxiety disorder. The GHQ12 was able to correctly classify 3 out of every 4 of those with and without depression in the population, in addition to having overall good psychometric properties. The GHQ12 will be a useful tool in screening for common mental disorders in general practice in Nigeria.

The 39-item child exposure to community violence (CECV) scale: Exploratory factor analysis and relationship to post-traumatic stress disorder symptomatology in trauma-exposed children and adolescents

Lindi Martin, Nicola Revington, Soraya Seedat
Department of Psychiatry, Stellenbosch University
lmartin@sun.ac.za

Background. Exposure to multiple forms of community violence in youth is associated with a wide range of negative health outcomes. A number of scales measuring community violence exposure have been developed, including the child exposure to community violence (CECV) checklist. This study examined the psychometric properties of an adapted version of the CECV in a South African sample of trauma-exposed youths. In addition, the study assessed the relationship between exposure to community violence and post-traumatic stress disorder (PTSD) symptomatology.

Method. Trauma-exposed youth (*n*=231) completed 2 self-report instruments, namely the CECV and the child PTSD (CPC) checklists, on a single occasion. Exploratory factor analysis (EFA) was used to investigate the factor structure of the CECV. The association between CECV and CPC scores was also explored.

Results. EFA of the CECV revealed 3 factors that accounted for 38.66% of variance in the model and consisted of 29 of the original 39 items. Reliability of the 3 factors ranged from moderate to excellent (α=0.682 - 0.892). Exposure to community violence was positively correlated with post-traumatic stress symptomatology (r=0.464; p<0.001). Adolescents attending high school reported significantly higher levels of exposure to community violence than children in primary school.

Conclusion. Findings provide support for the conceptualisation of exposure to community violence as comprising distinct, multiple factors. Levels of exposure to community violence and family violence were high, consistent with other South African studies. We found a highly significant positive association between exposure to community violence and PTSD symptomatology, providing evidence for the convergent validity of the CECV.

Poverty and suicide in the Transkei region of South Africa

B L Meel
Walter Sisulu University
bmeel@wsu.ac.za

Background. Poverty leads to many social ills including suicide. Hanging is the method of choice for a poor person in committing suicide. The former Transkei region is one of the poor regions of the Eastern Cape in South Africa.

Objectives. To study the trend of suicides in the Transkei and to follow the link between suicide and poverty.

Method. This was a retrospective study from 1996 to 2006, carried out at Mthatha (Umtata) Hospital Complex mortuary. More than 1 000 medico-legal autopsies are conducted at the complex annually, catering to a population of 400 000 in the former Transkei region.

Results. A total of 10 138 medico-legal autopsies were conducted between 1996 and 2006. Of these, 552 (5.4%) subjects had died from hangings. The average number of hangings was 13.3 per 100 000 population annually. The number increased from 6.7 per 100 000 population in 1996 to 21.7 in 2006 (p=0.05, X^2=17). Males outnumbered females 5.9:1. The highest percentage (33.9%) of deaths was among persons aged 21 - 30 years. There is circumstantial evidence that growing financial difficulties along with HIV/AIDS have been contributory to these deaths.

Conclusion. There is an increasing incidence of suicides in the Transkei region of South Africa. Poverty appears to be contributory to these deaths.

Prejudice toward child depression: A theoretical framework

G Mendez Gonzalez, O Okere, R Gonzalez Vergara
Family Medicine Department, Port Elizabeth Hospital Complex
vergara@telkomsa.net

Background. Depression was not recognised as a childhood disease until 1980. It is not uncommon in children, but for many reasons it often escapes diagnosis. Possible reasons for the above include the historical denial that depression exists in children, and the reluctance to diagnose mental disorders in children because mental illness is a badge of shame in many families. Parents may exert subtle and non-subtle pressures on physicians to find another cause of a depressed child's behaviour. Parents may not even think of depression as a possible cause of their child's sudden trouble in school or with friends, or as a reason why their child is so confrontational. Parents may be reluctant to voice their fears and may find little practical information about child depression.

Objectives. To describe the state of scientific literature on prejudice and stigma associated with child depression and to make empirical recommendations.

Method. We reviewed 42 child depression articles in peer-reviewed journals. The review process involved identifying and appraising literature convergence on prejudice and stigma associated with child depression.

Results. Our review suggested that while childhood depression is a widely accepted mental disorder, it still often goes undiagnosed and untreated. Some research points to the stigma associated with depression as an apparent driving factor in not receiving proper evaluation and treatment. Even for those children and parents who may know that their feelings and behaviours are related to depression, the fear of stigma may keep them from seeking help. Parents often wonder if they did something to cause the child's depression (guilt) and worry that their child will be treated differently in school and perhaps be excluded from future opportunities.

Conclusion. For many children, depression is linked to stressful life events, such as prejudice. Prejudice can be very harmful because the children feel discriminated against, not wanted around others, thinking that they have done something wrong that they cannot explain. They are afraid to confide in their parents and do not want to attend school. They need 'professional help' to overcome their depression.

Electro-encephalography referrals and outcomes in a tertiary psychiatric hospital

M Molokomme, U Subramaney
Sterkfontein Hospital
molokashe@mweb.co.za

Background. Since its inception in the 1930s, electro-encephalography (EEG) has become one of the most used investigative tools in psychiatry. Its uses include the exclusion of seizure disorders and encephalopathic conditions. In psychiatry, distinguishing between a primary psychiatric disorder and psychiatric manifestations of an underlying medical condition is of vital

importance. This determines which course of management the psychiatrist should follow, and most importantly, determines prognosis. However, EEG studies in psychiatry have yielded unfavourable results. The yield of positive (abnormal) EEG results is very low. Despite this, it is still widely requested by most psychiatrists. There is a dearth of literature assessing the usefulness of EEG in psychiatry in our South African setting.

Aim. To determine which users are referred for EEG and the outcomes thereof.

Method. The study was conducted at Sterkfontein psychiatric hospital. We performed a retrospective review of clinical records and EEG reports of inpatients aged ≥18 years who underwent EEG between January 2008 to June 2009. A datasheet was used as a recording tool. Data were analysed using Statistica software (version 9.0).

Results. The sample comprised 85 patients: 74 (87%) records were normal, 7 (8.2%) were abnormal, 2 (2.4%) were inconclusive and 2 EEG reports were unavailable. Only 1 patient's diagnosis changed based on abnormal EEG results. There was no statistically significant correlation between abnormal EEG results and demographic variables, symptoms, admission diagnosis and medications.

Conclusion. The positive yield of EEG results remains very low in psychiatry. EEG results do not appear to influence the treating psychiatrist's decision regarding management.

Treating depression in HIV positive patients – positive impact on adherence

M Y H Moosa, F Y Jeenah
University of the Witwatersrand, Johannesburg
yusuf.moosa@wits.ac.za

Objectives. The aim of this study, conducted at the Perinatal HIV Research Unit of the University of the Witwatersrand, was to determine changes in adherence to antiretroviral therapy (ART) in HIV-positive patients with depression, following antidepressant or psychotherapy treatment.

Method. The study was prospective, randomised and controlled. Volunteers aged ≥18 years and stable on ART for at least 6 months were included in the study. At entry to the study, sociodemographic data were obtained, and a clinical diagnostic evaluation and the Hamilton depression rating scale (HAMD) were performed on all subjects (and repeated at the end of the study). Participants found to be depressed were randomly assigned to receive either an antidepressant (20 mg citalopram) or interpersonal psychotherapy (IPT) (5 sessions). Medication was dispensed at each visit and patients were asked to return all unused medication. The returns were counted by the investigator to determine adherence to treatment. All subjects gave written informed consent to participate in the study, which was approved by the Committee for Research on Human Subjects, University of the Witwatersrand.

Results. Sixty-two HIV-positive persons receiving ART participated in the study; 30 were not depressed (control group) and 32 were depressed (patient group). There were no significant differences between the controls and patients with respect to demographic characteristics. At entry to the study, the mean adherence to ART was 99.5% (standard error (SE) ±0.46) and 92.1% (SE ±1.69) in the control and patients groups, respectively. At the end of the study, the mean adherence rate to ART in the control group changed marginally to 99.7% (SE ±0.46), while in the patient group, the mean adherence increased significantly to 99.5% (SE ±0.13) ($p>0.05$). The mean adherence rate of the patients on pharmacotherapy increased from 92.8% to 99.5% and those receiving IPT increased from 91.1% to 99.6% ($p>0.05$). There was no significant association between this increased adherence in the patient group (among those receiving antidepressant medication or IPT) and baseline demographic and clinical characteristics ($p>0.05$).

Conclusion. Successful treatment of depression with an antidepressant or psychotherapy was associated with significantly improved ART adherence, independent of the type of treatment or any sociodemographic factors. Healthcare providers must identify HIV-positive patients at risk of developing depression, to initiate antidepressant treatment to prevent ART non-adherence and consequent disease progression and increased morbidity.

A case series of HIV-positive children and adolescents referred to a child and adolescent mental health service for neuropsychiatric evaluation

Rene Nassen
Stellenbosch University
rnassen@sun.ac.za

Background. Studies exploring emotional and behavioural disturbances among HIV-positive children show a high prevalence of attention deficit hyperactivity disorder (ADHD), depression and anxiety disorders.

Objectives. To describe the medical and neuropsychiatric presentations of a sample of perinatally HIV-infected children who had been treated with antiretroviral medications for longer than 1 year.

Method. A case series of 9 institutionalised perinatally HIV-infected children and adolescents referred for a neuropsychiatric evaluation will be described.

Results. Four of the 9 children were diagnosed with ADHD. Other diagnoses were: adjustment disorders ($n=3$), oppositional defiant disorder ($n=2$), mood disorder due to a general medication condition (GMC) ($n=1$), mental disorder due to a GMC ($n=1$), pervasive developmental disorder (PDD) ($n=1$), and major depressive episode (MDE) ($n=1$). The majority of children were assessed to be in the borderline to mild range of intellectual functioning. Neurological examinations revealed microcephaly in 2 children and brisk reflexes in 1. Electroencephalograms (EEGs) were abnormal in 2 of the 9 children. Two children were referred for magnetic resonance imaging (MRI) brain scans, the results of which were normal in both cases.

Conclusion. The systemic effects of highly active antiretroviral therapy (HAART) do not appear to be matched by its neurocognitive effects, as infected children appear to remain at significant risk of psychiatric and neurocognitive problems. This negatively affects their learning and overall

academic performance. Early intervention with HAART may be an important strategy to arrest or reverse the onset of early HIV encephalopathy and should be instituted in clinically stable children who present with early cognitive deficits or behavioural difficulties which do not appear to be psychosocially related.

Post-traumatic stress disorder, veterans and DSMV

Samuel O Okpaku

Center for Culture, Health, and Society, Nashville, Tennessee, USA
indtiger@aol.com

The United States of America has been engaged for several decades in foreign wars. This has resulted in military casualties with concomitant psychiatric morbidities. Depression, suicide and post-traumatic stress disorder (PTSD) are the most commonly described psychiatric consequences. The military currently consists of soldiers from many different ethnic and cultural backgrounds. Meanwhile, the DSM5 is being revised and cultural factors are being given more weight and attention. It is, therefore, timely to explore cultural influences on the presentation and diagnosis of PTSD in veterans being examined for disability and treatment. The implications of the above for individuals from different backgrounds were explored.

Method. This study is based on the independent medical examinations carried out by the author.

Results. The results illustrate that cultural influences may play a role in the presentation and diagnosis of PTSD in individuals from different ethnic backgrounds and countries of origin.

Objectives. At the end of the presentation, attendees will be more familiar with some cultural differences in the signs and symptoms of PTSD in veterans.

The greening of Lentegeur Hospital

J S Parker

Department of Psychiatry and Mental Health, University of Cape Town and Lentegeur Hospital
jsparker@pgwc.gov.za

Lentegeur Hospital is 1 of 3 major psychiatric hospitals in the Western Cape province of South Africa. It serves as a referral centre for one-third of the province. Originally commissioned in 1984 for psychiatric patients classified as coloured under apartheid, the hospital occupies a large site in the impoverished suburb of Lentegeur. To the public eye, it resembles many similar institutions from a bygone era, with anonymous buildings, in empty grounds, surrounded by high fences. Lentegeur currently faces difficult challenges in both managing its workload and adapting to a variety of changes. These include population growth and epidemiological, as well as legislative, organisational, and infrastructural changes. This is taking place in a global context, where the value of large psychiatric institutions is being debated. Furthermore the legitimacy of psychiatry itself is facing critical scrutiny, and hospitals like Lentegeur, by virtue of their size, budgets and high profile, are powerfully representative of psychiatric services. This image of large institutional care, as well as the very understanding of what treating mental illness is about, is undergoing considerable change in many parts of the world with the advent of the recovery movement. This movement, currently in its infancy in SA, emphasises the importance of being highly responsive to the needs of service users in determining how services are designed and managed. The communities served by the hospital, and particularly those in the surrounding areas surrounding, are characterised by high levels of poverty, drug abuse, criminality and social fragmentation. Although climate change may not be a major concern within these communities, it is clear that its consequences, particularly that of food-price inflation, will affect them most directly. Translated, the word Lentegeur means: 'the smell of spring'. The Lentegeur Spring Project is an attempt to re-invent the hospital as a 'green' hospital, using green initiatives for the rehabilitation of those with mental illness and the upliftment of their communities, and to establish the hospital as a leader in mental health, with a particular focus on the environment. In a sense, it is about a hospital in recovery. In the last 2 years the project has grown from an idea to a multifaceted project that has become a tool for raising funds, improving the hospital's image, boosting morale and for developing a new understanding of healing and recovery, not only for its patients but for the community as a whole.

A culture of addiction

J S Parker

Department of Psychiatry and Mental Health, University of Cape Town and Lentegeur Hospital
jsparker@pgwc.gov.za

Western culture is becoming increasingly market-driven and, in particular, driven by a market place that is focussed on short-term gains (or rewards), often at the expense of longer-term benefits. Some of these longer-term benefits include physical and mental well-being, as well as environmental sustainability. A number of studies show that the prevalence of a variety of mental disorders has been increasing in the last century in developed and developing nations and that this may be related to changes in culture. This culture is now becoming globalised with similar effects throughout the world. Using an evolutionary framework and evidence from a variety of research in the fields of behavioural psychology, neuroscience and behavioural economics, the argument can be made that motivational systems cluster into 2 groups. The first group, concerning values related to extrinsic reward-driven behaviour, is associated with activity in the limbic system and, in particular, in the reward pathways. From an evolutionary perspective, this system is extremely ancient and originates in basic survival imperatives. The second group, concerning intrinsic values related to social behaviour, personal growth and what is now understood as pro-environmental behaviour, is associated with activity in the prefrontal cortex. This area, from an evolutionary perspective, developed far more recently and may have only become fully activated during what has been referred to as the 'sedentary' or 'agricultural revolution'. The 2 areas are also known to mature at different stages in the development of the brain, with the prefrontal cortex only becoming fully mature at around the age of 25 years. This has serious implications with regard to the exposure of adolescents and young adults to potentially addictive behaviours. Furthermore there is evidence that the 2 areas may, to some degree, function in an antagonistic

relationship with functioning in the pre-frontal cortex compromised by an over-reliance on reward-driven behaviour. These findings have serious implications for the developing brain in our current cultural setting and also raise serious questions in terms of how to influence adults to behave in a more pro-environmental and pro-social manner. They also raise important questions about whether a free-market system has any capacity to promote either pro-social behaviour or environmental sustainability.

Clinical factors associated with rape victims' ability to testify in court: Records-based study of final psychiatric recommendation to court

T D Phaswana, D Van der Westhuizen, C Krüger
Weskoppies Hospital, University of Pretoria
tshepisom@moeketsione.co.za

Background. The journey of rape victims crosses the health and the legal systems. Unanswered questions remain about clinical factors associated with rape victims' ability to testify in court, and the quality of care that they are offered.

Objective. To determine the clinical factors associated with rape victims' ability to testify in court, and to explore the referral system between the court and the mental health services.

Method. A retrospective study was conducted of 70 files of rape victims referred by the court to be assessed psycho-legally by psychiatrists. Rape victims who were recommended as able and unable to testify in court, respectively, were compared with regard to clinical characteristics.

Results. Thirty-seven (53.6%) victims were recommended as able to testify and 32 (46.4%) victims as unable to testify in court. Victims from rural areas and victims with severe mental retardation were statistically significantly more often unable to testify in court. Almost half (49.2%) of the victims were referred by court to Weskoppies Hospital for first assessment within 6 months of being raped. Most (63.5%) victims were assessed for the first time within 1 month of being referred.

Conclusion. Residential category and mental retardation had an effect on the rape victims' ability to testify in court. However, the decision about ability to testify should not be based only on these 2 variables, but should be individualised. Thorough psycho-legal assessment remains essential so that mentally ill victims can be offered the opportunity of testifying in court. Optimal mental health and legal services need to be offered to rape victims and the communities. The result of these services might be a decline in the risk of sexual re-victimisation among mentally impaired people and an improvement in the recovery of rape victims. More studies are needed to assess the collaboration between the health and the legal system so that care of rape victims can be effective.

Depressive symptoms in South African black patients with rheumatoid arthritis

Anersha Pillay
University of the Witwatersrand, Johannesburg
anersha.pillay@wits.ac.za

Background. Rheumatoid arthritis (RA) is a chronic auto-immune musculoskeletal disorder of unknown aetiology that can result in physical disability, chronic pain and impaired quality of life. RA is associated with an increased prevalence of depression. The presence of this depression is reported to be associated with pain, functional disability, high disease activity and mortality.

Objectives. (i) To determine the prevalence of depressive symptoms in a cohort of black South African patients attending a rheumatology outpatient clinic at a public health centre; and *(ii)* to determine the association and correlation between the presence of depressive symptoms and the sociodemographic profile and RA clinical characteristics of the study population.

Method. The study was conducted in a rheumatology outpatient clinic. The study sample consisted of 100 systematically selected participants of black race. The participants completed the disability questionnaire (HAQ-DI), Visual Analogue Scales (VAS) for pain, fatigue and disease activity; and the depression and tension subscales of the arthritis impact measurement scale (AIMS). The Montgomery-Åsberg Depression Rating Scale (MADRS) was then administered to assess depressive symptoms. Study participants were clinically assessed for disability, joint status and disease activity. Data were analysed using SAS software (version 9.1).

Results. Most participants were female (85%) and unmarried (66%). The prevalence of current depression was 13.2%, although a further 22.2% of the sample was already stable on antidepressant treatment. The mean RA disease duration was 12.5±9.2 years. No significant associations were found between the presence of depression and the sociodemographic variables. MADRS scores were significantly associated and correlated with disability (p=0.002, r=0.30), fatigue ($p \leq 0.001$, r=0.43), disease activity (p=0.001, r=0.32), AIMS-D ($p<0.001$, r=0.40) and AIMS-T ($p<0.001$, r=0.35). Upon adjusting for age and clinical status, significant associations remained with MADRS scores and all 5 above-mentioned RA variables, although correlations weakened slightly.

Conclusion. Co-morbid depression is prevalent in black South African patients with RA. To improve RA clinical outcomes, depression must be actively sought and effectively managed.

Depression and anxiety among Grade 11 and 12 learners attending schools in central Bloemfontein, South Africa

M Strydom, P J Pretorius, G Joubert
Department of Psychiatry, University of the Free State
pretorpj@fshealth.gov.za

Objectives. Anxiety disorders are the most common childhood psychiatric disorders. Previous research suggests that South African rates may be high. This study examined the prevalence and severity of anxiety and depression among Grade 11 and 12 learners attending schools in central Bloemfontein, South Africa. Learners' perceptions of the important stressors as well as the most relevant coping strategies were investigated.

Method. A cross-sectional study was conducted by using self-assessment rating scales and questionnaires. The Hospital Anxiety and Depression

Scale (HADS) was used to screen for anxiety and depressive symptoms. Participants were provided with an additional list of possible stressors and coping skills, from which they identified those applicable to themselves. All students enrolled in Grade 11 and 12 at the selected schools during August 2009 were eligible for inclusion.

Results. Five hundred and fifteen learners participated in the study, of which 32.0% presented with moderate or severe anxiety and 5.3% with moderate or severe depressive symptoms. Mild symptoms were reported by an additional 29.0% on the anxiety subscale and 14% on the depression subscale of the HADS. Academic workload was reported as the main source of stress (81.4%).

Conclusion. Although the study has limitations in terms of methods and size, resulting in undetermined validity, it indicates possible higher prevalence rates for anxiety and depression compared with previous South African studies and worldwide prevalence rates for adolescents. Pupils were generally hesitant to seek help from formal assistance structures provided by the schools and preferred discussing problems with parents or friends. A need for stress awareness programmes, early identification and improved access to mental health support services was identified. Our study suggests that interventions should consider empowering pupils with the means to detect possible mental problems in peers and educate them on ways to support peers and assist them in obtaining professional help when indicated.

HPA axis and immune responses in a Metro police cohort susceptible to post-traumatic stress disorder

Ugash Subramaney, Neville Pitts, Merryll Vorster
University of the Witwatersrand, Johannesburg
ugasvaree.subramaney@wits.ac.za

Background. Police officers represent a special group affected by occupation-related post-traumatic stress disorder (PTSD). Altered hypothalamic-pituitary-adrenal (HPA) axis activity has been linked to the development of psychopathology such as PTSD and depression, and the development of psychopathology has also been attributed to inflammatory processes.

Objective. To investigate whether several psychological and physiological factors can provide early evidence of the development of PTSD.

Method. We conducted a prospective study, following new Metro police recruits for the initial 12 months of employment. Recruits who volunteered to participate (n=145) completed a personality profile and assessment for depression (HAM-D) on entrance to the Metro force. At the same time, each subject provided blood and saliva samples and completed a 24-hour collection of urine. At 3-month intervals, each subject completed the HAM-D test and assessments for PTSD (CAPS and IES-R), and provided further blood, saliva and 24-hour urine samples, over a total of 5 visits (V1 - V5). Early morning, blood and saliva cortisol were measured, while the urine samples provided an indication of 24-hour HPA activity. Blood concentrations of interleukin-6 (Il-6) and tumour necrosis factor (TNF) were also measured at each visit.

Results. Plasma cortisol initially declined, then increased significantly from V3 to V5. The 24-hour urine cortisol increased progressively from V1 to V5. Important correlations were only seen when the group was divided into 'low' and 'high' responders at each visit. Changes in plasma and urine cortisol correlated with HAM-D, IES-R and CAPS scores mainly recorded at previous visits, suggesting an increase of allostatic load over time.

Conclusion. Psychological and physiological variables can provide early evidence for the development of PTSD, with allostatic load playing an important role in depression and PTSD.

Trauma appraisal, sleep and working memory responses in acute stress disorder

Sharain Suliman, Zyrhea Troeman, Tracy Jacobs, Marina Basson, Dan Stein, Soraya Seedat
Medical Research Council Anxiety Disorders Unit, Department of Psychiatry, Stellenbosch University
sharain@sun.ac.za

Background. The diagnosis of acute stress disorder (ASD) describes a post-traumatic stress reaction that occurs 2 days - 4 weeks following a trauma, and involves symptoms of intrusion, avoidance, hyperarousal and dissociation. ASD may be associated with poorer working memory and negative appraisals post trauma. Several studies have also demonstrated that sleep can be severely disrupted following exposure to a traumatic event.

Method. We assessed working memory, trauma appraisal and sleep in a sample of 125 adult motor vehicle accident survivors (aged 32.26±9.99 years; 56.6% male) within 2 weeks of the accident.

Results. Of the survivors, 19.8% presented with clinically determined ASD. Although no significant differences in subjective sleep quality were found between those with and without ASD, there was a highly significant correlation between negative appraisals of the trauma and sleep (p=0.001).

Conclusion. While the development of ASD after trauma did not appear to have early effects on working memory, trauma appraisal or sleep, in traumatised individuals, negative cognitions relating to the event were associated with poorer sleep quality. These findings suggest that negative appraisals of the traumatic event and its sequelae contribute to reduced sleep quality and should, therefore, be assessed in acute trauma survivors.

Review of the consultation-liaison psychiatry service at Helen Joseph Hospital

N Tema, A B van Rensburg
University of the Witwatersrand, Johannesburg
nkokone.tema@gmail.com

Objectives. To provide a demographic and clinical profile of all patients consulted by the consultation-liaison psychiatry (CLP) service, and describe the clinical management of patients referred with a diagnosis of a mental disorder associated with a co-morbid medical condition in a general hospital.

Method. A retrospective record review was performed of all patients referred to CLP team over a 6-month period.

Results. A total of 884 routine and emergency consultations were performed for patients referred from the various other clinical departments, comprising of 662 patients (305 males, 357 females) aged 13 - 90 years. The most common documented reason for referral was a request for assessment (*n*=182; 27.5%). Only 63 patients (10%) had a confirmed axis 1 diagnosis with a defined co-morbid medical condition. The medical wards admitted the majority of the patients (*n*=37; 67.3%), most of which had a diagnosis of delirium (*n*=28; 51.9%) and also HIV (*n*=23; 67.7%).

Conclusion. A female patient aged 16 - 45 years with a diagnosis of delirium and suffering from HIV/AIDS was more likely to be referred to the CLP service for assessment, and more likely to be managed in the medical wards.

Psychiatric ramifications of paediatric obesity: A model for addressing the problem

Deborah van der Westuizen
University of Pretoria
debbie.mervitz@telkomsa.net

Obesity is a major health problem worldwide and has been associated with diabetes mellitus, cardiovascular disease, increased blood lipids and decreased longevity. Not only do the sedentary lifestyles of children and adolescents contribute to an increase in body mass index (BMI), but the undesired side-effects of psychiatric medications (atypical antipsychotic drugs or mood stabilisers) used in the management of bipolar mood disorder, non-psychotic disorders or first-episode psychotic disorder, also compound the problem of weight gain, and the risk of the development of the metabolic syndrome. Far-reaching effects of obesity among youth are experienced in co-morbid psychological symptoms or psychiatric disorders. Common symptoms include depression, anxiety, disordered eating behaviours, body dissatisfaction, poor self-esteem and peer teasing. General practitioners need to recognise the early risk factors and symptoms, and should know when to refer a child or family to a mental health specialist for further evaluation and treatment. It is self-evident that the best treatment regime may be to advise the child or adolescent and their family to follow a balanced healthy lifestyle, which may include a structured diet, regular exercise and behavioural therapy. The efficacy and safety of anti-obesity drugs currently used in children and adolescents are controversial. As type 2 diabetes mellitus is a growing problem in paediatrics, no consensus on the efficacy of treatment with either metformin, insulin or a combination has been reached. No miracle pill exists for weight loss. However, the current status and perspectives of bio-psycho-social treatment of obesity in children and adolescents, as guided by the literature, will be discussed.

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