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GENETIC VARIATION
CONTRIBUTING TO
SCHIZOPHRENIA IN A
FOUNDER POPULATION

TRAINING PSYCHIATRISTS
FOR MALAWI

COLLABORATION
WITH THE UNIVERSITY
OF ZIMBABWE

MENTAL HEALTH
CARE IN MALAWI

MENTAL HEALTH CARE
IN SOUTH AFRICA
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



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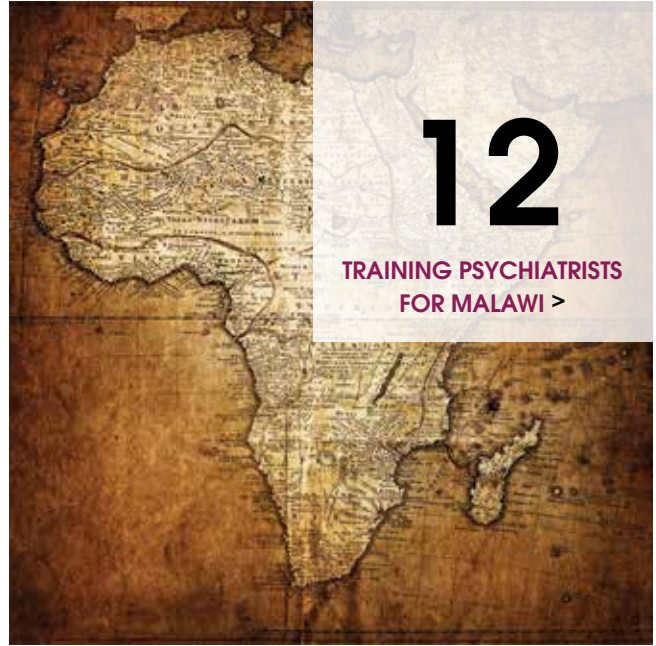


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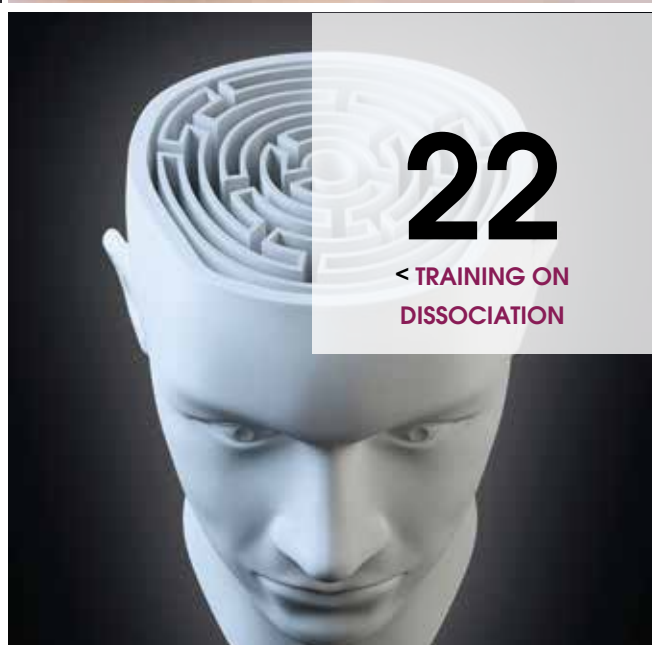
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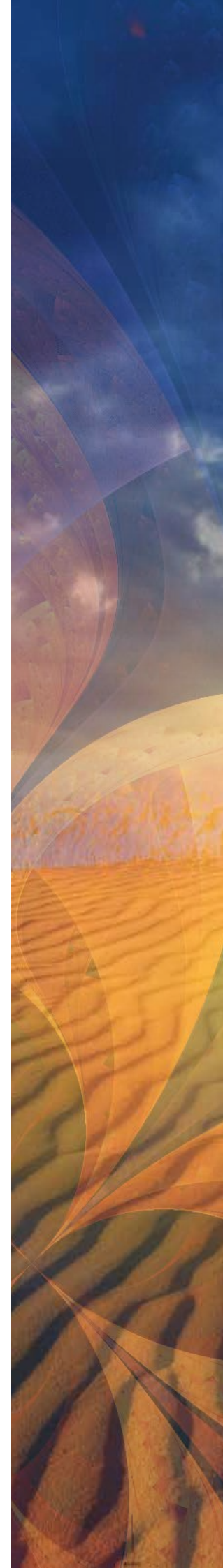
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COVER PHOTOGRAPH: BUTTERFLIES IN ABSTRACT

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Dear Reader,

Dear Reader, welcome to our second issue. When a new publication emerges, the question of survival arises. As things stand the May 2015 edition is in progress and my attention is shifting to the August and November editions. That being the case, the publication's second objective will have been achieved, namely the appearance quarterly in 2015. The first objective was the successful launch of our inaugural issue in November 2014. The current edition comprises of a mix of features and reports of scientific meetings that impact on clinical practice. In addition we have introduced a section related to news from Academic Departments of Psychiatry around the country. Aside from feedback on the first issue received from colleagues, a letter to the editor related to content is always an important indicator of interest. Sean Kaliski's article in the November 2014 issue has elicited such a response. Please feel free to continue the conversation! I also have an apology to make to another of our authors – Stoffel Grobler – whose surname we managed to note as "Grobelaar" at the beginning of his article.



In this issue the feature articles cover a range of topics, with 3 of the articles relating to one in particular – the involvement of South African psychiatrists in training both under and postgraduate students in Psychiatry in Malawi and Zimbabwe (Rita Thom; Pete Milligan; Lynda Albertyn). The article by Louw Roos highlights the international reach of local researchers in contributing to a cutting edge field within Psychiatry, genetics. This is echoed in the article by Christa Kruger where she writes about her involvement with the international community in relation to dissociative disorders. Allan Sweidan's article poses an important question – related to how we measure value in the services we render. There are also reports on lectures and workshops related to electro convulsive therapy and HIV and psychiatry (Sandra Fernandes; Carla Kotze; Robyn van Schoor; Ethel Thekiso; Rene Nassen and Anbrenthia Moos). The edition closes out with articles based on a series of lectures at a recent industry sponsored "wellness roadshow", ending with a bit of history related to Tara The H Moross centre in Johannesburg. All of the content, taken together illustrates work in our discipline that contributes meaningfully to South African Psychiatry. I anticipate that future editions will be no different.

Whilst by virtue of being a new publication the content tends to be editor driven, I would like to reiterate what has been said before – the publication is about you the South African psychiatrist. I look forward to your contributions. For now, I hope you will enjoy this issue.

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A Letter TO THE EDITOR

Dear Professor Szabo,
Congratulations with your vision in starting this new publication. Hopefully it will go from strength to strength. Whilst I totally agree with the comments made by Professor Sean Kaliski about polypharmacy in the November 2014 edition of the publication¹, I want to take up on another comment he made. He asks what happened to the old adage that psychiatrists should talk to their patients and help them overcome their real problems.

As a psychiatrist who is in psychiatry since 1985, who was for 14 years in private practice, and who is now responsible for the psychotherapy training of registrars in the Department of Psychiatry, University of Pretoria, this question is close to my heart; it lured me back to a university / joint appointee post. My experience, however, is that psychiatrists, especially academic psychiatrists, pay lip service to 'talk therapy' being part of South African psychiatry.

My statement is based, amongst others, on:

- Observations over a period of 29 years, during which I have worked in 6 psychiatric hospitals.
- The weighting of topics in the FC Psych(SA) examinations. I calculated the percentage of points allocated to questions in the written component of the FC Psych(SA) Part II on the topic of psychotherapy for the years 2010 – 2014, and came up with a total of 4 % over these five years. In the recent FC Psych(SA) Part II exam, there was one question for 25 points on the psychotherapeutic management of PTSD out of a total of 1200 points. In the clinical component of the examination the candidates had only one question in the OSCE on counselling (personal communication from Professor P.M.Joubert)
- The topics of the presentations given, and posters presented at the 2014 SASOP Congress. 2 of 55 oral presentations, one is about psychotherapy and one is linked to this topic. Of the 33 posters, also two can be counted as linked to psychotherapy.
- And lastly, listening to the talk of our colleagues!

Some reflection on this state of affairs is required.

We need to stop bluffing ourselves. How many Departments of Psychiatry in South Africa can, for example, teach psychotherapy (including the supervision) without the help of psychologists?

Onto the topic of psychoanalysis, as mentioned by Kaliski in his last sentence i.e. that we don't need to "resurrect the old psychoanalysts" (not that Kaliski, I think, has a desire to do that, quite the contrary, the unconscious should be buried very deep).¹ There are 'new' psychoanalysts, like psychiatry's Nobel Prize winner, Eric Kandel, who wrote: "It would be unfortunate, even tragic, if the rich insights that have come from psychoanalysis were to be lost in the rapprochement between psychiatry and the biological sciences" (p. 467).³ He also wrote:

"MOST IMPORTANT, & MOST DISAPPOINTING, PSYCHOANALYSIS HAS NOT EVOLVED SCIENTIFICALLY...AS A RESULT, PSYCHOANALYSIS ENTERS THE TWENTY-FIRST CENTURY WITH ITS INFLUENCE IN DECLINE. THIS DECLINE IS REGRETTABLE, SINCE PSYCHOANALYSIS STILL REPRESENTS THE MOST COHERENT AND INTELLECTUALLY SATISFYING VIEW OF THE MIND".

⁴ We should endeavour to together build a new future for psychotherapy in South Africa, in which different points of view are presented, listened to, respected, and an integrated psychotherapy is taught.

Manfred W Böhmer Consultant Psychiatrist, Weskoppies Hospital, University of Pretoria. References 1-4 : available on request from the author. **Correspondence: Manfred.Bohmer@up.ac.za**



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References

1. Pandina G, Lane R, Gopal S, et al. A double-blind study of paliperidone palmitate and risperidone long-acting injectable in adults with schizophrenia. *Progress in Neuro-Psychopharmacology & Biological Psychiatry* 2011;35(1):218-226. 2. Kramer M, Litman R, Hough D, et al. Paliperidone palmitate, a potential long-acting treatment for patients with schizophrenia. Results of a randomized, double-blind, placebo-controlled efficacy and safety study. *Int J Neuropsychopharmacol* 2010;13(5):635-642. 3. Hough D, Gopal S, Vijapurkar U, et al. Paliperidone palmitate maintenance treatment in delaying the time-to-relapse in patients with schizophrenia: A randomized, double-blind, placebo-controlled study. *Schizophrenia Research* 2010;116:107-117. 4. Gopal S, Vijapurkar U, Lim B, et al. A 52-week open-label study of the safety and tolerability of paliperidone palmitate in patients with schizophrenia. *J Psychopharmacol* 2010;25(5):685-697. 5. Pandina G, Lindenmayer JR, Lui L, et al. A randomized, placebo-controlled study to assess the efficacy and safety of 3 doses of paliperidone palmitate in adults with acutely exacerbated schizophrenia. *J Clin Psychopharmacol* 2010;30(1):235-244. 6. Hoy SM, Scott LJ, Keating GM. Intramuscular paliperidone palmitate. *CNS Drugs* 2010;24(3):227-244. 7. Xeplon Prolonged release suspension for intramuscular injection. Package insert, October 2012.

GENETIC

VARIATION CONTRIBUTING TO SCHIZOPHRENIA IN A FOUNDER POPULATION FROM SOUTH AFRICA

I have been involved with a collaborative study on the Genetics of Schizophrenia in an Afrikaner Founder Population since 1997.

Louw Roos

The principal investigator of this study is Prof Maria Karayiorgou who is the Head of the Human Neurogenetics Laboratory, initially at Rockefeller University and later at Columbia University in New York. From the Weskoppies Psychiatric Hospital's catchment area a constant flow of Afrikaner schizophrenia patients are admitted. As the principal clinical investigator in this study, together with Herman Pretorius as co-investigator, seven hundred and fifty study identification numbers have been entered in this data base with 877 patients included with a diagnosis of schizophrenia or schizoaffective disorder.

THE GOAL OF THE RESEARCH IS TO IDENTIFY GENES ASSOCIATED WITH THE RISK OF SCHIZOPHRENIA IN THE AFRIKANER POPULATION. EARLY ON IN THIS RESEARCH WE CONCLUDED THAT THE AFRIKANER POPULATION IS LIKELY TO BE AN APPROPRIATE FOUNDER POPULATION TO MAP GENES FOR SCHIZOPHRENIA USING BOTH LINKAGE AND LINKAGE DISEQUILIBRIUM (LD) APPROACHES.

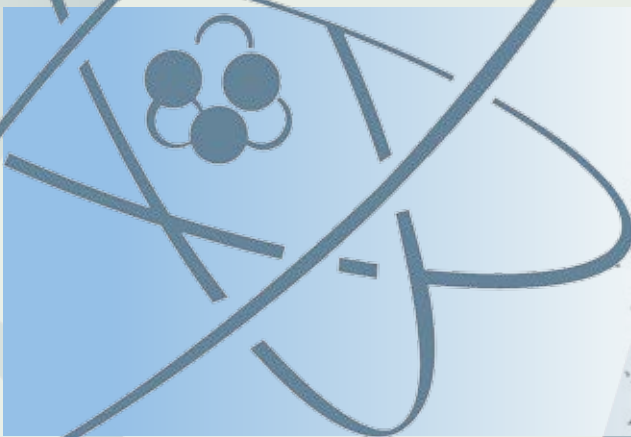
The 877 probands that have been collected include triads, multiple affected family members and individual cases. On most of these probands a Diagnostic Interview for Genetic Studies were completed, summary reports completed and care was taken to obtain detailed family history. In the early stages of this study there was specific emphasis on the genealogical tracings of recruited patients. To aid the genealogist, information had to be obtained from the National Archives in Pretoria. Families in which numerous relatives, over several generations who developed schizophrenia were identified and linkage studies were performed on them. In Linkage Studies, no a priori hypotheses are made about what genes may be involved. Rather, the entire genome is searched by easily trackable DNA markers - DNA



Louw Roos

segments with known locations on the chromosome - for evidence of linkage. Specifically, when a marker is near a disease gene it is expected to be consistently inherited by persons with the disease but not by relatives who are disease free. Even when the rough location of a disease gene is known, much more laboratory work is required to specifically identify it and characterize its alterations or mutations. We have addressed the role of the individual genes from the 22q11 locus (prototype CNV described in schizophrenia). Systematic screening of 26 genes residing in this locus identified PRODH2, ZDHHC8, NOGO Receptor 1 (RTN4R) gene as contributing to schizophrenia risk associated with this region. Linkage genome-wide scans, using both less dense (10cM) and more dense scans (2cM) identified a locus on chromosome 1 and 13. Recent fine mapping on chromosome 13q32-34 and brain expression analysis implicates MYO16 in schizophrenia. For the first time a proband with a uniparental disomy (UPD) of the entire chromosome 1 was identified, which further support the involvement of chromosome 1 in schizophrenia.

As research progressed it became clear that the genetic architecture of schizophrenia has proven to be complex. There has been a lively debate as



to the nature of this complexity. The debate has focussed on the relative merits of two contrasting (but conceptually-related) hypotheses: the common variant common disease (CVCD) and rare variant common disease (RVCD) models. The CVCD model proposes that genetic risk in an individual (and in the population) is attributable to many high-frequent variants, each conferring modest level of risk. Then by contrast, the RVDS model proposes that genetic risk in an individual can be explained by rare mutations that confer significant risk. Thus, the common disease might reflect a large number (hundreds or thousands) of different causes, have low frequencies (typically less than 1/1000 individuals), but accounting for a large portion of attributable risk in aggregate. The overlap between these 2 hypotheses strongly suggests that common and rare variant studies are complementary rather than antagonistic. Mechanistic studies driven by rare genetic variation will be informative for schizophrenia. Since 2008 our research offered the first clear view of the genetic landscape of schizophrenia. Our research focussed on rare variant studies. Our results suggested that rare de novo germ line mutations contribute to schizophrenia vulnerability in sporadic cases and that rare genetic lesion at many different loci could account, at least in part, for the genetic heterogeneity of this disease.

TO UNDERSTAND THE GENETIC ARCHITECTURE OF FAMILIAL SCHIZOPHRENIA AND THE PATTERN OF TRANSMISSION OF RARE RISK ALLELES IN AFFECTED FAMILIES WE COMBINED HIGH-RESOLUTION LINKAGE ANALYSIS WITH STUDIES OF FINE-LEVEL CHROMOSOMAL VARIATION IN FAMILIES RECRUITED FROM THE AFRIKANER POPULATION IN SA.

In addition to the genetic homogeneity, the Afrikaners were valuable for genetic studies because they presented a close-knit family structure and after the potential to perform detailed genealogical analysis, which afforded reliable discrimination of familial and non-familial forms of the disease and

facilitates family-based genetic studies. Here, using approaches designed to detect risk variants with relatively low-frequency and high penetrance, we provided strong empirical evidence supporting the notion that multiple genetic variants, including individually rare ones that affected many different genes, contributing to the genetic risk of familial schizophrenia. This heterogeneity (present to some degree even in founder populations) was consistent with the hypothesis that there were many genes that contributed to schizophrenia and might account for past and present difficulties in finding bone fide genetic variants. Because there were significant clinical similarities of schizophrenia cases diagnosed in Afrikaners and those diagnosed in more heterogeneous populations (such as the USA) our results were likely to have general implications regarding the genetic architecture of schizophrenia.

We reported that exome sequencing supported a de novo mutational paradigm for schizophrenia. Our work showed that de novo protein-altering mutations contribute substantially to the genetic component of schizophrenia and taken together with previous estimates of the de novo CNV rate in the same population indicated that de novo mutations account for more than half of the sporadic cases of schizophrenia. Our findings were also in line with results for genome-wide scans for de novo CNV or CNVs in general, supporting the notion that multiple de novo genetic variants that affect many different genes contribute to the genetic risk of schizophrenia. The complexity of the neural substrates affected in schizophrenia and other psychiatric disorders offered a large mutational target comprised of many genes. We propose that this large number of targets that, when mutated, could give rise to schizophrenia, along with the relatively high rate of protein-altering mutations empirically showed in this study, provided a plausible explanation for both the high global incidence and the persistence of schizophrenia despite extremely variable environmental factors, severely reduced fecundity and increased mortality. Our findings were an important step towards understanding the pathogenesis of the disease and emphasized the challenge in determining the neural substrates that these diverse genetic risk factors converged upon to generate a common pattern of clinical dysfunction and symptoms.

SCHIZOPHRENIA

We sequenced a total of 795 exomes from 231 parent-proband trios enriched for sporadic schizophrenia cases, as well as 34 unaffected trios. We reported on these findings in 2012. We observed in cases an excess of de novo non-synonymous single-nucleotide variants as well as a higher prevalence of gene-disruptive de novo mutations relative to controls. We found four genes (LAMA2, DPYD, TRRAP and VPS39) affected by recurrent de novo events within or across the two populations, which is unlikely to have occurred by chance. We showed that de novo mutations affect genes with diverse functions and developmental profiles, but we also found a substantial contribution of mutations in genes with higher expression in early foetal life. Our results helped define the genomic and neural architecture of schizophrenia. The contribution of de novo nucleotide level variants to schizophrenia risk had not been proved extensively. Considering phenotypic correlates, we observed a correlation between paternal age at the proband's birth and the number of de novo events per offspring, but did not find any other significant differences between proband carriers and non-carriers of de novo functional mutations. Notably, there was a functional correlation between the prenatal, expression bias of the mutated genes and the neurodevelopmental impact of the corresponding mutations. Specifically, among cases carrying de novo mutations, those with mutations in genes with a bias towards prenatal expression were more likely to have had multiple (>3) behavioural abnormalities in childhood (before the age of 10 years) compared to the cases carrying de novo mutations in genes with no bias towards fetal brain expression, as well as worse functional outcome following disease onset.

In addition, comparison of all genes with functional de novo events identified in our families with schizophrenia ($n = 145$) with those identified in families with autism spectrum disorder (ASD) ($n=675$) identified 15 shared genes an overlap with the range expected by chance ($p=0.29$). However, 11 of the 15 shared genes (73%) were included in our list of genes that showed a bias towards prenatal expression. The probability that this overlap arose by chance is very low ($p=0.004$). We also compared the identified functional de novo mutations to the de novo CNVs identified previously in our two cohorts (22 CNVs affecting 156 genes). Five genes (DGCR2, TOP3B, CIT, STAG1 and SMAP2) were altered by both de novo SNVs and CNVs, two of them in affected individuals across the two different populations tested. Two of

these genes were within the 22q11.2 schizophrenia susceptibility locus. Our findings which characterized a diverse set of de novo mutations represented an original contribution to unravelling the genomic architecture of schizophrenia in the context of a mutation-selection balance model and highlighted the importance of using family samples where disease history had been thoroughly ascertained. Focusing on our comprehensively ascertained Afrikaner cohort we estimate that at least 17.6% of sporadic cases carried a de novo pathogenic exonic mutation, and at least 9.9% carried a de novo. Thus, such mutations might contribute to the risk in approximately one-fourth to one-third of all sporadic cases. Given that results of non-exonic regions were still forthcoming; this was likely to be an underestimate. Our findings also contributed to the understanding of the neural architecture of schizophrenia risk. Given that we estimated the number of schizophrenia risk loci at more than 850, our findings implied an exquisite sensitivity of the neural circuits underlying susceptibility to schizophrenia to precise levels or activity of many diverse proteins and signalling modules and suggested that focusing on circuits might be more commensurate with the heterogeneity of schizophrenia than other proposed mechanisms that concentrate on specific neurotransmitters or cell types. In addition, we showed that, in determining disease risk, not only the functioning of the mutated gene but also the timing of the genetic insult might be of critical importance. Specifically, although de novo mutations affected genes with diverse functions and developmental profiles, we described a substantial contribution of mutations in developmentally regulated genes with higher expression during early and mid-stage foetal life and showed that such mutations were enriched among adult cases with prominent early pre-psychotic, deviant behaviours. Notably, a bias towards prenatal expression was also demonstrated for genes affected by multiple types of schizophrenia-associated genetic variation. Our findings provided a mechanistic context to interpret epidemiological correlations among various prenatal environmental insults during the first and second trimesters of pregnancy and risk for schizophrenia. Moreover, the fact that expression might explain emerging links between miRNA dysregulation and psychiatric disorders. The challenge remained to identify the affected biological processes and neural circuits and to determine how they are affected. Unbiased network-based approaches as well as animal and cellular models of recurrent mutations will be invaluable in reaching this goal.

Louw Roos is Professor and Head of the Department of Psychiatry at the University of Pretoria, and at Weskoppies Hospital in Pretoria. Aside from his work in genetics, he is also actively involved in Forensic Psychiatry. Prof Roos will receive his DSc, related to the content forming the basis of the article, in April 2015 **Correspondence: c/o erna.fourie@up.ac.za**

After being involved with the same topic of research for 17 years and with more than 35 publications on the topic, you do ask yourself how this new information changes my daily practice and outlook on the genetics of schizophrenia? As part of this research genetic and family counselling became a common practice. Although I always thought that schizophrenia is a complex disease, this research made me aware that this was an understatement - in my mind. Schizophrenia may be influenced by hundreds or thousands of genetic variants that interact with one another in complex ways. This disease displays a multifaceted genetic architecture and we did not take into account the complexity of the phenotypic architecture of this illness. I have often seen in the counselling situation that a parent will point fingers towards a side of a family with a strong family history of schizophrenia, as the people who brought this illness into their family. That is in a context where de novo mutations are implicated, coming from the "normal" side of the family. Counselling individuals about their offspring's genetic risk must take into account both the more common but less pathogenic SNP risk and the less common but more pathogenic CNV risk. A psychotherapeutic approach is needed as a routine part of risk counselling, particularly for resolution of ethical issues and for within-family stigma and conflicts over genetic results. Psychiatric counselling has thus changed from risk estimates based on family history previously, to estimates based on test results in specific individuals after undergoing whole exome sequencing.

For further detailed reading:

- * Liu H., Abecasis GR., Heath SC., Knowles A., Demars S., Chen YJ., Roos JL., Rapaport JL., Gogos JA., Karayiorgou M. Genetic variation in the 22q11 locus and susceptibility to schizophrenia. *Proceedings of the National Academy of Sciences of the United States of America*. 99(26): 16859-64, 2002
- * Abecasis GR., Burt R., Hall D., Bochum S., Doherty KF., Lundy LS., Torrington M., Roos JL., Gogos JA., Karayiorgou M. Genome wide scan in schizophrenia families from the founder population of Afrikaners reveals evidence for linkage and uniparental disomy on chromosome 1. *American Journal of Human Genetics*. 2004; 74:403-417
- * Xu B., Roos JL., Levy S., Janse van Rensburg E., Gogos JA., Karayiorgou M. Strong association of de novo copy number mutations with sporadic schizophrenia. *Nature Genetics*. 2008;7(40):880-885
- * Bin Xu., Abigail Woodroffe., Laura Rodriguez-Murillo., J Louw Roos., Elizabeth van Rensburg., Goncalo Abecasis., Joseph Gogos., Maria Karayiorgou. Elucidating the genetic architecture of familial schizophrenia using rare copy number variant and linkage scans. *Proceedings of the National Academy of Sciences of the United States of America*. 2009; 106(39):16746-16751
- * Xu B., Roos JL., Dexeheimer P., Boone B., Plummer B., Levy S., Gogos JA., Karayiorgou M. Exome sequencing supports a de novo mutational paradigm for schizophrenia. *Nature Genetics*. 2011; 43(9):864-868
- * Xu B., Ionita-Laza I., Roos JL., Boone B., Woodrick S., Sun Y., Levy S., Gogos JA., Karayiorgou M. De novo gene mutations highlight pattern of genetic and neural complexity in schizophrenia. *Nature Genetics* 2012;44(12):1356-1370

TRAINING PSYCHIATRISTS FOR MALAWI

The University Of Cape Town/University Of Malawi Partnership

Peter Milligan

Many of the medical schools in South Africa have been involved in training psychiatry registrars from different parts of Africa. The University of Cape Town (UCT) has a long history of training registrars in psychiatry and senior registrars in child and adolescent psychiatry from a number of African countries. Malawi currently has only one Malawian psychiatrist and currently relies on a cohort of clinical officers trained in mental health to support mental health services in the country.

In the early 2000s, Dr Felix Kauye completed his specialist training in psychiatry at UCT and became the first Malawian to qualify as a psychiatrist and return to Malawi. In 2005, he took up the post of Chief Psychiatrist at Zomba Mental Hospital and in 2009, became Director of Mental Health Services. In early 2010, on the initiative of Dr Robert Stewart, a Scottish psychiatrist working in Blantyre, a successful grant application was made via the Scotland Malawi-Mental Health Education Project (SMMHEP) to the Scottish Government to support a range of mental health educational activities in Malawi. As part of this grant, a joint proposal was developed between the Department of Mental Health, College of Medicine, University of Malawi and the Department of Psychiatry and Mental Health at UCT to train Malawian registrars in Psychiatry.

A MASTERS IN MEDICINE (MMED) IN PSYCHIATRY HAS BEEN DEVELOPED BY THE UNIVERSITY OF MALAWI WHICH AIMS TO TRAIN SPECIALISTS IN PSYCHIATRY TO PROVIDE CLINICAL SERVICES, TEACH AT THE COLLEGE OF MEDICINE, CONTRIBUTE TO THE DEVELOPMENT OF MENTAL HEALTH SERVICES, SUPERVISE A RANGE OF MENTAL HEALTH PROFESSIONALS AND INITIATE AND PERFORM CLINICAL RESEARCH.



Peter Milligan

Registrars spend two years in Malawi and complete a Part I examination and then spend a further two years in Cape Town. While at UCT, the focus is on providing exposure to sub-speciality services such as forensic psychiatry, child and adolescent psychiatry, intellectual disability, neuropsychiatry, addiction psychiatry and emergency psychiatry. They also spend an initial three months at Valkenberg Hospital getting an orientation to general adult psychiatry. On completion of their time in Cape Town, registrars will return to Malawi to write Part II exams.

DR CHIPILIRO KADZONGWE AND DR KAZIONE KULISEWA BOTH QUALIFIED AS DOCTORS FROM THE COLLEGE OF MEDICINE IN BLANTYRE IN DECEMBER 2007 AND THEN COMPLETED THEIR MANDATORY 18 MONTH INTERNSHIPS.

Dr Kadzongwe worked in a district hospital for two years, while Dr Kulisewa worked in psychiatry at Zomba Hospital. Both were recruited to the registrar programme in 2011 and spent two years in Malawi before commencing their rotations in Cape Town in early 2014. They will be returning to Malawi at the end of 2015 to complete their final exams. They



Dr Chipiliro Kadzongwe



Dr Kazione Kulisewa

have indicated that their vision on returning to Malawi as qualified psychiatrists is to further develop undergraduate psychiatry training in the University of Malawi which is currently limited to eight weeks in the fourth year, to include psychiatry in the internship programme and to further develop and support postgraduate training. They point out that there is no exposure to psychiatry beyond the fourth year in medical school and that this limits the number of Malawian doctors who are interested in pursuing psychiatry as a career. Dr Kadzongwe would like to be involved in the development of community mental health services, whilst Dr Kulisewa would like to return to the capital Lilongwe where there is an existing mental health unit, but no psychiatrist. A third registrar, Dr Olive Liwimbi will be starting at UCT in early 2015.

The partnership aims to continue training Malawian psychiatrists as other suitable trainees are identified and will also look towards providing sub-specialty training in the future.

Peter Milligan is a specialist psychiatrist at Valkenberg Hospital where he is the Head of Acute Services. He is the Chair of the Registrar Training Committee in the Department of Psychiatry and Mental Health at the University of Cape Town as well as being a member of the Council of the College of Psychiatrists in the Colleges of Medicine of South Africa.

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THE CHILD & ADOLESCENT MENTAL HEALTH FORUM

Teaching, Training and Skills Transfer Programme

“THE 2015 SOUTH AFRICAN (SA)/USA CHILD AND ADOLESCENT MENTAL HEALTH TRAINING MODULE IS TAKING PLACE MARCH 16TH-20TH AT LENTE GEUR HOSPITAL IN MITCHELLS PLAIN. THIS FIVE DAY MODULE WILL BE THE FIRST OF AN INTER-CONTINENTAL COLLABORATION BETWEEN SOUTH AFRICAN ADOLESCENT MENTAL HEALTH CLINICIANS AND CLINICIANS FROM THE SHEPPARDS PRATT HOSPITAL/JOHN HOPKINS UNIVERSITY, IN BALTIMORE USA.

Core topics to be covered will be Suicide and depression, ADHD, Trauma, Substance Abuse, and Public Mental Health. Topics will be presented at different levels of complexity ie core knowledge and advanced level (masterclasses). Service innovations will be shared by local and USA clinicians. Additionally, 5 parallel one day workshops will be presented. Topics covered will be Infant Mental Health, Art, Dance and Music therapy, Educational Aspects of Children with Mental Health Problems, Mental Health Nursing/Leadership.

This collaboration is a unique partnership with both medium and longer term goals. A longer term aim is to strengthen collaborations locally and internationally, to promote mental health education in South Africa, as well as research. One of the medium term outcomes will be to initiate a post graduate degree or diploma in Child Mental Health. This initiative will be a collaboration between the three CAMHS units in the Western Cape, and will be offered to nurses, general practitioners and allied professionals in South Africa as well as sub-Saharan and East African countries.



If you are interested in attending the collaboration, please email Shannon O'Rourke at sausacollaboration@gmail.com to find out how to register.

South Africa/ USA Child and Adolescent Mental Health Collaboration

March 16th-20th,
2015

Lentegeur Hospital,
Mitchells Plain

**RSVP to Shannon
O'Rourke at
sausacollaboration
@gmail.com**

This forum is the first event to develop out of a unique collaboration between the Lentegeur Hospital Child and Adolescent Mental Health Forum and a group of clinicians from Shepard Pratt Hospital and John Hopkins University in Baltimore, USA.



Lentegeur Hospital



Sheppard Pratt
HEALTH SYSTEM

COLLABORATION WITH THE UNIVERSITY OF ZIMBABWE, MEDICAL SCHOOL - DEPARTMENT OF PSYCHIATRY

I spent the 1980's in Zimbabwe, largely due to political reasons, obtained my early psychiatric training there and obtained an MMedPsych Degree. At that time the Department of Psychiatry was well staffed, by largely expatriate psychiatrists from the USA, UK, India, Czechoslovakia and Uganda. It was an exciting and diverse department. *Lynda Albertyn*

From the late 1900's until recently, there had been a sharp decline in both psychiatric services and staffing, with many Zimbabweans leaving the country to work abroad.



Lynda Albertyn

As a result of the decline in medical education and training, a National Institute of Health (NIH) (UK) funded initiative was established to build capacity in mental health undergraduate and post graduate education, as well as research capacity strengthening. It started 3-4 years ago. The programme is called IMHERZ (Improving Mental Health Education and Research in Zimbabwe). At the time of its initiation there was very limited psychiatry capacity in Zimbabwe (7 trained psychiatrists, only 3 of whom were in state services). There was no child psychiatry service in Zimbabwe at all and Zimbabweans saw this as a critical gap to be filled. Dr Larry Wislow, (a paediatrician and adult/child and adolescent (C&A) psychiatrist whose research focuses on finding novel ways to integrate mental health services into general medical services) from Johns Hopkins University and I were approached to lead the initiative in trying to develop a C&A service and to improve knowledge in C&A psychiatry.

OUR PRIMARY GOAL WHILE VISITING, WAS TO AID IN ESTABLISHING A CHILD AND FAMILY UNIT, WHILE INCREASING KNOWLEDGE ABOUT CHILD AND ADOLESCENT PSYCHIATRY AND SUPPORT FOR THOSE PROFESSIONALS WORKING WITH THIS POPULATION. THE GOAL WAS TO HOLD A CHILD PSYCHIATRY MASTER-CLASS OVER 5 DAYS, AT WHICH THERE WOULD BE TEACHING ON SPECIFIC CHILD PSYCHIATRY ISSUES – SOME INTERACTIVE WORK WITH TRAINEES AND SOME TIME FOR PLANNING WHAT SERVICES MIGHT LOOK LIKE.

Psychiatrists, including those in training, paediatricians, (again including those in training), child psychologists, private practitioners, nursing staff, the Mental Health Directorate, therapist groups, private practitioners and GPs were invited to attend.

The overall goals of the Master Class included:

- strengthening the C&A mental health component of training for all health care providers
- improving child access to evidence-based care
- integrating detection of child mental health problems (and related parental mental health problems) into routine child health care
- building capacity for community-based services that are effective and affordable

Some specific areas that were identified as priority intervention needs were:

- Parenting
- Domestic violence
- Sexual assault
- Maternal depression in the pediatric setting
- Detection of developmental disabilities
- Psychosocial support for HIV
- Autism
- Support post traumas

The structure involved six kinds of interactions:

1. An all-day autism workshop led by myself and a South African colleague from Unica School, Dr. Cobie Lombard

- The Department Of Psychiatry, University of Zimbabwe (UZ) were very enthusiastic about the idea of a separate workshop on autism over a weekend. The Autism workshop included: presenting features of Autism, psychiatric assessment, use of assessment tools (ADOS), educational and pharmacologic interventions. It consisted of 6 one-hour sessions. It was very well attended and also included parent groups, in addition to attendees mentioned

2. A stakeholders' workshop which:

- Defined the scope of "child psychiatry" for Zimbabwe
- Assessed available resources – what sorts of organizations, institutions, agencies currently address these needs? What sorts of social structures help address these needs?
- Assessed how increased clinical skills in child mental health can help strengthen these resources
- Assessed what opportunities and barriers there are to building the mental health skills of professionals at various levels who come into contact with children and their families
- Assessed what sort of structure would help to support and maintain the development of mental health skills among these professionals
- It helped with setting up such a plan and how to assess if it was succeeding

3. Twice-daily short lectures (masterclass):

- Introduction to child psychiatry
- Attachment and its importance to development
- The child with poor behaviour – thinking about causes and some basic approaches to parenting and behaviour management
- Detecting and responding to traumatic experiences
- Detection and family advice for children with developmental and learning problems
- Anxiety problems in children
- Psychosocial problems among children and adolescents with HIV-(focusing on disclosure of HIV status, awareness of cognitive issues, and adherence among adolescents)

4. Clinical skills sessions during the day

5. Meetings with IMHERZ scholars - these were workshops on service planning and development

6. Any other 1:1 mentorship e.g. I did an autistic assessment of a child with several trainees observing the assessment.

Feedback from the 5 day Master Class workshop led to a recognition that one of the crucial areas that needed urgent attention was the cognitive assessment of children. I organized for Professor Lorna Jacklin (University of the Witwatersrand/ Charlotte Maxeke Johannesburg Academic Hospital Neuro-development clinic) to do a follow up course for many of the attendees, on the administration of The Griffiths Mental Development Scales. This was done about 6 months after the Master Class and has been incorporated into their assessment procedures. In addition, a recently qualified Zimbabwean psychiatrist, who was leading the drive to start a C&A unit spent 2 months in our unit shadowing me and attending our academic activities. A nurse, who now works in their newly formed C&A unit also came for a period of several weeks and shadowed nurses in our unit, also attending our academic activities. At the recent International Association for Child and Adolescent Psychiatry and Allied Professional's conference (Durban, 2014) there were several Zimbabwean delegates, showing an increased interest in C&A psychiatry and allied professions.

Beyond my C&A work, further involvements with UZ include being invited to be the external examiner for the University of Zimbabwe, medical school undergraduate (medical students) and post graduate (registrars) final year examinations and a marker of the theses of the MMedPsych programme. In November 2013 I spent a week in Harare, as their external examiner helping examine their medical student's psychiatric final year written examinations, examine the 2 MMedPsych theses and take part in the clinical and written final examinations of the MMedPsych course. In 2014 I marked another 2 theses and will go to Harare in November 2015 to once again act as the external examiner.

My experience as an examiner has been uplifting. Despite the lack of resources and staffing, I have been impressed by the rigour of the research of the MMedPsych candidates and the dedication of the psychiatrists and psychologists in the UZ Psychiatry Department to develop their students, to maintain international standards of care and education and to make enormous effort to keep up to date in knowledge. I have also been struck by the amount of multidisciplinary cooperation there is in Zimbabwe. Where there is a shortage of skills everyone who has skills is called on for help and guidance, irrespective of whether people are from the same discipline or not. It has been a privilege to work with them and I am grateful to the IMHERZ team for having invited me there.

Lynda Albertyn is head of the training of sub-specialists in child and adolescent psychiatry, in the Department of Psychiatry, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg South Africa. She also heads the Child, Adolescent and Family Unit, Charlotte Maxeke Johannesburg Academic Hospital. Dr Albertyn has a monthly outreach clinic at Unica School for Autistic children. Her particular interests are in the fields of Autistic Spectrum Disorders, Attachment Disorders, speech development and the impact of socio-political circumstances on the mental health of children.

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INCREASING

ACCESS TO MENTAL HEALTH CARE IN MALAWI THROUGH TRAINING CLINICAL OFFICERS: THE ST JOHN OF GOD COLLEGE OF HEALTH SCIENCES EXPERIENCE

Mental Health Services in Malawi

Rita Marie Thom

Malawi is one of the poorest countries in Africa. In common with many developing countries, Malawi has a shortage of health workers, in particular medical doctors and specialists. The small number of doctors and specialists, together with clinical officers, as well as registered and enrolled nurses, provide health services in the country. Clinical Officers, a category of mid-level health worker, receive three-years of training in Clinical Medicine and qualify with a Diploma which then enables them to work in general health settings and to provide clinical assessment and treatment at a primary care level. They provide the majority of clinical care in Malawi.

Psychiatric and mental health services in Malawi are poorly developed and resourced. Currently, there are only a handful of psychiatrists working in Malawi, although the University of Malawi is working in collaboration with the University of Cape Town, South Africa, to train more psychiatrists for the country. Enrolled nurses with specific training in psychiatry as well as psychiatric registered nurses form the backbone of mental health services in the country. The services are largely institutional with three specialized psychiatric hospitals serving the three regions (Zomba in the Southern Region, Lilongwe in the Central Region and St John of God in the Northern Region). In addition, people access mental health care through healers in the traditional health care system, but there is little collaboration between the two systems of care.¹

As a result, mental health services tend to be provided as a vertical service that is not integrated into general health care. In a country with a high burden of disease, many of which can present with psychiatric symptoms, this is a recipe for disaster. But in this largely rural country, many people do not have easy access to psychiatric or mental health services. A recent study found that duration of untreated psychosis in the northern region averaged 51.70 months (4.3 years), which is significantly longer than that found in similar studies in developed countries as well as in other African countries.²

A mental health policy was developed in 2001, which outlines the need to allocate more resources to develop mental health services, to decentralize and develop community-based mental health services and to establish some in-patient beds in general hospitals. However,



Rita Marie Thom

existing mental health legislation dates back to 1947 during the era of custodial care. A new Mental Health Care Bill was drafted in 2004, which is in line with the policy and with current human-rights-based treatment approaches in psychiatry and mental health. This Bill has yet to be passed by Parliament, so the existing legislation from 1947 is currently still in force.

MENTAL HEALTH SERVICES IN THE NORTHERN REGION OF MALAWI

Malawi has a history of a strong network of health services provided by Christian organizations through the Christian Health Association of Malawi (CHAM). These services support and complement government health services. One of these organisations, the Brothers of St John of God, Ireland, helped to establish a community-based mental health service in the northern region of Malawi, beginning in 1993, and which is now managed and run by local Malawian staff. This region has a population of over 1.5 million people and consists of an area of almost 27 000 square kilometres (almost double the area of Gauteng). The area is largely rural with subsistence farming and fishing being the main means of survival. The St John of God mental health service is based in Mzuzu, with outreach services to the surrounding rural areas. The service includes direct clinical mental health services (outpatient and inpatient), as well as a range of rehabilitation activities, including educational activities for children with disabilities and special needs, and income-generating



SJOG College

activities for adults. As the service developed, a training arm was established, which is now known as the St John of God College of Health Sciences. The college offers a range of courses, including certificate, diploma and degree courses (which are offered in association with the Universities of Malawi and of Mzuzu).

The Bachelor of Science in Clinical Medicine (Mental Health) is a degree course offered to qualified and registered Clinical Officers, which enables them to specialize in Psychiatry and Mental Health. This 2-year course is offered by the St John of God College in conjunction with Mzuzu University and was first offered in 2008. The aim of this course is to train clinical officers with an interest in psychiatry and mental health to be able to provide a clinical service as well as to develop and manage appropriate community-based mental health services wherever they are working. It is the vision of the organization to be able to train a specialized psychiatric/ mental health clinical officer for each district in Malawi. They would be responsible for the provision of mental health care in that district, and would act as the drivers of the development of comprehensive mental health services in each district.

The curriculum for the Bachelor of Science in Clinical Medicine (Mental Health) extends over two years and consists of modules in basic sciences and social/psychological theory (such as biochemistry, human neuroscience, developmental psychology and sociology), as well as modules in theoretical and clinical aspects of psychiatry (including psychopharmacology and psychotherapy).

Students also receive input on health service management and research methodology. It is a full-time course, and students spend time in the classroom, in laboratories and in clinical practice in the mental health service in Mzuzu. This is a unique degree in Africa and clinical officers from countries such as Zambia, Kenya and Uganda have also completed the qualification.

There is a rigorous assessment process, with both formative and summative assessments. Students keep a clinical log-book and are expected to complete a community needs assessment and mental health promotion project as part of their practical training. In addition, they complete a research dissertation towards fulfillment of the degree.

Rita Marie Thom is an honorary adjunct professor in the Department of Psychiatry, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg. She is in private practice as a specialist psychiatrist, working at the Wits Donald Gordon Medical Centre in Parktown, Johannesburg. *References 1-3 can be obtained from the author.*

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I have had the privilege of acting as moderator for this degree since its inception in 2008, and have visited the St John of God College of Health Sciences in January 2010, 2012 and 2014. The theoretical course work is comprehensive and detailed, and there is a good balance between theoretical and clinical components in the training. Over the years, there have been ongoing discussions on improvements to both training and assessment methods, in particular to integrate practical and theoretical components more effectively, to teach around local needs, to increase practical training in counselling skills, to introduce an Objective Structured Clinical Examination (OSCE) as part of the assessment process, and to more accurately and effectively define and measure the required competencies of the qualified clinical officer.

To date, 76 candidates have registered for the degree and 74 (97,3%) entered the final examination and graduated. Two candidates (2.7%) in the three courses were recommended not to enter the second year of study. There are currently a further 18 candidates in their first year of study.



Graduates

Ultimately, the success of the training should be measured by the achievements of graduates. To date, no formal assessment of this has been undertaken, although a research study to follow-up graduates is planned. Anecdotal reports suggest that some graduates are providing direct clinical mental health care in areas where this has previously not been available. However, this is dependent on the availability of suitable posts in government health services. It seems that many have joined non-governmental organisations. On a personal level, the acquisition of a degree opens many doors to graduates in terms of career progression and better remuneration, allowing them to apply for management posts in health services. Hopefully this also raises the profile of mental health and the need for mental health services in Malawi and neighbouring countries.³

MENTAL HEALTH CARE

IN SOUTH AFRICA: DEFINING AND MEASURING 'VALUE'

It has become apparent to me that healthcare in South Africa (SA) has entered a season of change. I have become aware of this in both of my primary roles - as a registered psychologist working clinically, and in my capacity as the CEO of the Akeso Group of Psychiatric Clinics.

Allan Sweidan

Healthcare systems, both private and public, are under review globally. Many of you would know from media reports that Obamacare is a major political issue in the United States of America (USA) and the National Health System (NHS) is under scrutiny in terms of both its service delivery and its financial sustainability in the United Kingdom (UK). In SA there is much talk about the introduction of a National Health Insurance (NHI) and what this might ultimately mean for all stakeholders.

Funders of healthcare, whether they be the government, the insurers/medical schemes, or individuals and families, use different language to describe their priorities when it comes to the healthcare system and the changes they would like to see.

Government will talk about population health management through enhanced primary care. This interprets as intervening at the earliest possible opportunity to ensure that disease progression is stymied before complications arise leading to much higher costs down the line in terms of money, time and professional resources. Within the greater public system, the management of the population's health becomes an interdepartmental issue. For example, we see the introduction of so-called "sin taxes" to discourage the use of alcohol and tobacco (and soon to be sugar, salt?) with the aim of reducing the costs of avoidable burden on an already overloaded public healthcare system.

In the private sector, the medical schemes are seemingly more concerned about managing 'risk', where risk in this instance refers to in-hospital treatment with all its associated costs. Population health management within the private sector is getting some attention, with the introduction of loyalty programs that incentivise healthier living. Whilst these programs may have many aims, the most important of these is probably to keep people out of hospital as much as possible. When one learns that 1 in 4 medical aid members is hospitalised in

SA every year, compared with the international norm of about 1 in 8, one begins to understand the extent of their concern.

Statistics show that 4 out of the top 10 contributors to the global disease burden are neuropsychiatric. As is oft quoted, the World Health Organisation predicts



Allan Sweidan

that by 2020 depression will be the second largest contributor to the global burden of disease and neuropsychiatric diseases will contribute up to 35% of total disabilities globally and 15% of the disease burden.

In the private psychiatric healthcare sector in South Africa, where we have previously been under-resourced in the provision of both beds and professional resources, the costs associated with mental healthcare increase annually. This is as a result of increases in both the burden of disease and access to care with consequent higher levels of utilisation. The effects, as seen in the context of recent annual premium hikes to medical scheme members, is that healthcare inflation rises by above average inflation (Consumer Price Index) every year because in determining premiums, the schemes need to take into consideration both inflationary and utilisation increases. I am no health economist, but I understand that if premiums continue to rise at above inflation, people generally will drop out of the insured system and younger, healthier people won't join schemes at all.

In psychiatry, within the public and private sectors, there are inconsistencies with regards to how the different parts of each system approach quality and cost. In the public system, average lengths of stay for adult voluntary patients presenting with symptoms of major depression can be as high as 60 days, depending on setting i.e. acute unit in a general hospital or a specialised psychiatric hospital.

At each public hospital there is much focus on formularies and reduced choice of medication. Length of stay in public facilities is often related to distance travelled to access care, lack of primary resources closer to home and other socioeconomic factors. In the private sector, the length of stay for a similarly (clinically if not socially) presenting patient will probably be about 11 days (that's the industry average within the private sector for voluntary adult patients with depression), but the doctors are generally free to prescribe whatever medication they would like. Because psychiatric diagnoses generally fall into the prescribed minimum benefit category of diseases, there are no limits on medication for private patients in hospital. Patients, generally speaking, are largely unaware of the costs associated with the care, unless they are paying for such care out of pocket, and even then, there is much inflexibility in where they will get treated and how they will get treated. The doctor will tell them they need to be admitted, he or she will prescribe a treatment path that the patient must follow, and the patient will be unaware of costs until he or she is presented with the final account.

The conundrum, as hopefully I have contextualised, is that every system is looking for the highest quality of care at the lowest cost. Within psychiatry, nobody has yet comprehensively defined what outcomes should determine quality, and no system has yet defined what costs should be incurred in the achievement of desired outcomes. Should length of stay be 60 days for depression, or 11, or more, or less? Should all medications and other procedures be made available to every patient, or should these be restricted according to budgets? What should the costs be to get a patient to a required outcome, and what are the costs to each individual and the wider system if the patient does not receive adequate care?

And thus, finally, we can begin to talk about the concept of measuring value within the sphere of mental healthcare...

Firstly, how do we define quality? Is quality related to the outcomes that the schemes desire - high levels of patient satisfaction, adherence post-discharge and ultimately lower readmission rates? Or is quality defined by patient needs - safety, minimum inconvenience, getting 'well', coping better etc.? Michael Porter, the Harvard academic who has written extensively on the value based care agenda, suggests that "the only true measures of quality are the outcomes that matter to the patient". International literature on the topic suggests that the outcomes that matter to the patient at many points correspond with outcomes that matter to the funder and service provider, and these include treatment costs, psychological well-being, patient satisfaction, treatment adherence, ability to perform daily activities and staying well, as measured by

readmission rates.

Where psychiatry currently lags behind other medical disciplines is in the historical lack of a systemic and comprehensive effort to capture data that would measure the treatment pathways best designed to achieve high levels of quality. As I mentioned above, the industry has not yet even agreed to what constitutes quality, although hopefully many readers are nodding in agreement with the list above. Compared to more precise disciplines where quality and outcomes are immediately measurable (as in some areas of ophthalmology) psychiatry still has a long way to go.

So, if the journey towards change in psychiatry is to begin, what is our starting point?

The first step, of course, is to negotiate the obstacles. The two major hindrances to creating a value based system are the lack of both information and integration. Within a fragmented system (and both the public and private sectors are guilty of sustaining fragmented systems although this is less problematic in the public sphere) there are few opportunities to share costs and outcome data in such a way that analysis of this data will feed into a cycle of continuous systemic improvement. In many countries there exist central registries of information pertaining to processes (which can be proxy cost information) and outcomes. In SA there are no such registries. So for us, the starting point is to ensure that the doctor groups, the hospitals and the insurers begin collaborating and sharing information so as to drive value based initiatives into the system.

If there is one message to be imparted it is that the participation of psychiatrists in the process is of crucial importance.

Allan Sweidan is a registered clinical psychologist and the CEO of Akeso Clinics. Akeso manages six psychiatric hospitals through South Africa and Allan has been involved with the group since 2004. **Correspondence:** allan@akeso.co.za



Christa Kruger Training on dissociation and dissociative disorders in South Africa

It is a privilege to use this opportunity to introduce to the readership the International Society for the Study of Trauma and Dissociation (ISSTD), my involvement in it, and the implications for South African psychiatry, including implications for training on dissociation and dissociative disorders.

It was my long-standing research interest in the phenomenon of dissociation – why it happens, how it works, how it affects people – that drew me to ISSTD initially. And it was the nature of the organisation – the quality of the teaching, the richness of the writing and research coming from ISSTD, the helpful and compassionate attitudes of the members, and the genuine sense of community – that have made me remain a grateful member over the years. A member of ISSTD since 1995, I currently serve as a director on the ISSTD Board and a member of its standing Scientific Committee, Core Conference Committee and Governance Committee. In addition, I previously served on the ISSTD's International Academic Task Force and Task Force for the Internationalisation of Dissociation. The ISSTD is an international, non-profit, professional association organised to develop and promote comprehensive, clinically effective and empirically based resources and responses to trauma and dissociation and to address its relevance to other theoretical constructs (ISSTD, <http://www.isst-d.org/>). The vision of ISSTD is that social policy and health care will address the prevalence and consequences of chronic trauma and dissociation, making effective treatment available for all who suffer from the effects of chronic or complex trauma; and its mission is to advance clinical, scientific, and societal understanding about the prevalence and consequences of chronic trauma and dissociation.

The annual conference of the ISSTD – a highlight in the year – is in the process of moving from November to April. The next conference, the 32nd Annual Conference, with the theme of "Mastering the Complexity of Trauma and Dissociation: A Major Training Event", will be held at the Hilton Orlando Lake Buena Vista in Orlando, Florida, USA, 16-20 April 2015. A link to the conference web page can be found on the ISSTD's home page (<http://www.isst-d.org/>). My involvement with the ISSTD has provided opportunities for fruitful international research collaboration. A group of us published a few articles in 2014, one of which was a review of the empirical research on dissociative identity disorder (DID) (Dorahy et al., 2014). This review article followed after two letters written by us in response to others' published articles (Martínez-Taboas et al., 2013; Sar et al., 2013). In addition, two articles were published in the Australian and New Zealand Journal of Psychiatry, which focused on the problems around institutional responses to child sexual abuse, and the role of the Australian Royal Commission in

investigating these (Middleton et al., 2014a and 2014b). We also had the opportunity to respond to a subsequent published commentary (Middleton et al., 2014c). In another collaborative project, a group of us are conducting a web-based survey entitled "Approaches to trauma treatment by mental health professionals". The aim of this research study is to determine how different mental health professionals understand and treat people who present for help with problems related to traumatic stress. Please see: (http://canterbury.qualtrics.com/SE?SID=SV_bf958k0Utp7fl11) to participate in this 10-15 minutes survey that has been approved by the University of Canterbury Human Ethics Committee. We would appreciate your participation very much.

My own research has also benefitted from the above international collaboration in that a partial replication of the methodology of the 'TopDD'-study by Brand and co-workers (Brand et al., 2009, 2013; Stadnik & Brand, 2013) is being used in a local study on dissociative disorders (DDs) in the Pretoria region. The objectives of this study include screening for patients with DDs among psychiatric patients; describing local variations in the clinical picture of the DDs; monitoring treatment progress and outcome in patients with DDs; and evaluating available local non-public-mental-health services for DD patients. Furthermore, the merits of the DSM-5's incorporation of possession trance in the main diagnostic criterion for DID – as a cultural variant of DID, and an alternative to 'distinct-personality-state DID' – are being evaluated. Preliminary findings about a cohort of participants in this local study at Weskoppies Hospital were presented at the recent 31st Annual Conference of the International Society for the Study of Trauma and Dissociation (ISSTD) in Long Beach, CA, USA, 23-27 October 2014 (Krüger, 2014). The proportion of patients with DDs among these psychiatric in-patients of 10% is similar to international studies. Preliminary analyses did not confirm a close relationship between possession experiences and DDs as suggested by the DSM-5's inclusion of possession in the main criterion for DID. The sample has since been extended to Tshwane District Hospital, a regional hospital in Pretoria, and further analyses are being performed. Previous local dissociation-related research has included the development and validation of a scale to measure the intensity of dissociative states at the time that they occur (Krüger & Mace, 2002); a study of quantitative EEG changes that occur in the brain during dissociative states using the above state scale and spectral analysis of EEG – the first of its kind (Krüger et al., 2013); a preliminary contextual model of dissociation (Krüger et al., 2007); and a qualitative study of the influence of conflicting socio-cultural discourses on individual dissociation (Krüger, 2009). The developed state scale of dissociation has also,

i.a., been used in a controlled treatment outcome study that demonstrated evidence of the benefit of cognitive analytic therapy for treating DID (Kellest, 2005).

With regard to the abovementioned contextual model of dissociation (Krüger et al., 2007), the question remains how the phenomenon of dissociation and the DDs can be studied in South Africa given the dearth of relevant indigenous language to describe these phenomena in detail. Is it acceptable to continue using English as a tool for studying dissociation and the DDs locally, since English is being used for much of the rest of psychiatric and medical practice and training, as is evident from the publication of local textbooks of psychiatry in English, and from the local psychiatry curricula? In this regard, see the chapter on DDs in the new South African textbook of psychiatry for a case of amafufunyana presenting as DID (Krüger, in Burns & Roos, due for publication in 2015). The chapter on DDs in the new textbook was aimed at making the concept of dissociation and the DDs accessible to medical students and psychiatric registrars in their early years of specialisation. Notwithstanding the summary in the chapter of several 'ways of understanding' dissociation and the DDs, the following might represent easy ways of explaining to a colleague from another discipline what dissociation and the DDs are: Dissociation is the brain's way of handling difficult information, for example, traumatic events or child abuse, information that is too painful to bear, or information that is in conflict with one's experiences or expectations. As for many other disorders, a certain degree of dissociation may be normal. It is only when dissociative symptoms become severe enough to cause clinically significant distress or disability in social, occupational, or other important activities, that they become a disorder. DDs mean there are significant problems with one's awareness, consciousness and sense of self. For example, one blocks out traumatic memories, or one "struggles to keep it all together". When more severe, there might be "breaks" in consciousness where a person may be unaware of behaving in contradictory ways, as if controlled by different forces at different times.

In terms of aetiology, psychological trauma, particularly complex, chronic, ongoing relational trauma (such as is found, e.g., in chronic childhood sexual abuse), leads to DDs. This link between trauma and dissociation (i.e., that trauma causes dissociation) is well-established and supported by substantial empirical evidence (Dalenberg et al., 2012; Dorahy & Van der Hart, 2007; Dorahy et al., 2014). Such ongoing relational trauma can be described as betrayal trauma – the trust of the child in a caregiver is betrayed when that caregiver abuses the child (Freyd, 1996; Freyd & Birrell, 2013). This type of relational trauma is usually associated with a disorganised attachment pattern in the child which contributes to ongoing abuse (Sachs, 2013). DID, for example, is currently understood as a chronic complex posttraumatic developmental disorder that usually begins before the age of 5-6 years, usually

as a result of chronic childhood abuse. The alter identities result from the inability of many traumatised young children to develop a unified sense of self that is maintained across various discrete behavioural states (Howell & Blizard, 2009; Putnam, 2006).

Adult patients with DDs may present more often in casualty departments or general medical settings than in psychiatric hospitals, and may be identifiable provisionally by a confusing polysymptomatic clinical presentation; prominent comorbidity; incongruent affect (detachment from emotional pain); abrupt mood changes; and inconsistency in attendance, presentation and the patient's account (e.g., a history or complaints of severe acting-out behaviour in a pleasant, compliant patient) (Hunter, 2004). Psychiatric hospital admission may be necessary at times when DD patients are at risk of harming themselves or others, or when their dissociative or posttraumatic symptoms are overwhelming or out of control. An important implication of DD patients' confusing clinical presentation for South African psychiatry is that DD patients need to be identified in general hospitals and other general medical settings. This might be achieved if general medical practitioners and other health professionals could be optimally educated about DDs and the effects of complex, chronic, ongoing relational trauma and childhood abuse. DDs are relatively common and problematic, and warrant proper training of undergraduate medical students in the diagnosis, provisional supportive management, and appropriate referral of patients with DDs.

To this end, and in light of the limited time available (and in some cases no time available) in South African undergraduate medical curricula for teaching medical students about DDs, the abovementioned chapter on DDs in the new South African textbook of psychiatry should fill an important gap. Another important implication for South African psychiatry is that consultation-liaison psychiatrists have a big role to play in the diagnosis and appropriate treatment of DD patients. In this regard, the consistent and cross-regionally equitable establishment of psychiatric units in South African general/regional hospitals, and the appointment of psychiatrists at those general hospitals are extremely important. Interested readers might consider membership of the ISSTD as a rich resource for learning more about dissociation and DDs, and about dealing with the effects of complex, chronic, ongoing relational trauma. Membership fees are calculated on a sliding scale according to a country's position in global economic categories. Membership benefits include free access to the Journal of Trauma & Dissociation, access to ISSTD training opportunities such as the Professional Training Programme at reduced rates, access to free member resources, and many more.

If more South African psychiatrists and other health professionals could develop expertise in the field of dissociation and DDs, it would aid in service delivery for the many South African patients who suffer from the effects of complex trauma.

Christa Kruger is a specialist psychiatrist at Weskoppies Hospital in Pretoria and a Professor in the Department of Psychiatry at the University of Pretoria. All cited references can be obtained from the author. **Correspondence:** Christa.kruger@up.ac.za

DEPARTMENTS OF PSYCHIATRY NEWS

UNIVERSITY OF THE WITWATERSRAND

HIGHER DEGREE GRADUANDS - 2014



Dr Arbee, Dr Lumu, Adj Prof. Subramaney, Dr Nel

The Department had 6 MMed graduands. These were Dr's Arbee, Govender, Lumu, Miric, Nel and Raghbir. Dr Lumu will be awarded the Louis Franklin Freed prize for the best MMed student in Psychiatry for 2014 at an awards ceremony in March 2015.

The Department had 1 PhD graduate Ms Radebe, psychologist at Charlotte Maxeke Johannesburg Academic Hospital was awarded her PhD.



Dr Zama Radebe

HEAD OF DEPARTMENT

Professor Christopher Paul Szabo was reappointed as Head of Department for a second and final 5 year term :

November 2014 - November 2019



Christopher Paul Szabo

CARNEGIE - WITS ALUMNI DIASPORA PROGRAMME

Prof. Anthony Feinstein will be visiting the University as a guest of the Department of Psychiatry for the week of the 22nd June. During this time he will lecture and conduct seminars on topics that include his work related to war journalists and traumatic stress and computerized approaches to neuropsychological testing.



Anthony Feinstein

Dr. Feinstein received his medical degree in South Africa at the University of the Witwatersrand. Thereafter he completed his training in Psychiatry at the Royal Free Hospital in London, England, before training as a neuropsychiatrist at the Institute of Neurology, Queen Square in London. His Master of Philosophy and Ph.D. Degree were obtained through the University of London, England. He is currently a Professor of Psychiatry at the University of Toronto.

His neuropsychiatry research focuses on the search for cerebral correlates of behavioral disorders associated with multiple sclerosis, traumatic brain injury, and hysteria (Conversion Disorders).

He is currently Chair of the Medical Advisory Committee of the MS Society of Canada. Dr. Feinstein is also involved in a series of studies of relevance to current issues within our society. The questions being addressed are: How are journalists affected emotionally by their work in zones of conflict and what motivates them to pursue such dangerous occupations?

In 2000-2001 he was awarded a Guggenheim Fellowship to study mental health issues in post-apartheid Namibia. This led to the development of that country's first rating scale for mental illness. Subsequent work in Botswana produced that country's first rating scale for mental illness as well.

Dr. Feinstein is the author of *Dangerous Lives: War and the Men and Women Who Report It* (Thomas Allen, Toronto 2003), *In Conflict* (New Namibia Books, 1998), *The Clinical Neuropsychiatry of Multiple Sclerosis* (Cambridge University Press 1999, with a second edition in 2007), *Michael Rabin, America's Virtuoso Violinist* (Amadeus Press, 2005, with a second edition in 2011) and *Journalists Under Fire: the Psychological Hazards of Covering War* (John Hopkins University Press). His most recent book is *Battle Scarred* (Tafelberg Press, 2011). He has published widely in peer-reviewed journals and has authored many book chapters. In 2012, a documentary, "Under Fire" produced by Dr. Feinstein and based on his research of journalist in war zones was shortlisted for an Academy Award. The documentary received a 2012 Peabody Award.

MRC CLINICIAN RESEARCHER PROGRAMME: PHD SCHOLARSHIPS

Professor Carina Marsay was awarded a scholarship which will commence in April 2015. The South African Medical Research Council (SAMRC) was established in 1969. Their aim is to build a healthy nation through quality research. Their mission is to improve the nation's health and quality of life through promoting and conducting relevant and responsive health research. Research at the SAMRC focuses on the ten highest causes of death in South Africa and includes TB, HIV, chronic diseases, alcohol and drug abuse, and women's health.



Carina Marsay

In order to address the health issues in South Africa, the SAMRC has set up a dedicated funding department, known as the Division of Grants and Scholarships Administration (GSAD). The core business of the GSAD is to build health research capacity by providing and administering scholarships to South African citizens studying towards their Masters and PhDs in Medical and Health Sciences. Post-doctoral candidates also have access to financial support in order to augment health research capacity. Furthermore, the GSAD drives the President's five-year initiative of MRC Research Strengthening and Capacity Development in five selected South African Universities.

All applications for funding are put through a rigorous review process to ensure that the best candidates and/or research projects receive funding. National and international reports (including reports from the National Institutes of Health) highlight the dearth of MBChB graduates that initiate and complete PhD research degree. The South African Medical Research Council (MRC) has taken note of this paucity of clinician researchers in South Africa and has implemented a PhD Scholarships in Clinical Research programme.

The full time PhD Scholarships are awarded to post MBChB candidates conducting clinical research for a period ranging from one to four years. Dr Carina Marsay, a joint appointee in the Department of Psychiatry at WITS University has been awarded this Scholarship, for her PhD study on perinatal depression. The study will investigate the impact of screening for perinatal depression in our communities. It creates a good opportunity for interested psychiatrists to pursue a career in clinical research.

Anyone interested in applying for funding can contact Dr Thabi Maitin via **email thabi.maitin@mrc.ac.za** or visit **<http://www.mrc.ac.za/v>**

PUBLICATIONS FOR 2014

ABR Janse van Rensburg, M Poggenpoel, CP Szabo and CPH Myburgh. Referral and collaboration between South African psychiatrists and religious or spiritual advisers: Views from some psychiatrists. SAJP – July 2014 Vol.20 No.2: 40-45

Bernard (ABR) Janse van Rensburg, M Poggenpoel, Chris PH Myburgh and Christopher P Szabo. A Model for the Role of Defined Spirituality in South African Specialist Psychiatric Practice and Training J Relig Health (2014) 53:393-412

Cora Smith Training of psychoanalytic psychotherapy in contemporary South Africa: Theoretical dilemmas, clinical debates and diverse contexts. Psychoanalytic Psychotherapy in South Africa 22 (1) 2014.

Todd Wagner, Jennifer Furin, Barbara Gripshover, Yasmien Jeenah and Greg Jonsson. Loss to Follow-Up among a Group of Patients with HIV and Severe Mental Illness in South Africa. World Journal of AIDS, 2014, 4, 74-80

Helen Jack, Ryan G Wagner, Inge Petersen, Rita Thom, Charles R Newton, Alan Stein, Kathleen Kahn, Stephen Tollman and Karen J Hofman. Closing the mental health treatment gap in South Africa: a review of costs and cost-effectiveness. Global Health Action 2014, 7:23431 page 1-11

ABR Janse van Rensburg. South African Society of Psychiatrists guidelines for the integration of spirituality in the approach to psychiatric practice. SAJP November 2014 Vol.20 No 4 page 133 - 139

Bernard Janse van Rensburg, Lian Taljaard, Zane Wilson. Communication and adherence of patients at a South African public sector specialist psychiatric out-patient clinic. Arch Clin Psychiatry 2014; 41(6):142-9

Visser J, Notelovitz T, Szabo CP, Fredericks N. Abnormal eating attitudes and weight-loss behavior of adolescent girls attending a "traditional" Jewish high school in Johannesburg, South Africa. S Afr J Clin Nutr 2014; 27(4):208-216

Muller DM, Errington S, Szabo CP, Pitts NI, Jacklin LB (2014). Cortisol and IL-6 responses to stress in female children presenting at a sexual abuse clinic. Journal of Child & Adolescent Trauma, 7 (3), pp. 185 - 191.

Muller DM, Errington S, Szabo CP, Pitts NI, Jacklin LB. (2014). Disparate plasma cortisol concentrations in sexually abused female children from Johannesburg, South Africa. CHILD ABUSE & NEGLECT, 38 pp. 1778 - 1786.

UNIVERSITY OF STELLENBOSCH

Endowed Chair in Schizophrenia Research

The Department of Psychiatry at Stellenbosch University recently announced the establishment of an Endowed Chair. This is also the 1st Endowed Research Chair at Stellenbosch University's Faculty of Medicine and Health Sciences. The establishment of the Sarah Turoff Endowed Chair in Schizophrenia Research has been made possible by a donation from the Sarah Turoff Will Trust (the donors are the parents of twin daughters who both had schizophrenia).

The Endowed Chair was announced at a function on 9th December 2014 to thank the Executor of the Trust, Mr Ben-Zion Surdut, who made the generous donation possible. This is an exciting development for schizophrenia research in the department and will be an important mechanism to further facilitate and support research activities in the field. Professor Robin Emsley has been appointed to the Sarah Turoff Endowed Chair in Schizophrenia Research for a five year term. Professor Emsley retired as the Executive

Head of the Department of Psychiatry in 2011 but has been highly productive as a researcher since then and heads up the schizophrenia research team. His international stature as an academic and as a leader in the field of schizophrenia makes him ideally suited for this Endowed Chair.



At the official announcement were (from left to right): Prof Robin Emsley, holder of the Research Chair, Mr Ben-Zion Surdut, executor of the Sarah Turoff Trust, Mrs Esther Surdut, prof Soraya Seedat, executive head of the Department of Psychiatry and prof Jimmy Volmink, dean of the Faculty of Medicine and Health Sciences.

UNIVERSITIES OF CAPE TOWN/STELLENBOSCH

PUBLICATION:

Howells FM(1), Hattingsh CJ(2), Syal S(3), Breet E(4), Stein DJ(5), Lochner C(4). (1)H-magnetic resonance spectroscopy in social anxiety disorder. *Prog Neuropsychopharmacol Biol Psychiatry*. 2014 Dec 27. pii: S0278-5846(14)00245-0. doi: 10.1016/j.pnpbp.2014.12.008.

(1)Department of Psychiatry and Mental Health, University of Cape Town, South Africa. Electronic address: howellsfleur@gmail.com. (2)Department of Psychiatry and Mental Health, University of Cape Town, South Africa. (3) Department of Psychiatry and Mental Health, University of Cape Town, South Africa; Department of Psychology, University of Toronto, Canada. (4)MRC Unit on Anxiety and Stress Disorders, Department of Psychiatry, University of Stellenbosch, South Africa. (5)Department of Psychiatry and Mental Health, University of Cape Town, South Africa; MRC Unit on Anxiety and Stress Disorders, Department of Psychiatry.

BACKGROUND: Social anxiety disorder (SAD) is characterized by excessive anxiety about social interaction or performance situations, leading to avoidance and clinically significant distress. A growing literature on the neurobiology of SAD has suggested that the reward/avoidance basal ganglia circuitry in general and the glutamatergic system in particular may play a role. In the current study, we investigated (1)H-magnetic resonance spectroscopy ((1)H-MRS) concentrations in cortical, striatal, and thalamic circuitry, as well as their associations with measures of social anxiety and related symptoms, in patients with primary SAD. **METHODOLOGY:** Eighteen adult individuals with SAD and 19 age- and sex- matched

controls participated in this study. (1)H-MRS was used to determine relative metabolite concentrations in the anterior cingulate cortex (ACC) using single voxel spectroscopy (reporting relative N-acetyl-aspartate (NAA), N-acetyl-aspartate with N-acetyl-aspartyl-glutamate (NAA+NAAG), glycerophosphocholine with phosphocholine (GPC+PCh), myo-inositol, glutamate (Glu), and glutamate with its precursor glutamine (Glu+Gln)), and the caudate, putamen and thalami bilaterally using two dimensional chemical shift imaging (reporting relative NAA+NAAG and GPC+PCh). Relationships between metabolite concentrations and measures of social anxiety and related symptoms were also determined. Measures of social anxiety included symptom severity, blushing propensity, and gaze anxiety/avoidance.

RESULTS: We found, first, decreased relative glutamate concentration in the ACC of SAD and changes in myo-inositol with measures of social anxiety. Second, NAA metabolite concentration was increased in thalamus of SAD, and choline metabolite concentrations were related to measures of social anxiety. Lastly, choline metabolite concentration in the caudate and putamen showed changes in relation to measures of social anxiety.

CONCLUSION: These findings are consistent with evidence that the reward/avoidance basal ganglia circuitry, as well as the glutamatergic system, play a role in mediating SAD symptoms.

JOURNAL OF CHILD AND ADOLESCENT MENTAL HEALTH NOW INDEXED IN MEDLINE

The Journal of Child & Adolescent Mental Health (JCAMH) publishes papers that contribute to improving the mental health of children and adolescents, especially those in Africa. Papers from all disciplines are welcome. It covers subjects such as epidemiology, mental health prevention and promotion, psychotherapy, pharmacotherapy, policy and risk behaviour.

The Journal is published by Taylor & Francis in association with NISC and the South African Association for Child and Adolescent Psychiatry and Allied Professions (SAACAPAP). The editorial board comprises seven associate editors and an international advisory board.

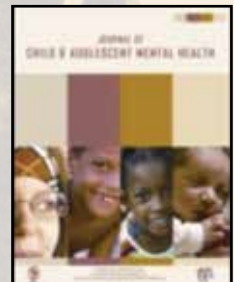
THE JOURNAL PUBLISHES REVIEW ARTICLES, ORIGINAL RESEARCH (INCLUDING BRIEF REPORTS), CLINICAL PAPERS IN A 'CLINICAL PERSPECTIVES' SECTION AND BOOK REVIEWS. JCAMH IS ACCREDITED WITH THE SOUTH AFRICAN DEPARTMENT OF HIGHER EDUCATION AND TRAINING FOR PUBLICATION SUBSIDY PURPOSES.

The journal's current exposure through various online platforms continues to show steady improvement. The journal has recently seen an expansion in frequency to accommodate the rising number of submissions. As of 2014, JCAMH releases three issues per year. We are hoping to increase

this to four issues per year in the very near future. The journal featured quite prominently at the IACAPAP 2014 Congress, recently held in Durban (11-15 August 2014).

In October 2014, the Journal of Child & Adolescent Mental Health was officially indexed on Medline®. JCAMH is currently the only South African mental health journal indexed in Medline®. Produced by the U.S. National Library of Medicine, Medline is considered to be one of the top medical bibliographic databases in the world.

Medline indexes almost 6000 journal titles, with 19 million records. Inclusion in the database is an affirmation of the journal's standing as the selection process is stringent, with a very long waiting list of applications. A specific committee reviews all new applicants and selection is made on the journal's scope and importantly, its overall quality. All 2014 issues of the journal will be fully indexed. With access to Medline available through Pubmed and Ebscohost, JCAMH provides excellent exposure of your child and adolescent mental health research.



Sandra Fernandes

South African Society of Psychiatrists Southern Gauteng Subgroup - ECT workshop

The Southern Gauteng subgroup of the South African Society of Psychiatrists (SASOP) hosted an Electro Convulsive Therapy (ECT) workshop on the 1st of November 2014 at the Radisson Blu Hotel in Sandton. It focused exclusively on the practical issues relating to ECT.

ECT SEEMS TO BE A NEGLECTED FORM OF PSYCHIATRIC INTERVENTION FOR VARIOUS REASONS: A LACK OF UNDERSTANDING BY THE PUBLIC; THE STIGMA ASSOCIATED WITH ECT FROM 'HORROR' STORIES GENERATED BY POPULAR MOVIES AND CULTURE; AND FROM THE MEDICAL SIDE A LACK OF RESOURCES, ESPECIALLY IN THE STATE SECTOR.

The referral of patients for ECT within clinical sites that form part of the Department of Psychiatry at the University of the Witwatersrand has, up until earlier this year, been largely managed by Chris Hani Baragwanath Academic Hospital (CHBAH). "Tara Hospital now has its ECT service up and running and Helen Joseph Hospital (HJH) has finally received its Thymatron machine and has started ECT", noted Dr Craig Bracken, a senior specialist at HJH and member of the Wits ECT practice group.

Dr Bracken gave a comprehensive overview of the practicalities of ECT, from electrode placement, dosing with different titration schedules, and the overall efficacy of ECT. He also gave an overview of how the Thymatron machine works and what variables can be manipulated by the treating doctor. The Mental Health Care Act was briefly covered in order to highlight finer aspects of the licensing issues for facilities and the consent required for patients under the Act. His presentation also included a review of the literature with a focus on the efficacy of real versus simulated ECT as well as pharmacotherapy versus ECT for depressive symptoms. There has been a shift from unilateral to bilateral ECT in the literature with bilateral ECT showing the best effects.

This workshop allowed for an interesting discussion on the use of anaesthesia in ECT with Dr Akiya Atiya, an anaesthetist in private practice, presenting her experiences of ECT over the years. She had previously worked at CHBAH with Dr Shana Meyer and was involved with ECT at Tara Hospital a number of years ago. She gave an overview on the physiology of

patients undergoing ECT followed by the different anaesthetic agents currently used. A lively discussion ensued around the use of Etomidate, which she uses frequently. Tara Hospital had recently had some difficulties in using Etomidate due to anaesthetist's fears (from Charlotte Maxeke Johannesburg Academic Hospital) on the development of adrenocortical suppression. She discussed some of the literature that has perpetuated this fear, which resulted from the use of Etomidate in an ICU setting, and which led to various complications



Craig Bracken; Shana Meyer; A Prinsloo; Sandra Fernandes; Akiya Atiya

THE QUALITY OF THESE STUDIES ARE IN QUESTION, ACCORDING TO HER. IN HER EXTENSIVE INVOLVEMENT WITH ECT NO PROBLEMS HAVE ARISEN WITH THE USE OF ETOMIDATE. SHE FELT THAT CHBAH NOW HAS AN EXTENSIVE EVIDENCE BASE TO COUNTER THESE FEARS AND SHE HAS ENCOURAGED THE PUBLISHING OF THIS EVIDENCE.

Dr Shana Meyer (Department of Psychiatry - CHBAH) was able to share some EEG tracings from some of her patients, especially the post-ictal suppression that is not always seen on tracings yet is one of the requirements for an effective treatment session of ECT. The practical difficulties that CHBAH has encountered over the years was shared with everyone. Dr Meyer said, "I have been fortunate in working very closely with the anaesthetic team on site. The psychiatric team has reaped the benefit of the exclusive use of a designated theatre for ECT". Something of which she can be very proud having worked to secure such a facility.

Mr Antonie Prinsloo, from New Paradigm Electronics, brought a Thymatron IV machine to the workshop and was able to show us how it works, the physics

behind the machine and what should be expected when a machine is serviced.

Finally there was an interesting case presentation by Dr Sandra Fernandes (Specialist psychiatrist-Tara Hospita), on a patient who was receiving anticoagulation treatment, needed ECT and who went on to develop a deep vein thrombosis (DVT) while undergoing ECT. This case perfectly highlighted aspects previously presented, such as the use of Etomidate in this patient, the seizure duration required for effective treatment and the absolute necessity of close communication between the different team members involved with ECT.

This workshop provided lots of interesting food for thought. ECT in the private setting was not covered, but as Dr Bracken said, "This will become an annual event where further collaboration could happen". The Wits ECT Practice Group, initially set up by consultants at Tara Hospital with representation from all the clinical units on the Wits circuit, was set up precisely for this. The group seeks to promote better referral processes for ECT across all the hospitals and to encourage further collaboration and possible research.

The morning could not have ended without the scrumptious catering by Radisson Blu Hotel, and an electrifying morning it was indeed!

Sandra Fernandes is a specialist psychiatrist working at Tara, the H Moross Centre in Johannesburg. She is a member of the Department of Psychiatry at the University of the Witwatersrand. References available from the author on request.

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ANTIDEPRESSANTS WHICH ONE TO CHOOSE?

The content of this article is based on a presentation by Eugene Allers at the Pfizer Mental Wellness Roadshow held at 20 West Street, Morningside, Johannesburg on the 18th November 2014.

This article was written by Dr. David Webb, Medical writer, Pattacus Medical Consulting Johannesburg dawebb@mweb.co.za

Eugene Allers

In South Africa, doctors have a daunting variety of medications to choose from when selecting therapy for patients with depression. Currently, there are 8 classes of antidepressants with different mechanisms of action to choose from and, within those, 92 products from 24 generic classes (Table 1). Prices are variable, with generic SSRI options being the least expensive.

Mechanism of action	Acronym	Number of products	Number of generic classes
Selective serotonin reuptake inhibitor	SSRI	54	6
Tricyclic antidepressant	TCA	11	7
Tetracyclic antidepressant		9	3
Mono-amine oxidase inhibitor	MOAI	2	2
Serotonin noradrenaline reuptake inhibitor	SNRI	11	2
Noradrenaline dopamine reuptake inhibitor	NDRI	2	2
Melatonergic		1	1
Others		2	1
Total		92	24

Guidelines recommend products from most of these classes as first-line options. However, it is well recognised that individual patients respond differently to different drugs, so deciding which one may be most suitable for an individual patient to obtain a significant therapeutic response and maintain remission requires a more clinical approach.

Selecting an antidepressant based on symptoms

DSM 5 defines major depressive disorder (MDD) in terms of 2 core symptoms and 7 secondary symptoms, from which 5 are required for diagnosis. In addition, many depressed patients suffer from additional symptoms that are not specifically required by DSM 5 (Table 2).

However, if the DSM 5 symptom descriptions are deconstructed, it can be seen that each consists of not one symptom only, but a cluster of symptoms. For example, weight loss, weight gain, decreased appetite and increased appetite are 4 different clinical presentations described by symptom complex



Eugene Allers

3. In total, DSM describes 23 clinical presentations, which, with the addition of the non-DSM described symptoms, highlights the observation that depression is actually a very diverse group of illnesses, with a wide variety of symptoms that may present in a variety

DSM Criteria		
At least 5 of the following symptoms have been present during the same 2-week period and represent a change from previous functioning:		
DSM symptom	DSM description	
At least one of the symptoms (core symptoms) is either:		
1	Depressed mood	Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad or empty) or observation made by others (e.g., appears tearful).
2	Interest of pleasure	Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation made by others).
At least four of the symptoms is either:		
3	Appetite and weight loss	Significant weight loss when not dieting or weight gain (e.g., a change of more than 5 percent of body weight in a month), or decrease or increase in appetite nearly every day.
4	Sleep problems	Insomnia or hypersomnia nearly every day.
5	Psychomotor agitation or retardation	Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
6	Fatigue	Fatigue or loss of energy nearly every day.
7	Guilt and worthlessness	Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
8	Concentration	Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).
9	Suicidality	Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.
Non-DSM defined symptoms		
Pain, anxiety, vasomotor, sexual dysfunction, hypersomnia		

of syndromic combinations. Each of the clinical symptoms is related to circuitry in specific areas of the brain and particular neurotransmitter activity (Table 3). An understanding of the relationship of symptoms to neurochemical pathways in the brain facilitates drug selection based on antidepressant mechanism of action (Figure 1). The affinity of different antidepressants for the monoamine systems is variable, with some antidepressants being more specific for serotonergic, noradrenergic or dopaminergic pathways or a combination of those pathways.

- Trazodone is a serotonin antagonist and reuptake inhibitor (SARI) and acts mostly on the serotonergic system. Trazodone has a sedative effect and fluoxetine has an activating effect.
- Various medications act on both the noradrenergic and serotonergic systems. These are the SNRIs, the noradrenergic and selective serotonergic antidepressant, mirtazapine, and the TCAs. The serotonergic activity of the SNRIs is greater than their noradrenergic effects, which could mean that the dose of these medications would need to be elevated to an appropriate level

Table 3. Neurotransmitters and related symptoms

Neurotransmitter	Symptom complex	Individual symptoms
Serotonin	Mood	Depressed mood
	Anxiety	Anxiety
	Pain	Pain
	Sleep	Insomnia, hypersomnia
	Guilt and worthlessness	Feelings of worthlessness, excessive guilt, inappropriate guilt
	Appetite and weight	Weight loss, weight gain, decreased appetite, increased appetite
	Suicidality	Recurrent thoughts of death, recurrent suicidal ideation, suicide attempt, plan for suicide
Noradrenaline	Interest	Diminished interest
	Anxiety	Anxiety
	Hypersomnia	Hypersomnia
	Pain	Pain
	Concentration	Diminished ability to think, diminished ability to concentrate, indecisiveness
	Fatigue	Fatigue, loss of energy
	Psychomotor retardation	Psychomotor agitation, psychomotor retardation
	Appetite and weight	Weight loss, weight gain, decreased appetite, increased appetite
Dopamine	Sexual dysfunction	Sexual dysfunction
	Hypersomnia	Hypersomnia
	Concentration	Diminished ability to think, diminished ability to concentrate, indecisiveness
	Fatigue	Fatigue, loss of energy
	Psychomotor retardation	Psychomotor agitation, psychomotor retardation
	Anhedonia	Diminished interest, diminished pleasure

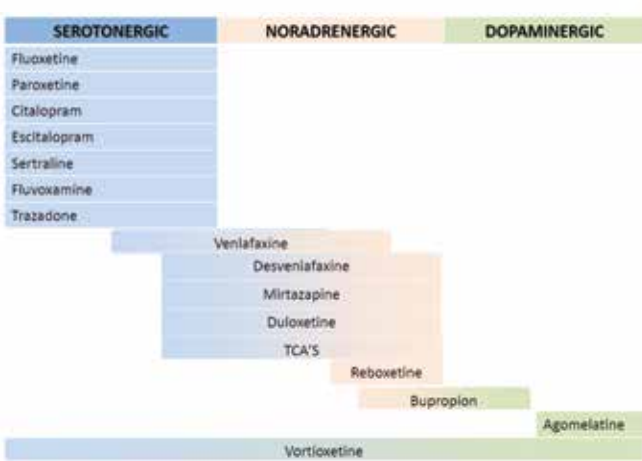


Figure 1. Mechanism of action of antidepressant medication

Antidepressants can be classified in terms of their main action on a specific neurotransmitter system and circuitry in the brain:

- The SSRIs are most widely prescribed. Most of these agents have a high affinity for serotonergic receptors and block the reuptake of serotonin. Six generic molecules are available in South Africa.

for the noradrenergic activity to be of significance. Table 4 indicates the relative ratios of noradrenaline and serotoninbinding to the noradrenergic and serotonergic transporters. Reboxetine is the only pure noradrenergic agent and does not have good antidepressant efficacy when prescribed alone. However, it may be useful in combination with an SSRI. Mirtazapine is a sedating agent and all the others in this class are activating.

- Bupropion has both an influence on dopamine and noradrenalin.
- Agomelatine is a melatonin receptor agonist and a serotonin receptor 2C antagonist with no other effect on serotonergic receptors. This has the resultant effect that it selectively increases dopamine levels in the frontal cortex through various mechanisms. Both bupropion and agomelatine are activating, but agomelatine seems to restore circadian rhythms and therefore helps with sleep.
- Vortioxetine possess serotonergic, adrenergic and dopaminergic activity.

Antidepressant	NA/5HT ratio*
Reboxetine	0.03
Amitriptyline	1.47
Imipramine	3.10
Duloxetine	8.00
Desvenlafaxine	13.95
Venlafaxine	30.24
Paroxetine	450.00
Fluoxetine	544.55
Sertraline	2380.00
Citalopram	3868.75
Escitalopram	7128.18

*Smaller values <1 indicate greater affinity for noradrenalin than for serotonin, and values >1 indicate greater affinity for serotonin. 1 = equal affinity.

Selecting an antidepressant based on genetic polymorphisms

Drug response and drug metabolism are dependent on specific genotypes. Genotyping may be useful to help differentiate poor from rapid metabolisers, especially for drugs which are dependent on the cytochrome (CYP) P450 pathways for activity or clearance. In this way, it may be possible to predict drug response and tendency to increased risk of adverse effects, and also to alert the prescriber to an increased risk of possible drug interactions with other concomitantly prescribed medication. Tests that are available include those for polymorphisms of CYP 2D6, CYP 2C19, CYP 2C9 and VKORC1, CYP

3A4, CYP 3A5 and CYP 1A2. Methylene-tetra-hydro-folate-reductase (MTHFR) genotyping may help to identify patients with mood disorders in whom poor drug response and treatment resistance may be augmented by folate supplementation. Serotonin transporter genotyping may help to identify patients who are likely to have a poor response to serotonergic medication and an increased risk of drug-related adverse effects.

Conclusion

ALTHOUGH GUIDELINES ARE OFTEN UNHELPFUL WITH SPECIFIC INSTRUCTIONS WHEN SELECTING FIRST-LINE ANTIDEPRESSANT THERAPY, A CLINICALLY GUIDED DECISION BASED ON PREDOMINANT SYMPTOMS IS A REASONABLE APPROACH TO DECISION MAKING. WHERE IT IS AVAILABLE AND FINANCIALLY FEASIBLE, GENOTYPING MAY HELP TO FURTHER GUIDE DRUG SELECTION BASED ON PREDICTED RESPONSE AND THE POTENTIAL FOR ADVERSE DRUG EFFECTS OR INTERACTION WITH OTHER CO-PRESCRIBED MEDICATIONS.

Table 5 indicates for which drugs genotyping may be useful in predicting drug action or the potential for drug interactions.

Medication	How metabolised	Induces	Inhibits	Test for drug action	Test for drug interaction
Bupropion	2B6	None	2D6		Yes
Citalopram	2C19; 3A4	None	2D6; 1A2; 2B6; 2C19		Yes
Duloxetine	1A2; 2D6	None	2D6	Yes	Yes
Escitalopram	2C19; 3A4	None	2D6		Yes
Fluoxetine	2C9; 2D6; 3A4	None	2B6; 2D6	Yes	Yes
Mirtazapine	1A2; 2D6	None	1A2; 2B6; 2C19; 3A4	Yes	
Paroxetine	2D6	None	2B6; 2D6	Yes	Yes
Sertraline	2B6; 2C19	None	2B6; 2C9; 2C19; 3A4		
Trazadone	3A4	None	2D6; 3A4		Yes
Venlafaxine	2D6; 3A4	None	2B6; 2D6; 3A4	Yes	Yes
Desvenlafaxine	3A4	None	3A4		
Agomelatine	1A2	None	1A2		
Vortioxetine	2D5; 3A4; 2C9	None	2D6	Yes	Yes

Eugene Allers is a specialist psychiatrist and Chairperson of PHI Psychiatrist Management(Pty) Ltd. References and suggested reading are available from Eugene Allers. **Correspondence: kopshop@global.co.za**



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SOUTH AFRICAN SOCIETY OF PSYCHIATRISTS (SASOP)

NORTHERN GAUTENG SUBGROUP/ LUNDBECK CME MEETING

The South African Society of Psychiatrists Northern Gauteng Subgroup held a Continuing Medical Education meeting on the 6th November 2014, sponsored by Lundbeck.

Compiled by Carla Kotze

The topics were very relevant to the psychiatrist practicing in South Africa today. Dr Masibuko introduced the two speakers, Dr van Schoor and Dr Thekiso and their respective topics were: "Concomitant use of antiretroviral and psychiatric medication" and "Meeting the challenge of depression and HIV/AIDS". The report details content from either presentation.

Carla Kotze is a specialist psychiatrist in the Geriatric Unit at Weskoppies Hospital in Pretoria, and a member of the Department of Psychiatry at the University of Pretoria.

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THE CONCOMITANT USE OF PSYCHOTROPIC AND ANTIRETROVIRAL MEDICATIONS

Robyn Anne van Schoor

Since HIV infection so commonly co-occurs with psychiatric difficulties, as psychiatrists practicing in South Africa, we have a responsibility to familiarise ourselves with antiretroviral medications and the various drug interactions. In addition the clinician should be aware of various side effect profiles of the psychotropics that may be advantageous or deleterious to the person living with HIV infection. It is important to remember that this population is extremely sensitive to the side effects of the psychotropics. This is thought to be due to direct invasion of the basal nuclei by HIV and secondary alteration in dopaminergic mechanisms causing a decreased basal nuclei reserve. It is often necessary to start with lower doses of psychotropics and titrate doses up slowly in this patient group. Using the simplest possible regimen is important in improving adherence as these patients are often using multiple other treatments at any given time.

Re-familiarising oneself with the anti-retrovirals (ARV's)

The nucleoside reverse transcriptase inhibitors (NR-

TI's) include: Tenofovir (TDF), Zidovudine (AZT), Stavudine (d4T), Lamivudine (3TC), Emtricitabine (FTC) and Abacavir (ABC). These drugs are predominantly excreted via the kidneys and drug interactions are uncommon.



Robyn Anne van Schoor

The non-nucleoside reverse transcriptase inhibitors (NNRTI's) include Efavirenz (EFV), Nevirapine (NVP) and Etravirine. These drugs are inducers of multiple cytochrome P450 enzymes and tend to decrease levels of other drugs.

The protease inhibitors (PI's) include Lopinavir/ritonavir (LPV/r), Ritonavir (RTV) and Atazanavir (ATV). In this group RTV is most commonly implicated in drug-drug interactions, causing inhibition of multiple cytochrome P450 enzymes. It tends to increase levels of other drugs. The latest South African antiretroviral treatment (ART) guidelines released in April 2013 has introduced the fixed dose combination tablet, which contains TDF, FTC and EFV, as the first line treatment. This is an initiative to try and improve adherence to ART as this consists of one tablet taken once per day.

Choosing an antidepressant safely

This is important as people with HIV infection who are depressed and who are prescribed and adherent to an antidepressant show higher adherence to antiretroviral treatment. Citalopram and Escitalopram are the drugs of choice since they are the SSRI's with the fewest drug interactions. They are well-tolerated and have a low risk to worsen insomnia (a common side effect of almost all the ARV agents). Note that EFV can increase the levels of Citalopram and it may be safer not to dose it above 20 mg. Sertraline has the second fewest number of drug interactions. It is the SSRI most associated with diarrhoea as a side effect and this may be its main disadvantage.

Mirtazapine is an antidepressant that has particularly

useful side effects. Its sedating qualities may be a wanted side effect. The agent may also be useful in patients where weight gain is desired as this may be quite substantial, 5 kg on average. Appetite stimulant and anti-nausea effects may be seen within days of initiating this drug due to its 5HT_{2C} and 5HT₃ antagonist activity. It should be noted that protease inhibitors can increase mirtazapine concentrations and EFV and NVP may decrease mirtazapine concentrations. Dosage alterations may be required. Bupropion may be a tempting antidepressant to use as it has positive effects on cognition and low risk of sexual dysfunction. Unfortunately its levels are decreased by the protease inhibitors, EFV and NVP. One study showed that levels can be decreased by up to 57% resulting in loss of efficacy.

Choosing an antipsychotic safely

This can be difficult as these patients have an increased sensitivity to develop extrapyramidal side effects (EPSE), neuroleptic malignant syndrome and tardive dyskinesia, due to the aforementioned decreased basal ganglia reserve. This should be considered when a first generation antipsychotic is chosen. On the other hand when a second generation antipsychotic is chosen one should be aware of the overlap in the risk for metabolic side effects. All combinations of antiretroviral therapy (NRTI's and PI's) put patients at risk for metabolic abnormalities including hypertriglyceridaemia, hypercholesterolaemia and insulin resistance. There is a 26% increase in risk of cardiac illness due to atherosclerosis each year of ARV usage. HIV infection itself is also associated with metabolic abnormalities e.g. hypertriglyceridaemia due to a chronic systemic inflammatory response.

The following Table summarises information regarding using antipsychotics and ART concomitantly:

Drug	Side effect profile	Drug interactions
Haloperidol	3.4 times more likely to develop EPSE than non-infected individuals	RTV can increase levels of Haloperidol Risperidone Clozapine Aripiprazole Ziprasidone Quetiapine RTV can decrease levels of Olanzapine EFV and NVP may decrease levels of: Quetiapine Aripiprazole Clozapine
Quetiapine	Lowest potential for EPSE, intermediate metabolic risk	
Risperidone	Most widely studied SGA and appears to be safe	
Olanzapine	Main concern is metabolic syndrome	
Clozapine	Main concern is metabolic syndrome Not absolutely contraindicated, reserve for treatment resistance	
Depot antipsychotics	Not absolutely contraindicated but high risk of EPSE	
Antipsychotics do not significantly inhibit or induce the P-450 enzymes and can thus be added to ART regimens without causing toxicity or ART failure		

Robyn Anne van Schoor has recently qualified as a specialist psychiatrist, receiving her MMed(Psych) degree and FCPsych(SA) qualification in 2014. She currently works as a consultant at Steve Biko Academic Hospital in Pretoria and is a member of the Department of Psychiatry at the University of Pretoria. References are available from the author:

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The use of clozapine is not routinely recommended and is reserved for treatment resistance in medically stable patients. People living with HIV have a high risk to develop bone marrow suppression due to various reasons, other than clozapine-induced agranulocytosis. These include: the direct effects of HIV infection on bone marrow, certain neoplasms, malnutrition, opportunistic infections and their treatments (e.g. Bactrim, Ganciclovir), and the myelosuppressive effects of the ARV's, especially AZT. When clozapine is indicated, the advice is to ensure the patient's immune status is optimal and to avoid initiating clozapine at the same time as other myelosuppressive agents. Close adherence to white cell count monitoring is mandatory.

Choosing a mood stabiliser safely

Valproate is considered to be the mood stabiliser of choice and is particularly useful in mania that occurs secondary to a general medical condition (including HIV). Thrombocytopenia is an important side effect in this patient population. Valproate can cause severe hepatitis and its combination with other hepatotoxic drugs should be avoided (e.g. NVP and rifampicin). Be aware that RTV may decrease the levels. Monitor liver functions and drug levels as necessary.

Lithium is commonly used in patients with primary bipolar disorder co-morbid to HIV. Its narrow therapeutic window and frequent toxicity due to changes in body water or sodium content may be problematic in this patient population. The drug should be reserved for use in patients with higher CD4 counts in the absence of renal function impairment. Lamotrigine has shown efficacy in bipolar depression and in neuropathic pain, but levels can be decreased by up to 50% by RTV. Carbamazepine should be avoided due to the interactions it has with various ARV's and

its potential to decrease levels of RTV, Indinavir, Lopinavir, Saquinavir and EFV. ART failure has been reported due to this drug interaction.

Conclusion

HIV and psychiatric disorders are highly co-morbid. Psychiatric co-morbidities potentially compromise adherence to ART and must be adequately treated. Conversely treating HIV adequately can alleviate certain psychiatric symptoms. Being aware of drug interactions in these cases is especially important as psychotropic agents are generally prescribed for periods of 6 months or more.

MEETING THE CHALLENGE OF DEPRESSION IN HIV/AIDS

Ethel Masolo Thekiso and Solomon Rataemane

Depression is one of the most common consequences of HIV/AIDS. Globally, depression in People Living with HIV (PLWH) has a 12 month prevalence of 36%. This is 2 to 3 times higher than in the general population.

Depression can occur as a direct or indirect effect of HIV/AIDS. Undiagnosed depression can lead to adverse consequences such as poor treatment adherence, self-medication with substances and consequently poorer health outcomes.

THE CHALLENGES OF DEPRESSION IN HIV/AIDS ARE MAINLY AT A DIAGNOSTIC AND MANAGEMENT LEVEL. STIGMA, CULTURE, SYMPTOM-OVERLAP AND NEUROCOGNITIVE IMPAIRMENT MAY POSE AS CHALLENGES FOR DIAGNOSING DEPRESSION IN HIV AIDS. HIV IS A HIGHLY STIGMATIZED CONDITION, LEADING TO PROBLEMS SUCH AS NON-DISCLOSURE OF ONE'S HIV STATUS AND SOCIAL ISOLATION, THUS INCREASING THE RISK OF DEPRESSION IN THIS POPULATION.

Semantic differences between the terminology of depression screening tools and the language of some cultures may limit the diagnostic power of these tools. Somatic symptoms may be more reliable indicators of depression than a patient's emotional state in some cultures. It is therefore recommended that scores from depression screening tools should be used to indicate the need for further evaluation, not as a basis for diagnosis. Despite their limitations, self-reported depression screening tools are still useful for detecting depression in the primary care setting.

Somatic symptoms, loss of or increase in appetite, excessive or decreased sleep, agitation or retardation and fatigue co occur in depression and HIV. It is therefore suggested that clinicians can reliably diagnose depression in PLWH by focusing more on affective or cognitive symptoms; e.g. depressed mood or loss of interest in pleasurable activities, guilt, worthlessness and hopelessness. Neurocognitive impairment in PLWH and major depression co-occur commonly. Pseudo-dementia and mild neurocognitive impairment may pose a diagnostic challenge. The HIV dementia scale and Montreal Cognitive Assessment (MOCA) will reliably differentiate the two.

Management

Meeting the challenge depends on successfully managing HIV and depression. This will require careful selection of antiretroviral treatment (ART) and antidepressants. A combination of biological treatment and psychotherapy is superior to biological treatment alone.



Ethel Masolo Thekiso

All antidepressants are effective but selective serotonin reuptake inhibitors (SSRI) are first line. The only absolute contra indication is St John's Wort as it may precipitate serotonin syndrome and interferes with ART.

THE ADVANTAGES OF SSRIS AS A CLASS ARE AS FOLLOWS: THE STARTING DOSE CAN BE LOWER THEREBY IMPROVING TOLERABILITY, THERE ARE FEW TO MINIMAL DRUG TO DRUG INTERACTIONS, THE DRUGS ARE COST EFFECTIVE AND READILY AVAILABLE AS WELL AS SAFE IN OVER DOSE. THERE ARE DISADVANTAGES, SPECIFICALLY WITH PAROXETINE WHICH MAY INTERACT WITH LOPINAVIR/ RITONAVIR AND INCREASES THE RISK OF SEROTONIN SYNDROME, AGITATION, INSOMNIA, SEXUAL DISTURBANCE AND GASTROINTESTINAL SYMPTOMS - WHICH MAY NOT BE WELL TOLERATED.

Tricyclic antidepressants (TCA) as a class may be used as first line, especially in co-morbid pain disorders or sleep disorder. Disadvantages however are that low doses may be insufficient for depression and higher doses increase anti cholinergic side effects, Overdose may prove lethal in patients with suicidality. Lopinavir/Ritonavir increases levels thereby increasing possible toxicity.

Serotonin norepinephrine reuptake inhibitors (SNRI) as a class are second-line options if there is a failed response to SSRIs. The disadvantages are that they are expensive and require initiation by a psychiatrist. Insomnia, sweating and agitation may not be well tolerated. Norepinephrine dopamine reuptake inhibitors (NDRI) are indicated where sexual dysfunction is a problem with SSRIs. The disadvantages are agitation; panic attacks and they are contra indicated in seizure disorders.

The NASSA class has the advantage of promoting weight gain but with disadvantages of hepatotoxicity and sedation. Sedating effects of the SARI class are considered an advantage, but they may cause priapism.

Unfortunately, most ARTs have neuropsychiatric side effects. Efavirins (EFV) is the agent most often implicated, but is not absolutely contra-indicated in patients with a history of severe mental illness. Patients should be informed of potential side effects and closely monitored for any emergence or exacerbation of symptoms.

Depressive symptoms usually start shortly (within 3 months) after starting arts and respond on withdrawal. Where possible alternative ARTs should be considered. ARTs implicated in depression include: nucleoside reverse transcriptase inhibitors (Lamuvudine, Stavudine and Tenofovir), non-nucleosid reverse transcriptase inhibitors (EFV) and the protease inhibitors (Atazanavir, Lopinavir / Ritonavir). It is important to choose ARTs with minimal drug-to-drug interactions with the antidepressants chosen.

Poor response may be managed with the following agents Dehydroepiandrosterone (DHEA), S-adenosylmethionine (SAM-e) and Testosterone. Other augmentation strategies include psychostimulants, Dextroamphetamine, Pemoline, Methylphenidate, Modafinil as well as electro convulsive therapy.

Conclusion

CLOSE COLLABORATION BETWEEN PSYCHIATRISTS, PHYSICIANS, NURSING STAFF AND ALL MEMBERS OF THE MULTI-DISCIPLINARY HEALTHCARE TEAM IS CRUCIAL. IT IS IMPORTANT TO MAKE THE DISTINCTION BETWEEN PRIMARY AND SECONDARY PSYCHIATRIC SYMPTOMS IN ORDER TO GIVE THE BEST TREATMENT.

Ethel Masolo Thekiso graduated as a medical doctor at the then University of Limpopo in 2005, and is currently a third year registrar in the Department of Psychiatry at the former University of Limpopo, now Sefako Makgatho Health Sciences University (SMU). References are available from the 1st author: **Correspondence: masolon2@gmail.com**

Solomon Rataemane is the Professor and Head of the Department of Psychiatry at the former University of Limpopo, now Sefako Makgatho Health Sciences University (SMU). He is also the current President of the African Association of Psychiatrists and Allied Professions (AAPAP).

DEPRESSIVE SYMPTOMS

A SKILLS TRANSFER

CHILD AND ADOLESCENT MENTAL HEALTH INITIATIVE: THE DELIVERY OF A PAEDIATRIC HIV SYMPOSIUM

HIV in the combination antiretroviral era (CART) has seen a dramatic reduction in the incidence of the severe forms of HIV-associated neurocognitive disorders (HAND), such as HIV encephalopathy (HIVE).

Rene Nassen and Anbrenthia Moos

However, mild to moderate neurocognitive deficits persist among perinatally HIV infected (PHIV) children and adolescents such as impairments in working memory and executive functioning. The literature has consistently demonstrated the presence of higher rates of neuropsychiatric disorders (ADHD, depression and anxiety), compared to HIV negative children and adolescents. As more PHIV children enter adolescence, poorer neurodevelopmental functioning and the onset of psychiatric disorders may negatively impact on antiretroviral (ART) medication adherence and long term outcome of HIV disease. Intervention and prevention programmes ideally should be scaled up in primary care settings, particularly in resource limited environments, where access to child and adolescent mental health services is limited.

In South Africa, resource allocation to mental health care is limited with little parity to other health programs within the primary care platform. Children and adolescents therefore fail to access mental health care equal to adult users. This impacts detrimentally on mental health outcomes, increases cost of treatment at later presentation, obstructs potential for prevention programmes and increases the adult mental health burden both with regard to morbidity and cost to treat. The South African Mental Health Policy acknowledges the childhood origins of most mental disorders and that 50% of mental disorders have their onset before the age of 14 years. Section 2.4.1 of the policy recognises the importance of mental health promotion and prevention of mental disorders particularly during childhood and adolescence. Aspects of service provision is referred to in section 2.5, particularly the importance of integrating mental health into primary health care and training initiatives for nurses, and that such integration initiatives should include services to children and adolescents.

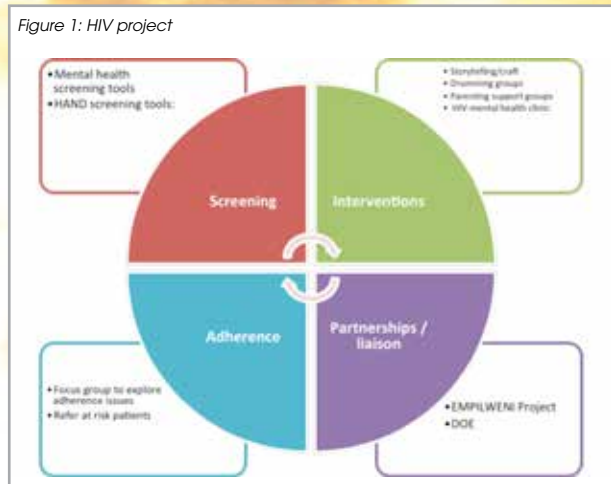
PUBLIC HEALTH FRAMEWORK/PERSPECTIVE

HIV care in South Africa has shifted from tertiary services to community based antiretroviral clinics,

as the antiretroviral roll-out expanded during the past decade. This devolution from tertiary to primary levels of care, has however resulted in large numbers of HIV positive children being cared for at primary care clinics where services are limited and essentially consist of medical care, provision of ART and counselling services. Specifically there is limited capacity to screen for mental health problems and HIV associated neurocognitive deficits which largely go undetected and untreated.

The Lentegour Child and Adolescent Mental Health Service (LGH CAMH) is a tertiary level (level 3) service located in Cape Town within the catchment area which serves the Khayelitsha community. It provides clinical services, teaching and training to undergraduate and postgraduate trainees in medical and allied health professions. The service delivered a two day paediatric HIV symposium on 13-14 November 2014, at the Colleges of Medicine of South Africa (CMSA) in Rondebosch, Cape Town. This event was part of a broader Paediatric HIV Project initiated in 2013, as part of the CAMH outreach mandate to provide support to district based services (Figure 1). The project focussed on the support and development of programmes at an ART site at the Michael Mapongwana Community Health Clinic, in Khayelitsha. This project was submitted to the sanofi Mental Health Leadership Initiative and attended by two LGH CAMH clinicians, Rene Nassen and Anbrenthia Moos. The HIV symposium also arose out of the broader LGH CAMH training initiatives, aimed at strengthening the level 3 mandate to provide outreach, support and skills transfer to district services within the catchment area i.e. during 2012, the LGH CAMH service initiated a 3 day annual training module in child and adolescent mental health. The aim was to capacitate clinicians at district and primary care services and thereby improve the detection and management of child mental health presentations. This initiative has expanded to include all CAMH services within the Western Cape (the Division of Child and Adolescent Psychiatry of the Red Cross Children's hospital, and Tygerberg hospital Child Psychiatry Service). The 4th annual training module will take place from 16-20 March 2015, will

be hosted by the western Cape CAMH platform and will be a joint collaboration with colleagues from the Sheppard's Pratt Mental Health Service in Baltimore, USA.



HIV SYMPOSIUM

The programme was devised to cover public health aspects, as well as the mental health and neurocognitive sequelae of HIV in children and adolescents (Figure 2). Training was provided to utilize mental health and neurocognitive screening tools developed by the LGH CAMH clinicians. The keynote speaker was Ms Juliet Houghton, country director of the Childrens HIV Association (CHIVA).

PAEDIATRIC HIV SYMPOSIUM
LENTEGEUR CHILD AND ADOLESCENT MENTAL HEALTH SERVICE

Time	Day 1: 13 Nov 2014	Time	Day 2: 14 Nov 2014
08:15-8:45	Registration		
08:45-9:00	Welcome Rene Rossouw	8:30-9:15	The intersection between HIV and mental health: a public health perspective Rene Rossouw
9:00-10:00	Surviving Childhood and Adolescence with HIV: Is it enough? Keynote Speaker Juliet Houghton Country Director CHIVA	9:15-10:00	Community based interventions for children affected by HIV Sarel Steyn
10:00-10:30AM	Tea	10:00-10:30	Tea
10:30-11:15	Neurodevelopmental deficits among HIV infected children Krislan Daniels	10:30-11:30	Development of a screening tool for HIV associated neurocognitive deficits Andriette Rossouw
11:15-12:00	Aspects of HIV care in primary care settings: A public health perspective Andriette Rossouw	11:30-12:15	Training/demonstration of screening tools Andriette Rossouw, Rene Rossouw
12:00-12:30	Mental health impact on adolescent ART adherence Rubina Akhbar, Nandani Ngesawa	12:15-12:30	Mental health screening in primary care settings Rene Rossouw
12:30-14:00	Lunch	12:30-14:00	Lunch
14:00-14:45	Neurocognitive aspects of paediatric HIV Heidi Lochner	14:00-14:45	The role of storytelling group as a psychosocial intervention for HIV infected children and adolescents Lizbeth Beer

Figure 2: Programme

A paediatric HIV 'kit' consisting of screening tools (mental health and 'HAND'), and the latest paediatric HIV guidelines for the detection and management of mental health and neurocognitive disorders, were provided for each attendee. The South African HIV Clinicians Society donated copies of the September edition of its journal, in which the guidelines were published.

The symposium was also a platform to showcase the work of local NPO's such as Cape Mental Health, and the art project Bodymapping, which exhibited the art work of women living with HIV. The event ended with a drumming group facilitated by the



LGH CAMH psychologist Garth Newman.

Governance aspects of the HIV symposium

The symposium was supported, funded and administered by the South African Society of psychiatrists (SASOP) and sanofi. Valuable feedback and guidance was received by project mentor Professor Tuviah Zabow, as well as attendees and facilitators of the leadership programme.

The planning for the symposium was undertaken by the CAMH team with the help of an administrative assistant, who was appointed to coordinate the planning and organisation of the symposium. This was invaluable and ensured that time allocation to the project did not impact on service provision. Feedback following the HIV symposium

The symposium was successfully delivered with positive feedback from attendees who completed evaluation forms as well as emails from a few colleagues. Attendees consisted of clinicians, health professionals, researchers and trainees from the Department of Health (DOH) and the NPO sector. There was an appeal for similar training initiatives in the future, as it is much needed. Contact has been made with the CAMH team, to request that the screening tools be incorporated in the HIV Directorate assessment packs, at paediatric HIV clinics. A Stellenbosch University affiliated NPO focused on HIV support, has requested input from



ONE OF THE EMAILS RECEIVED HIGHLIGHTED THE UNIQUENESS OF THE EVENT IN THAT THE ATTENDEE (A SUBSPECIALIST TRAINEE IN CHILD PSYCHIATRY), EXPERIENCED CLINICIANS AND RESEARCHERS FROM ALL LEVELS OF CARE, CONTRIBUTING TO DISCUSSIONS ABOUT THE TOPIC I.E...

Dear Dr Nassen

I am writing to thank and congratulate you for organizing the HIV Symposium, which ran on 13 and 14 November 2014, at the College of Medicine in Cape Town. I attended both days of the symposium, and found it to be both academically enriching and enjoyable.

I was particularly struck not only by the wide range of disciplines represented at the symposium, but also by the range of contexts and working platforms represented. It was refreshing and interesting to me to hear first hand what projects are being run in the community, and by whom, and to learn about the variety of assessments, interventions and support being implemented for children and adolescents with HIV. I think the symposium also served as an excellent networking platform in this regard.

It was great to receive the box of screening tools, rating scales and journals. I am particularly excited by the HAND screening tool, and will be watching this space regarding its further development and validation.

While I enjoyed the more academically slanted presentations too, I found the presentations on drumming, storytelling and the talk regarding the body-mapping artwork on display, particularly refreshing. I think that they managed to foster in the attendees a sense of richness of experience and a sense of unity and communitarianism.

Thank-you again and congratulations,

James Shelly
Psychiatrist and Senior Registrar



Front Row: Extreme left Rene Nassen and 3rd from left Anbrenthia Moos

Rene Nassen is a subspecialist child and adolescent psychiatrist, Head of Clinical Unit Lentegeur Hospital, Cape Town and a member of the Department of Psychiatry at the University of Stellenbosch. Related literature and further information can be obtained from Dr Nassen. **Correspondence:** rnassen@sun.ac.za Anbrenthia Moos is a Chief Occupational Therapist based at the Lentegeur Hospital and Adolescent Mental Health Service in Cape Town. **Correspondence:** anbrenthia.moos@westerncape.gov.za

CONCLUSION AND PERSONAL REFLECTIONS

The HIV symposium was an initiative conceived and delivered by a group of tertiary level CAMH clinicians, as part of an outreach mandate to district services. While there is a mandate to provide outreach and support with an acknowledgement that training forms a component of such activities, no framework exists to describe the content and scope of such training initiatives within the DOH.

Leadership training and skills are also a vital aspect of professional development for public sector employees across all levels of the healthcare system. This was made evident to the project coordinators, as they grappled with a number of significant challenges. These were related to the transfer and administration of funds and navigating the policies and regulations of the various organisations involved such as the health facility (LGH), Stellenbosch University, CMSA, SANOFI and SASOP. This may provide a unique opportunity to contribute to the creation of a DOH skills transfer and training guideline, as these initiatives increase in number.

The delivery of the HIV symposium has provided an excellent opportunity for personal and professional development. The LGH CAMH team have acquired new skills in delivering academic events of a high quality, some have initiated new research and higher degrees in the field of paediatric HIV and public health. The team are also exploring new collaborations and technologies to provide training to colleagues in hard to reach rural areas. Other achievements are that locally applicable HIV screening tools were devised (to be validated) by project leaders of the CAMH team, who were also first and co-author authors for the paediatric HIV guidelines.

Time management was excellent, as manageable tasks and deadlines were set, with an action list which was updated regularly at planning meetings. The project has also strengthened the multidisciplinary team (MDT) functioning, cohesion and motivation. The team have experienced both positive and negative feedback. For example an oversight brought to the team's attention was the policy and regulations which govern financial aspects as well as leave arrangements for 'off site' work, and consent from the employer for a clinical team to deliver training programmes. A report will be provided along with the final budget to the CEO and LGH management team.

It is the hope and belief this initiative will impact on HIV care in a tangible way, particularly to highlight the neurocognitive and mental health aspects of children and adolescents living with HIV.



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Reference: 1. Hirschfeld RMA, Bowden CL, Gitlin MJ, Keck PE, Suppes, T, Thase ME, Wagner KD, Perlis RH. Practice Guidelines for the Treatment of Patients with Bipolar Disorder, Second Edition, American Psychiatric Association 2002.

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FUNCTIONALITY AND TREATMENT OF MAJOR DEPRESSION: INTRODUCTION TO DESVENLAFAXINE

The content of the article is based on a presentation by *Rakesh Jain* at the Pfizer Mental Wellness Roadshow held at 20 West Street, Morningside, Johannesburg on the 18th November 2014.

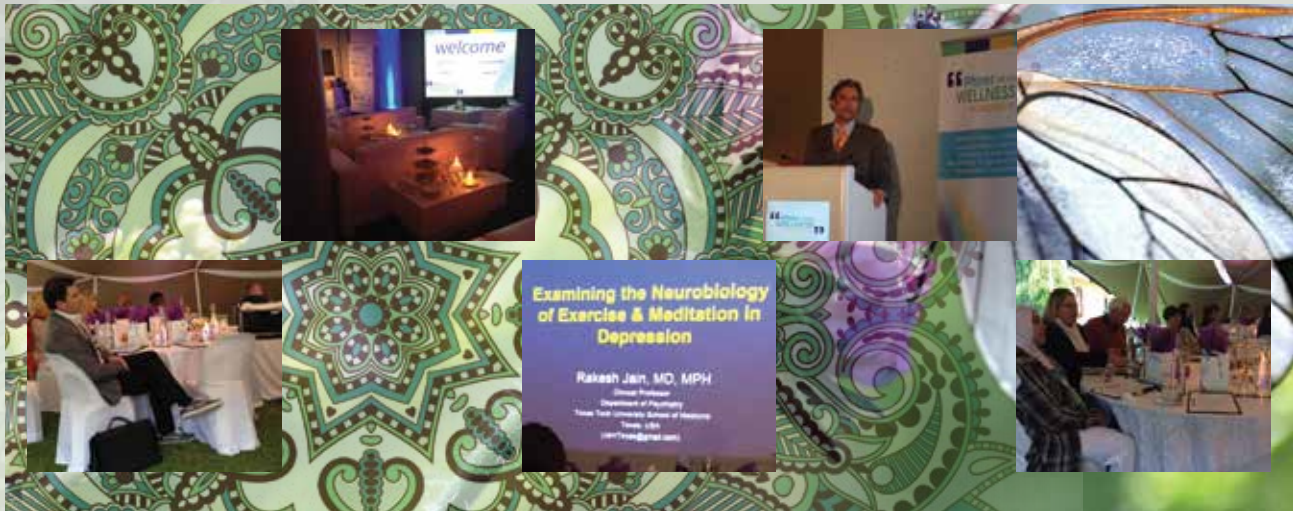
This article was written by Dr. David Webb, Medical writer, Pattacus Medical Consulting Johannesburg dawebb@mweb.co.za

The clinical consequences of major depressive disorder (MDD) go beyond alterations in mood. The average depressed patient has a biphasic illness, with the presence of depressive symptoms and the absence of wellness symptoms. This can be demonstrated by administering, not only depression rating scales, such as the Patient Health Questionnaire 9 (PHQ9) (Figure 1), but also measures of wellness, such as the World Health Organisation’s WHO-5 Wellbeing Index (Figure 2). Patients do not find these questionnaires offensive and do not mind completing them to guide management and monitor progress.

Please tick the block to show how often you have been bothered by the following problems over the last 2 weeks					
		Not at all	Several days	More than half the days	Nearly every day
1	Little interest or pleasure in doing things	0	1	2	3
2	Feeling down, depressed or hopeless	0	1	2	3
3	Trouble falling asleep, staying asleep or sleeping too much	0	1	2	3
4	Feeling tired or having little energy	0	1	2	3
5	Poor appetite or overeating	0	1	2	3
6	Feeling bad about yourself – or that you are a failure or have let yourself or your family down	0	1	2	3
7	Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8	Moving or speaking so slowly so that other people could have noticed. Or the opposite, being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9	Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3
		Columns total:			
		Add totals together:			
10	If you checked off any problems, how difficult have those problems made it for you to: Do your work, take care of things at home, or get along with other people?				
		🍏 Not difficult at all	🍏 Somewhat difficult	🍏 Very difficult	🍏 Extremely difficult

Figure 1. Patient Health Questionnaire 9 symptom checklist (PHQ-9)

Lower limits of mild, moderate, moderately severe and severe depression are scores of 5, 10, 15 and 20, respectively. Score ≥ 15 usually indicates presence of major depression. Diagnosis of depression requires ≥ 5 marked boxes in the shaded area and somewhat, very or extremely difficult marked for question 10. From Kroenke K, et al. J Gen Intern Med 2001; 16: 606-613.1 Available at: http://www.cqaimh.org/pdf/tool_phq9.pdf.



Over the last 2 weeks	All of the time	Most of the time	More than half of the time	Less than half of the time	Some of the time	At no time
I have felt cheerful and in good spirits	5	4	3	2	1	0
I have felt calm and relaxed	5	4	3	2	1	0
I have felt active and vigorous	5	4	3	2	1	0
I woke up feeling fresh and rested	5	4	3	2	1	0
My daily life has been filled with things that interest me	5	4	3	2	1	0

Figure 2. The WHO-5 Wellbeing Index.

The raw score is calculated by totalling the figures of the five answers. The raw score ranges from 0 to 25, 0 representing worst possible and 25 representing best possible quality of life. To obtain a percentage score ranging from 0 to 100, the raw score is multiplied by 4. A percentage score of 0 represents worst possible, whereas a score of 100 represents best possible quality of life. It is recommended to administer the Major Depression (ICD-10) Inventory if the raw score is below 13 or if the patient has answered 0 to 1 to any of the five items. A score below 13 indicates poor wellbeing and is an indication for testing for depression under ICD-10. In order to monitor possible changes in wellbeing, the percentage score is used. A 10% difference indicates a significant change. Available at <http://www.who-5.org>.

Even patients with low depression scores, who may be considered to be in remission, often score badly on the wellness scale. It is frequently this absence of 'wellness' qualities that induces a patient to relapse after a period of remission, despite initial improvement in measures of mood. In the STAR*D study, residual symptoms that were associated with increased probability of relapse included sleep disturbance, sad mood, changes in appetite and body weight, poor concentration, suicidal ideation, feelings of lack of involvement, low energy and fatigue, and psychomotor symptoms.² Therefore, it is important not to limit assessment to indicators of mood only. Both depressive symptoms and wider

aspects of wellness must be addressed by treatment. Priorities that patients identify when they are asked what they want from treatment for depression include the following

1. Absence of symptoms.
2. Restore functionality (physical, social, family, occupational).
3. Help with positive symptoms; to be optimistic and self-confident (most important).

Choosing an antidepressant

Guidelines recommend an array of antidepressants for consideration as first-line treatment for depression. These include selective serotonin reuptake inhibitors (SSRIs), serotonin-noradrenaline reuptake inhibitors (SNRIs), mirtazapine (noradrenalin-serotonin modulator), moclobemide (monoamine oxidase inhibitor) and bupropion (dopamine-noradrenalin reuptake inhibitor).

THESE DRUG OPTIONS, IN VARYING DEGREES, MAY INFLUENCE SEROTONIN, NORADRENALIN AND/OR DOPAMINE. THEREFORE THE ACTIONS AND EFFECTS ON THESE NEUROTRANSMITTERS NEED TO BE CONSIDERED WHEN SELECTING AN APPROPRIATE THERAPY FOR INDIVIDUALISING TREATMENT IN A DEPRESSED PATIENT.

Neurotransmitter actions	Hormone actions	Drug actions
<ul style="list-style-type: none"> • Release from cardiac sympathetic neurons increases heart rate 	<p>Stress hormone</p> <ul style="list-style-type: none"> • Effects in the amygdala (control of attention and responses) • 'Fight or flight' response (increase heart rate, release of glucose from energy stores, increased blood flow to skeletal muscle, increased oxygen supply to brain) • When released diffusely into the brain from the locus coeruleus, NA can suppress neuroinflammation 	<ul style="list-style-type: none"> • Increases vascular tone to increase blood pressure (α-adrenoreceptors) • Maintains heart rate during the stress response

Noradrenalin

Noradrenalin (NA) may act as a neurotransmitter and a hormone, and also has drug actions (table 1). The principle site of NA synthesis in the brain is the locus coeruleus (LC). NA exerts effects on large areas of the spinal cord and brain, including the striatum thalamus, some brainstem nuclei and the cerebellum, where it influences alertness, arousal and the reward system. Noradrenergic neurons originate both in the locus coeruleus and the lateral tegmental field. In addition, the axons of the neurons in the locus coeruleus act on receptors in the amygdala, cingulate gyrus, cingulum, hippocampus, hypothalamus and neocortex.

NA firing in the LC may occur in one of two patterns, tonic or phasic. Tonic is a steady-state, background firing that occurs at rest, when awake and alert. In depression, low tonic firing correlates with cognitive dullness, insomnia, hypersomnia, loss of weight or appetite and physical fatigue. Chronic stress and depression with low tonic activity and low inhibitory autoregulation allows excessive phasic NA firing. Under normal conditions, phasic firing occurs not only in response to a strong stressful stimulus, but also to significant positive emotions, such as elation or excitement. It increases vigilance, enhances sensorimotor reflex responses, increases the acoustic startle reflex, reduces immobility, and primes the 'fight or flight' response. In pathological states, phasic firing is associated with anxiety and panic disorders.

Cross-talk between serotonin, NA and dopamine-producing neurone pathways

NA, dopamine and serotonin pathways have a direct influence on the activity of each other. In the prefrontal cortex (PFC), NA and dopamine are closely related. The NA transporter has similar affinities for NA and dopamine, and dopamine is co-released with NA in the PFC. Dopamine is relatively abundant in comparison to the availability of its transporters in that area and can be taken up nonselectively by NA transporters. Therefore, selective inhibitors of NA uptake (e.g., reboxetine, atomoxetine), which have no affinity for dopamine transporters, increase NA and dopamine in the PFC, but do not increase dopamine in the nucleus accumbens.

Because serotonin inhibits neuronal release of NA,

drugs that increase serotonin activity may, at the same time, reduce the activity of NA. Changes in NA activity may produce unintended effects, because adrenergic receptors occur widely throughout the body, influencing numerous different physiological systems, including cognition and memory, cardiovascular regulation, both fat deposition (β_2 receptors) and lipolysis (β_1 and β_2 receptors), and insulin resistance. Because of the lack of specificity of NA transporters, and positive feedback signals between dopaminergic and noradrenergic neurons, increases in NA activity are also associated with an increase in dopamine activity. Consequently, increased NA activity may be associated with dopamine-related adverse effects, including agitation and excitability.

Therefore, because changing the activity of one neurotransmitter will also alter the activity of the others, drug therapy that influences any of these neurotransmitter pathways needs to be carefully considered. For example, NA activity appears to be increased in patients with major depressive disorder (MDD), but not during periods of remission. In 30% to 40% of depressed patients, treatment with an SSRI induces overregulation of NA activity, with resultant new residual symptoms that can include lassitude and low of energy; retardation of thoughts and actions; concentration difficulties and reduced alertness; loss of interest, anhedonia, emotional indifference or blunting; exacerbation of sleep difficulties; loss of appetite and nausea. Adverse drug effects are the primary reason why patients discontinue treatment.

Desvenlafaxine

Desvenlafaxine is the isolated major metabolite of venlafaxine. It is a serotonin-noradrenalin reuptake inhibitor and has been formulated as a succinate salt, extended-release, film coated tablet to increase absorption, improve tolerability, and extend pharmacological properties. In comparison to venlafaxine, it has a number of pharmacological advantages that may translate into clinical and therapeutic benefits. These include the following:

1. Optimised serotonin: NA reuptake activity

The specificity for serotonin : NA reuptake for desvenlafaxine is 10:1, compared with venlafaxine for which it is 29:30.

2. Pharmacokinetic properties

Comparative pharmacokinetics of the SNRIs is shown in Table 2. In comparison to venlafaxine, desvenlafaxine has a longer half-life. Metabolism is by conjugation rather than by oxidation, with a minor role of cytochrome P450 (CYP) 3A4. Desvenlafaxine is not metabolised by CYP 2D6. Consequently, there is a reduced risk of CYP-related drug interactions and plasma concentration of desvenlafaxine is unaffected by CYP 2D6 genetic polymorphisms (poor metabolisers vs. extensive metabolisers). Desvenlafaxine is neither a substrate nor an inhibitor of the P-glycoprotein (PGP) transport system.

Clinical studies: tolerability

Side effects are the primary reason for drug discontinuation among patients receiving treatment for depression, with up to 20% discontinuing an SSRI due to poor tolerability. Desvenlafaxine has demonstrated a favourable tolerability profile.

• Sexual function

Both MDD itself and antidepressant treatment may cause sexual dysfunction in male and female patients. In contrast, in clinical studies, desvenlafaxine was not associated with incident sexual dysfunction in MDD. In comparison with placebo, fewer female

Characteristic	Desvenlafaxine	Venlafaxine	Duloxetine
ABSORPTION			
Oral bioavailability	~80%	45%	50%
Half-life ($t_{1/2}$)	~11 hours	5 hours*	12 hours
T _{max}	~7.5 hours	5.5 hours*	6 hours
Coadministration with food	Minimal effects	Minimal effects	Minimal effects
DISTRIBUTION			
Protein binding	~30%	27%*	>90%
METABOLISM			
Main metabolic route	Glucuronidation	CYP2D6	CYP2D6, CYP1A2
CYP3A4	Minor metabolic path; minimal inhibition	Minor metabolic path; minimal inhibition	Major metabolic path; moderate inhibition
CYP2D6	3	6	>20
Metabolites	3	6	>20
PGP Transport system	Not substrate or inhibitor	Not substrate or inhibitor	Substrate; not an inhibitor
ELIMINATION	45% unchanged	5% unchanged	<1% unchanged
* Values are for venlafaxine (the parent compound)			

Table 2. Comparative pharmacokinetic profiles of SNRIs

3. Starting dose = usual maintenance dose

The starting dose and usual maintenance dose of desvenlafaxine is 50 mg once daily. A clinical response occurs from around week 2. In clinical studies higher doses were not associated with higher remission rates. However, in patients who do not initially achieve an optimal response with 50 mg, increasing the dose to 100 mg daily at week 8 can improve efficacy, whilst maintaining good tolerability. Dose adjustment is not necessary in elderly patients.

Clinical studies: efficacy for symptoms of depression

In placebo-controlled studies, approximately 60% of patients responded to desvenlafaxine 50 mg once daily, with remission rates of 36% ($P < 0.05$ vs placebo). In a long-term, open-label extension study in which patients were switched from venlafaxine to desvenlafaxine, remission rates were increased from 38% at baseline to 54% after the switch.

patients (responders and nonresponders) receiving desvenlafaxine complained of sexual dysfunction after 12 weeks of treatment (10% vs. >30%). Furthermore, among responders, more than 40% of females with sexual dysfunction at baseline reported resolution of sexual symptoms after 12 weeks treatment. In male patients, the incidence of sexual dysfunction was comparable to placebo. However, approximately 50% of men with sexual dysfunction at baseline reported resolution of these symptoms after 12 weeks of treatment with desvenlafaxine.

• Changes in body weight

Desvenlafaxine is not associated with drug-related weight gain and, in short-term studies, was associated with modest weight loss (<1 kg). However, over the long term, MDD itself may be associated with weight gain. In a 6-month study, patients treated with placebo or desvenlafaxine gained weight, but weight gain in the desvenlafaxine group was less than in the placebo group (approximately 1.2 vs. 1.5 kg).



Table 3. Q-LES-Q domains showing significant improvements with desvenlafaxine vs. placebo (p<0.04)

<ul style="list-style-type: none"> • Mood • Social relationships • Family relationships • Leisure activities • Daily function 	<ul style="list-style-type: none"> • Economic status • Physical mobility • Vision for work/hobbies • Overall well-being • Overall satisfaction
<p><i>Endicott J, et al. J affect Disorder 2014; 166: 307-314.*</i></p>	

• **Functionality, wellness and quality of life**

In addition to antidepressant efficacy, over a treatment period of 8 weeks, desvenlafaxine 50 mg was associated with a significant improvement in WHO-5 scores.

In another study, quality of life (QOL) before and after 12 weeks of treatment was assessed among employed outpatients with MDD using the Short Form of the Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q).³ In comparison to placebo, there were statistically significant improvements from baseline with desvenlafaxine in 10 of 16 Q-LES-Q domains (Table 3). Furthermore, the percentage of patients with severe QOL impairment (≥ 2 standard deviations below community norm) at week 12 was significantly lower for desvenlafaxine (46%) than with placebo (62%; $P=0.0024$; baseline: 95% and 94%, respectively). Change in Q-LES-Q total score was highly correlated with change in Hamilton depression (HAM-D17) score at week 12, and improvement in HAM-D17 total score at week 2 predicted change in Q-LES-Q total score at week 12 for the desvenlafaxine group, but not for the placebo group. Productivity and presenteeism at work were also improved by deslafaxine.⁴

• **Withdrawal**

In comparison to tapering the dose, desvenlafaxine was not associated with a greater incidence of withdrawal symptoms when abruptly discontinued after 24 weeks of treatment. Although, the effect of longer treatment periods is unknown, withdrawal symptoms with desvenlafaxine are not expected to be worse than those observed with venlafaxine or duloxetine.

Conclusion

Desvenlafaxine is a novel SNRI antidepressant with a more favourable pharmacokinetic profile than

venlafaxine. Clinical studies have demonstrated that, in patients with MDD, it is associated with a high rate of remission and improved measures of wellness and quality of life. It does not cause sexual dysfunction or weight gain and is unlikely to be associated with significant withdrawal effects on discontinuation.

Summary

- Alterations of monoamine (noradrenaline, serotonin and dopamine) activity may occur in patients with depression.
- The three monoamine systems in the central nervous system influence the activity of each other.
- Drug therapy that selectively alters the activity of one of the monoamines will influence the activity of another, with potential for unwanted side effects.
- Management of depression needs to address not only symptoms of low mood, but also other associated symptoms of 'wellness', including changes in weight and appetite, sleep disturbance, psychomotor symptoms, fatigue, absence of self-worth and positivity, executive dysfunction and suicidal ideation.
- Desvenlafaxine has a favourable pharmacokinetic profile in comparison with venlafaxine. It has a ratio of serotonin : noradrenaline activity of 10:1 and is metabolised primarily by conjugation rather than oxidation. Because CYP 3A4 plays a minor role in metabolism and CYP2D6 is not involved, there is a reduced potential for unpredictable plasma concentrations and interactions with other drugs.
- Desvenlafaxine has proven efficacy in the treatment of major depressive disorder, with a high rate of remission and improved measures of wellness and quality of life.
- Desvenlafaxine is well tolerated. Notably, it is not associated with drug-related sexual dysfunction or weight gain.

Rakesh Jain is a Clinical Professor in the Department of Psychiatry, Texas Tech School of Medicine, Texas, USA. References and suggested reading are available from the Rakesh Jain. **Correspondence: jaintexas@gmail.com**




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5TH ANNUAL MALAWI MENTAL HEALTH RESEARCH AND PRACTICE DEVELOPMENT CONFERENCE

DATE:

23rd – 25th March, 2015

VENUE:

The Mount Soche Sunbird Hotel,
Blantyre

ORGANISED BY:

Dept. of Mental Health,
College of Medicine,
University of Malawi
Scotland-Malawi Mental Health
Education Project (SMMHEP)

FUNDED BY:

Scottish Government Malawi
Development Fund grant

CALL FOR ABSTRACTS

ABSTRACT SUBMISSIONS:

Dear colleague,

The Department of Mental Health, College of Medicine, University of Malawi and Scotland-Malawi Mental Health Education Project are pleased to announce that the 5th Annual Malawi Mental Health Research and Practice Development Conference will take place on 23rd to 25th March, 2015 at Mount Soche Sunbird Hotel, Blantyre.

The purpose of the conference is to provide a forum for the dissemination and sharing of research and practice developments in mental health in Malawi and neighbouring countries. It is a multidisciplinary conference for all cadres working in mental health care (e.g. nurses, clinical officers, psychologists, psychiatrists, occupational therapists and others).

Again, we hope that the conference will encourage research and practice evaluation and will provide an opportunity for mental health practitioners to develop presentation skills.

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A number of international collaborators will be attending the conference to share their expertise and help develop further research activities. The broad overall theme of this year's conference is Strengthening Mental Health Systems: Research and Policy Development.

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2. Audit project.
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4. A situational analysis of a current issue in mental health care with suggestions for research or service development.

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Abstracts should be 250-300 words in length. Below is a suggested format for research abstracts. The format of abstracts for other types of project is at the discretion of the submitting author.

Title

Authors and affiliations

Background

Objective(s)

Method

Results

Conclusion

Please complete the attached registration form (Form can also be downloaded at http://www.medcol.mw/mental-healthmalawi/?page_id=113), and send it with the abstract of your proposed presentation by email to the conference administrator, Mr Demoubly Kokota c/o Dept of Mental Health, College of Medicine: dkokota@gmail.com or dkokota@hotmail.com. If you have any questions please feel free to get in touch on the same email address or by calling +265991227810

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THE TARA

PHOTOGRAPH ALBUM:

Visualising A Therapeutic Community

Rory du Plessis, Department of Visual Arts, University of Pretoria

ABSTRACT

A wealth of photographic material from Tara, the H Moross Centre, exists at the Adler Museum of Medicine. For the purposes of this article, only one photographic item will be investigated, namely the Tara photograph album (the album). Such an investigation is faced with a number of difficulties as the album is undated and lacks any accompanying text (no captions, titles, or preface). Although the album lacks the relevant texts and archived documents to assist in decoding the photographs, I argue that the institutional ethos of Tara during the superintendency of Dr H Moross (1947 – c. 1969) provides a contextual framework within which one can examine the photographs critically. Accordingly, this article seeks to explore Tara's institutional ethos in order to provide a historically informed understanding of the production and encoding of the album's photographs.

INTRODUCTION

"Psychiatry and photography were born with a few decades separating them. Their encounter produced the use of photography for classificatory and teaching purposes in order to identify, study and classify mental illness".¹ Such a statement highlights the dominant concern of visual culture scholarship that seeks to interrogate the clinical and classificatory genre of photography within psychiatry. Recently, however, there has been an acknowledgement that multiple other genres also stem from the nexus between photography and psychiatry. One such genre includes the promotional photographs that psychiatric institutions display or present to the public. The production and dissemination of these images can, for the most part, be linked to the image-making of the institution – the creation of a favourable view of itself.²⁻⁵ The archives of Tara, the H Moross Centre, at the Adler Museum of Medicine provide a valuable resource in exploring the genre of promotional photographs. The folders of the archive

are brimming with photographs from newspaper clippings, brochures and a photograph album (the album). For the purposes of this article, I am interested in providing a critical exploration of the album. Yet such an investigation is faced with a number of difficulties as the album is undated and lacks any accompanying text (no captions, titles, or preface). Moreover, I have thus far not been able to locate any documents that make specific mention of the album. One can estimate that the photographs were taken in the late 1940s and early 1950s based on the styles of clothing depicted.

The album is a regal hard-cover book in landscape format with twelve A4 black-and-white photographs pasted on separate sheets of paper with the name of 'Wittels Studio' signed at the bottom right corner of each photograph. Although the album lacks any captions and text to assist in decoding the photographs, I argue that the institutional ethos of Tara during the abovementioned time-period provides a context in which one can critically examine the photographs. Said differently, a contextual reading of the photographs is possible by understanding Tara's therapeutic tenets, principles and aims. Accordingly, the article seeks to explore Tara's institutional ethos to provide a historically informed understanding of the production and encoding of the album's photographs.

Tara was established as a provincial hospital of the former Transvaal province in 1946. The hospital in Hurlingham, Johannesburg, catered for the care and treatment of non-certifiable psychiatric problems, in other words, the minor and recoverable cases of mental illness.⁶⁻⁸ The scholarship on Tara has in the most part enumerated the seminal role and pioneering contributions of Dr Hyman Moross (1904 – 1979), the hospital's first Medical Superintendent.⁹ This article seeks to contribute to the existing scholarship by identifying and exploring the institutional ethos and image-making relating to the hospital.

Under the superintendency of Moross (1947 – c 1969), a core institutional ethos of Tara was the provision of and practice within a therapeutic community.¹⁰⁻¹² For Moross, the therapeutic community comprised a synthesis of a number of current concepts in psychiatry that focused on maintaining a therapeutic milieu and harmonious hospital environment while offering a range of occupational therapy and associated activities for the active participation of patients.¹³ The approach and regimen of the therapeutic community was believed to be ideally suited for the treatment of patients who were battling the perplexities of life and having problems relating to other people:

THE MILIEU WHICH HE ENTERS ON ADMITTANCE TO HOSPITAL MUST PROVIDE SUCH NEW LIVING EXPERIENCES AND NEW PERSONAL RELATIONSHIPS AS TO PROVOKE LESS ANXIETY THAN BEFORE, AFFORD MAXIMAL SUPPORT AND GRADUALLY ENABLE THE PATIENT TO DEVELOP SOCIAL RELATIONSHIPS AND TO LIVE MORE EFFECTIVELY WITH OTHERS.¹⁴

Tara was equipped with a range of medical technologies and machines that catered for the hospital's various sections – medical, surgical and neurosurgical. Yet, there is not one photograph that depicts either the machines or the aforementioned hospital sections. Instead, the photographs are of the picturesque grounds of the hospital, individuals playing sports (tennis, golf and bowls), patients relaxing to the rhythmic beat of a drum, a weaving workshop, and the impressive collection of books in the library. These photographs suggest that the album was not aiming to record all the facilities and facets of care and treatment at the hospital. Instead, it compellingly presented a hospital environment that promoted the ideals of a therapeutic community. Thus, I argue that the interpretation of the photographs requires a conceptual framework that sheds light on the therapeutic community. Consequently, the investigation consists of an interlinking twofold objective, namely: (1) to research the concept of the therapeutic community through historical and critical texts; and (2) to explore how the photographs require for their interpretation a conceptual framework of the therapeutic community.

Figures 1-3 are evocative of a leisure resort in the array of sporting amenities and activities depicted. All the images show patients playing sport. Figure 1 includes umbrellas and spectators, which contribute to establishing a vividly ebullient scene. While the photographs portray various outdoor sporting activities, these very activities operated as a mode of treatment at the hospital.¹⁵ A main concern within

the concept of the therapeutic community was developing the use of recreation as a therapeutic tool in hospital practice.¹⁶ Thus, what follows is an exploration that illuminates the diverse therapeutic imbue ment of sporting activities. On a very direct level, sport was one form of physical education that aimed to improve the bodily status of the individual.¹⁷ Furthermore, it was also believed to restore "rhythm, co-ordination, appetite and weight; it helps to induce a sense of well-being and inspires psychological accessibility".¹⁸ Sport was also constructed as a recreational pursuit for the therapeutic purpose of relaxation. Moreover, sporting activities, whether conceived as recreation engagement or physical education, were valuable for being participatory



Figure 1



Figure 2



Figure 3

and social.¹⁹ To this end, it was argued that on a therapeutic level the patients benefited from group engagement.²⁰ Such an argument was based on Moross's commitment to group psychotherapy that called for bringing individuals together into direct and meaningful interaction. In doing so, this form of therapy offered

OPPORTUNITIES FOR SOCIAL PARTICIPATION AND FOR INCREASING SOCIAL CAPACITY, AT A RATE COMMENSURATE WITH THE PATIENT'S ABILITIES. THE GROUP SITUATION MAKES IT POSSIBLE FOR THE MEMBERS TO ENJOY EQUAL RESPONSIBILITY, FREEDOM OF THOUGHT AND UNINHIBITED SELFEXPRESSION.²¹



The photographs are remarkable in this regard in that they display groups of individuals interacting with one another and socialising. The demeanour and behaviour of the individuals are markedly friendly and team spirit.

In figure 4, a healthcare worker in a white coat is seated in close proximity to the beds of the patients while she rhythmically beats a drum. Her eyes appear closed as if she is somewhat absorbed in a pleasurable state induced by the cadence of the drum. The pose of the healthcare worker is juxtaposed with the individuals lying on the bed. Whereas the healthcare worker looks naturally and unpretentiously relaxed, the individuals appear to be adopting poses mandated as part of a treatment programme. The individuals are all lying on their backs with their arms to the side while a pillow lies beneath their knees. Such a pose anchors the interpretation of the photograph as a treatment session conducted for therapeutic benefits. The sessions on relaxation techniques were a core principle of the therapeutic community.

Tara placed special emphasis on relaxation techniques and treatment. This took the form of

special classes in which the patients were taught how to consciously relax.²²⁻²³ The classes were valuable in improving sleep patterns while also contributing to minimising tension in human relationships and fostering stress-free interpersonal contact.²⁴⁻²⁶ A connected outcome of relaxation treatments was that the patient learnt to "appreciate the value of relaxation in action. He learns, for example, that he need not drive a motor car with a vice-like grip of the steering wheel, urging the car along with braced arm and leg muscles, but comes instead to appreciate how much more competent he can be when he is comfortable and relaxed".²⁷ One notable relaxation technique was the use of music that was deemed to be beneficial "to the extent that it may engender satisfying release from tension, and the pleasurable emotions stimulated by it may aid distressing sensations".²⁸

Depicted in figure 4 is a poster on a wall that reads "If you are relaxed you are not afraid; if you are afraid you are not relaxed". While music may be soothing and aid the patient in consciously relaxing, the outcome of the relaxation treatment programme is equally focused on teaching the patients the difference between tension and relaxation.²⁹ In this regard, the poster acts as a maxim that calls for the patients to consciously assess their stress and anxiety levels in their daily living and to manage them through the relaxation techniques taught at the hospital.

For Moross, a risk of hospital institutionalisation was that patients could develop an unhealthy dependence on the hospital to protect them against the pressures of normal life.³⁰⁻³² As a therapeutic community, Tara instead aimed to encourage the recovery and successful return of patients to the community. This was fostered by the hospital promoting social participation and relaxation techniques that aided the full integration of the individual into life outside the hospital. Active participation in occupational therapy was an additional means of supporting the patient to keep "in touch with the reality of daily living external to the hospital, and ... counteract Figure 4 isolation".³³ Figure 5 depicts a workshop for occupational therapy in which a number of women are engaged in weaving. Occupational therapy was thought to offer diverse therapeutic outcomes. It offered patients respite from tensions, anxiety, grief and morbid or melancholic thoughts by offering them opportunities for meaningful engagement and active socialisation.³⁴ This respite was contingent upon the hospital offering a wide range of activities to appeal to the various preferences of individuals.³⁵ Additionally, the choice of the activity was "discussed

Tara, namely the setting of the workshop and the presence of the nurse / therapist in the background. By being in the workshops, the patients were removed from their wards and entered a work atmosphere.³⁷ This was an intentional mechanism designed for the hospital to help the patients to reenter the work environment of the outside world. The Tara workshops therefore served as a stepping stone in the rehabilitation of the patient. A friendly workshop atmosphere was offered where "the patient is often helped to overcome his inability to mix with others, to make social contacts, and to take part in communal activities".³⁸ Central to enabling and encouraging the development of social contacts and co-operation between the patients is the role of the nurse / therapist.³⁹ The nurse / therapist acts not only to guide the patients but to promote confidence in their abilities and skills. "As confidence expands, anxiety, frustration and stress may become more endurable; the patient may be motivated to recover and move toward regulating his behaviour by personal initiative, judging for himself what needs to be done, making plans for doing it and executing such plans".⁴⁰ Thus, occupational therapy helped to prevent boredom and depression while also assisted in restoring self-confidence and the engendering of responsibility.



Figure 5

Figures 6 and 7 are visually striking in their photographic composition. What is most distinctive is the way in which the images represent the trope of the picturesque – how the landscape's arrangements are cultivated to resemble a painting. Figure 6 depicts an idyllic scene of a bridge over a tranquil and serene body of water. The photograph is framed on the right by a magnificent tree crowned by a thicket of leaves. The foreground reveals an open and inviting section of lawn that is well-shaded. The focal point of Figure 7 is a tree that is dignified and gracious in its outstretching towards the sky.

The shallow water of the pond appears marblelike in its reflection of the clouds and sky.



Figure 6

In the photographs, the landscape and scenery are the focal points. In one way, the focus can be accorded to the central role that the landscape and grounds played in treatment options within the therapeutic community. Extensive hospital grounds and gardens were fundamental for the outdoor recreation amenities offered at Tara.⁴¹ During leisure time, the gardens may have been a sought after space for rest and relaxation, for meditation, light meandering, bird-watching or a plethora of other activities that suited individual tastes.⁴²

Of interest, though, is that Tara's representation of its grounds and landscape has parallels with nineteenth century asylums across South Africa and the West, when asylums sought a country location with ample grounds and an unobstructed view of a surrounding landscape that was both tranquil and picturesque. Furthermore, substantial portions of the asylum site were cultivated as gardens and farms for the purpose of providing occupational therapy and exercise for patients – an intrinsic component of the therapeutic regimen practised at the asylum. Thus, the landscape design was not intended for appearances only, but had an explicit role in the treatment of patients. Stated differently, the location, grounds and design of asylums were intrinsic components of the therapeutic regimen offered at the institution.⁴³ The landscape tropes of nineteenth century asylums became adjuncts to mental health treatment in the twentieth century under the concept of milieu therapy. At Tara, milieu therapy was woven into every facet of the hospital system.⁴⁴⁻⁴⁵ Tara's appreciation of milieu therapy further serves to underpin and underscore the image of the hospital as being dedicated to providing an appropriate setting in which patients could regain their serenity.

A notable feature of the album is that there is not a single depiction of a psychiatrist. Instead, there are extensive representations of nurses and other members of the therapeutic team. This intriguing focus on members of the therapeutic team other than psychiatrists can be succinctly enumerated in terms of the therapeutic community. In such a treatment approach, it was extolled that "any staff member with whom the patient has contact is a potential psychotherapeutically active agent".⁴⁶ Thus it was not only the psychiatrist/patient relationship that mattered, but the patient's contact and communication with all members of staff that held therapeutic value.



Figure 7

IN FIGURES 4 AND 5, THE HOSPITAL'S STAFF MEMBERS ARE DEPICTED NEITHER AS WARDENS NOR SUPERVISORS. INSTEAD, THEY ARE SHOWN TO BE INTIMATELY ENGAGED WITH THE PATIENTS. THEY SERVE TO CONSTRUCTIVELY SUPPORT AND GUIDE THE PATIENTS IN THE WORKSHOP, WHILE IN THE RELAXATION SESSIONS THEY SOOTH AND COMFORT THE PATIENTS.

In the absence of any captions or text in the album, the interpretation of the photographs can for the most part be described as a hermeneutical or interpretive reading. A fundamental feature of hermeneutics is that it acknowledges that there will always be the prospect of generating alternative interpretations that may offer more convincing or even divergent interpretations. Thus, while this article considers the therapeutic community as a construct critical to the interpretation of the photographs, there are other ideological constructs evident in the photographs which offer further research topics. An

absence in this article has been a critical analysis of the representations of race, class and gender in the photographs. Future investigations may indicate how the dominant socio-cultural understandings of race, class and gender are embedded in the images. Such an undertaking will provide much warranted additional avenues of research.

Although the discussion of image-making has been limited to the Tara album, it may serve to enrich further explorations into other forms of promotional photography disseminated by Tara. A precursory examination of the archived promotional photographs shows a continuity in the themes, motifs and tropes established in the album. Thus, future research efforts may take the form of trying to evaluate and understand more extensively the resonance of the visual repertoire established in the album and its influence on various other promotional photographs. Additionally, future studies may move towards exploring the image-making of the hospital in various other media forms. Tara ran a number of mental health campaigns which included radio programmes, open-days and a film produced by the hospital to enlighten the public on the aims and work of Tara. It is certain that the examination of each medium will reveal new approaches and features that will aid in establishing the full scope and scale of the hospital's image-making.

FOR THE PRESENT, WHAT CAN BE STATED IS THAT THE IMAGEMAKING PROVIDED AN IMPORTANT TOOL TO COUNTER THE FEAR AND STIGMA OF MENTAL ILLNESS AND THE PUBLIC'S LACK OF CONFIDENCE IN MENTAL HOSPITALS.⁴⁷⁻⁴⁹ THE IMAGE-MAKING HELPED" IN THE DEVELOPMENT OF A MORE ACCEPTABLE IMAGE OF THE PSYCHIATRIC HOSPITAL WHICH MAY HAVE BEEN PRECONCEIVED AS A DREADFUL PLACE ACCOMMODATING BIZARRE 'MANIACS' AND STAFFED BY STRONG-ARMED PERSECUTORS".⁵⁰

ACKNOWLEDGEMENTS

I wish to thank Rochelle Keene for introducing me to the Tara photograph album and providing invaluable help and support with my research. The photographs are reproduced with permission from the Adler Museum of Medicine.

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References available from *Rory du Plessis* RoryDuPlessis@up.ac.za

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MESSAGE

FROM THE PRESIDENT

Wednesday 21 January 2015



2015 will be the year in which we change the nomenclature of the drugs used to treat psychiatric disorders. Or rather, we adopt an approach that is driven by science rather than inertia or marketing. This will be the result of the major project undertaken by ECNP in collaboration with ACNP, CINP, AsCNP and IUPHAR to reform the old and unhelpful nomenclature. It has been driven tirelessly by Yossi Zohar. When the project started, enthusiasm was largely confined to a relatively small coalition of the willing. As it has developed the point of it has grown more and more obvious to more and more people. The founding version of the Neuroscience-based Nomenclature – NbN – was launched at the ECNP congress in Berlin as a booklet and app.

THE GUIDING PRINCIPLE CAN BE EASILY STATED. MEDICINES ARE USED TO TREAT PATIENTS BECAUSE THEY HAVE A PARTICULAR PHARMACOLOGY AND A PARTICULAR INDICATION FOR INDIVIDUAL DIAGNOSES. IF THERE IS MORE THAN ONE MEDICINE FOR A PARTICULAR INDICATION WE NEED TO BE ABLE TO USE A CLASSIFIER. THE CLASSIFICATION CAN EMPHASISE EITHER PROPERTY, MODE OF ACTION OR INDICATION.

Pharmacological investigation of mode of action has had a special place in psychiatry, because effective medicines were discovered before their pharmacology was understood. The investigation

of mode of action was and arguably remains a cutting-edge theme in neuroscience. It provided and provides one of the few starting points for mechanistic understanding of psychiatric disorders. By contrast, diagnosis (the indication) remains arbitrary.



So pharmacology provides *Guy Goodwin*

the right space in which to describe, summarise and classify psychotropic medicines. Obviously some sub-classes of drugs are already described in this way. We have selective monoamine oxidase inhibitors and serotonin reuptake inhibitors (SSRIs), for example, although the latter usage was largely driven by marketing pressures in the 'Prozac' era. Unfortunately, we have not clearly preferred pharmacological classification over the alternatives. We have even lacked any kind of systematic approach to describing the pharmacological properties of our medicines. SNRIs are not selective noradrenaline reuptake inhibitors, for example. The NbN now proposes a reformed approach to classification based entirely on pharmacological mode of action. It is a work in progress. Thus, some of the terms we have proposed may sound infelicitous to some ears, but they are not written in stone. Moreover, consider the currently established alternatives.

First, the example of existing terminology that refers to chemistry (tricyclics, tetracyclics, phenothiazines, butyrophenones, benzamides, benzodiazepines). This has the virtue of neutrality but the vice for most of us of conveying no useful information whatsoever. Second, and predominantly, we have an overlapping primary classification by indication: antidepressants,

antipsychotics, mood stabilisers, anxiolytics, analgesics and, ambiguously, stimulants. This has been nicely modulated by companies adding soothing adjectives like atypical, conventional, second generation, novel, etc. It leads to a range of problems. Thus, the primary indications of most psychiatric drugs are not unique. In the case of the antidepressants, many are effective anti-anxiety or anti-pain treatments. In the case of a number of antipsychotics, they are effective in resistant depression, quite independent of any anti-psychotic action. A number of 'mood stabilisers' are also anticonvulsants. Further, the addition of qualifying adjectives has been almost entirely designed to persuade, Madison Avenue-style. Who would want an old iPhone if the next generation phone were on offer? But the analogy suggested by 'second generation' antipsychotic drugs is entirely specious. I could go on.

It is undeniably a mess. Does this matter? It has been tolerated for a long time without serious efforts to change. Our desire to make changes now should be fuelled by embarrassment. However, there are more serious reasons to change too. We often do not know what we think until we speak. Defining our treatments by diagnoses of limited validity limits our capacity to think. An emphasis on mechanism should stimulate clinicians to think what they are doing when they prescribe for patients. It will be a continuing stimulus to stay on top of the science that underpins our understanding. Moreover, a multi-axial system for describing medicines as we propose can grow flexibly: it can accommodate mechanistic understanding at any number of levels from molecules, to systems, to cognition. There is also the potential to harness the shift in emphasis from operational diagnosis to dimensional neurobiology (enshrined in the RDoC project).

Medicine is entering a new era in which it is being transformed by the explosion of access to knowledge and soon by the internet of things. We have deliberately invested in developing an app to be available from the beginning of the project (download now on Google Play or Apple Store), which will provide the prescribing information we think doctors and patients need. The app format allows medicines to be searched under the old categories and the new ones. It will allow translation into many languages. It will soon be linked to another specialist database (IUPHAR's). It can expand or extend through linking almost without limit. ECNP is committed to overseeing its development for public benefit. I think it's a game changer.

So, with spirits lifted despite recent world events, I wish you my very best wishes for 2015.



Guy Goodwin
ECNP President





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