



CELEBRATES SCIENCE



MARCH 2017

TOP 5 ARTICLES

Director: Prof Rachel Jewkes



Article:

van der Heijden I, Abrahams N, Sinclair D. Psychosocial group interventions to improve psychological well-being in adults living with HIV. Cochrane Database of Systematic Reviews. 2017 Mar 14; 3: CD010806. [Review]

DOI: 10.1002/14651858.CD010806.pub2

Impact Factor: 6.103

Summary:

Background: Being diagnosed with Human Immunodeficiency Virus (HIV), and labelled with a chronic, life-threatening, and often stigmatizing disease, can impact on a person's well-being. Psychosocial group interventions aim to improve life-functioning and coping as individuals adjust to the diagnosis.

Objectives: To examine the effectiveness of psychosocial group interventions for improving the psychological well-being of adults living with HIV/AIDS.

Search Methods: We searched the following electronic databases up to 14 March 2016: the Cochrane Central Register of Controlled Trials (CENTRAL) published in the Cochrane Library (Issue 2, 2016), PubMed (MEDLINE) (1996 to 14 March 2016), Embase (1996 to 14 March 2016), and ClinicalTrials.gov.

Selection Criteria: Randomized controlled trials (RCTs) or quasi-RCTs that compared psychosocial group interventions with versus control (standard care or brief educational interventions), with at least three months follow-up post-intervention. We included trials that reported measures of depression, anxiety, stress, or coping using standardized scales.

Data Collection and Analysis: Two review authors independently screened abstracts, applied the inclusion criteria, and extracted data. We compared continuous outcomes using mean differences (MD) with 95% confidence intervals (95% CIs), and pooled data using a random-effects model. When the included trials used different measurement scales, we pooled data using standardized mean difference (SMD) values. We reported trials that we could not include in the meta-analysis narratively in the text. We assessed the certainty of the evidence using the GRADE approach.

Main Results: We included 16 trials (19 articles) that enrolled 2520 adults living with HIV. All the interventions were multifaceted and included a mix of psychotherapy, relaxation, group support, and education. The included trials were conducted in the USA (12 trials), Canada (one trial), Switzerland (one trial), Uganda (one trial), and South Africa (one trial), and published between 1996 and 2016. Ten trials recruited men and women, four trials recruited homosexual men, and two trials recruited women only. Interventions were conducted with groups of four to

15 people, for 90 to 135 minutes, every week for up to 12 weeks. All interventions were conducted face-to-face except two, which were delivered by telephone. All were delivered by graduate or postgraduate trained health, psychology, or social care professionals except one that used a lay community health worker and two that used trained mindfulness practitioners. Group-based psychosocial interventions based on cognitive behavioural therapy (CBT) may have a small effect on measures of depression, and this effect may last for up to 15 months after participation in the group sessions (SMD -0.26, 95% CI -0.42 to -0.10; 1139 participants, 10 trials, low certainty evidence). Most trials used the Beck Depression Inventory (BDI), which has a maximum score of 63, and the mean score in the intervention groups was around 1.4 points lower at the end of follow-up. This small benefit was consistent across five trials where participants had a mean depression score in the normal range at baseline, but trials where the mean score was in the depression range at baseline effects were less consistent. Fewer trials reported measures of anxiety, where there may be little or no effect (four trials, 471 participants, low certainty evidence), stress, where there may be little or no effect (five trials, 507 participants, low certainty evidence), and coping (five trials, 697 participants, low certainty evidence). Group-based interventions based on mindfulness have not demonstrated effects on measures of depression (SMD -0.23, 95% CI -0.49 to 0.03; 233 participants, 2 trials, very low certainty evidence), anxiety (SMD -0.16, 95% CI -0.47 to 0.15; 62 participants, 2 trials, very low certainty evidence), or stress (MD -2.02, 95% CI -4.23 to 0.19; 137 participants, 2 trials, very low certainty evidence). No mindfulness based interventions included in the studies had any valid measurements of coping.

Authors' Conclusions: Group-based psychosocial interventions may have a small effect on measures of depression, but the clinical importance of this is unclear. More high-quality evidence is needed to assess whether group psychosocial intervention improve psychological well-being in HIV positive adults.

Director: Prof Dan Stein



Article:

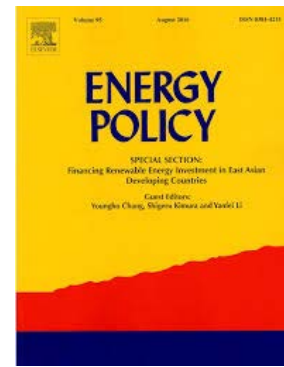
Stein DJ, Ahokas A, Jarema M, Avedisova AS, Vavrusova L, Chaban O, Gruget C, Olivier V, Picarel-Blanchot F, de Bodinat C. Efficacy and safety of agomelatine (10 or 25 mg/day) in non-depressed out-patients with generalized anxiety disorder: A 12-week, double-blind, placebo-controlled study. *European Neuropsychopharmacology*. 2017 Mar 12. [Original]
DOI: 10.1016/j.euroneuro.2017.02.007

Impact Factor: 4.409

Summary:

Agomelatine is efficacious in reducing symptoms and preventing relapse in placebo-controlled trials in generalised anxiety disorder (GAD). Nevertheless, fixed dose studies of agomelatine in GAD have not been undertaken. To determine the minimally effective optimal dose of agomelatine in GAD, the efficacy of two doses of agomelatine (10 and 25mg/day) was investigated in a 12-week, placebo-controlled, double-blind, international study in patients with a primary diagnosis of GAD. The primary outcome measure was the Hamilton Anxiety scale (HAM-A). The study was undertaken in 35 clinical centers in Finland, Russia, Poland, Slovakia and Ukraine from August 2013 to January 2015. 131 out-patients were included in the agomelatine 10mg group, 139 in the agomelatine 25mg group, and 142 in the placebo group. Both doses of agomelatine were associated with significant decreases in the HAM-A at week 12 (difference versus placebo of 7.16 ± 1.00 at 10mg and 11.08 ± 0.98 at 25mg, $p < 0.0001$). Significant effects on all secondary measures were found for both doses at week 12; including psychic and somatic HAM-A subscales, response rate, remission on the HAM-A, and functional impairment. Findings were confirmed in subsets of more severely ill patients on all endpoints. The low placebo response rate observed in this study was consistent with an increase in the quality of data collected. Agomelatine was well-tolerated by patients, with minimal distinctions from placebo. There was a dose effect of agomelatine, with a greater placebo-agomelatine difference in the agomelatine 25mg group, compared to the agomelatine 10mg group. The present data support early work indicating the efficacy and tolerability of agomelatine in the treatment of GAD

Director: Prof Mohamed Seedat



Article:

Kimemia D, Van Niekerk A. Cookstove options for safety and health: Comparative analysis of technological and usability attributes. *Energy Policy*. 2017 Mar 16. [Original]
DOI: 10.1016/j.enpol.2017.03.022

Impact Factor: 3.045

Summary:

Energy use in low-income households in South Africa is considerably more hazardous than in middle to high-income households. Poverty is a key underlying factor. However, poor quality domestic energy technologies, including stoves, heaters and light sources contribute to this vulnerability. The problem is compounded by behavioural and environmental factors. Since cooking is a key energy-using chore, access to efficient, safe and versatile stoves portend safety improvements. This paper reports on a comparative analysis of eleven technological and usability attributes (CO emissions, firepower, efficiency, fuel toxicity, fuel cost, stove price, controllability, durability, availability, temperature of touchable-parts, and mechanical stability) of commercially available stoves that utilise four energy sources (kerosene, methanol, ethanol gel, and LPG). The ensuing discussion serves as a guide to enable the selection of the best-fit stove-fuel combination for low-income households. The findings indicate that LPG stoves have comparatively better overall rankings for cleanliness, firepower, safety, and durability. This analysis highlights that no combustion technology is risk-proof and there remains a burden on users to exercise diligence. We recommend that South Africa adopts an affirmative policy and strategic actions that discourage the use of kerosene as a household combustion fuel, and promotes the adoption of LPG as a safer and practical alternative.

Director: Prof Aletta Schutte



Article:

Schutte AE, Botha S, Fourie CM, Gafane-Matemane LF, Kruger R, Lammertyn L, Malan L, Mels CM, **Schutte R**, Smith W, van Rooyen JM, Ware LJ, **Huisman HW**. Recent advances in understanding hypertension development in sub-Saharan Africa. *Journal of Human Hypertension*. 2017 Mar 23. [Review]

DOI: 10.1038/jhh.2017.18

Impact Factor: 2.833

Summary

Consistent reports indicate that hypertension is a particularly common finding in black populations. Hypertension occurs at younger ages and is often more severe in terms of blood pressure levels and organ damage than in whites, resulting in a higher incidence of cardiovascular disease and mortality. This review provides an outline of recent advances in the pathophysiological understanding of blood pressure elevation and the consequences thereof in black populations in Africa. This is set against the backdrop of populations undergoing demanding and rapid demographic transition, where infection with the human immunodeficiency virus predominates, and where under and over-nutrition coexist. Collectively, recent findings from Africa illustrate an increased lifetime risk to hypertension from foetal life onwards. From young ages black populations display early endothelial dysfunction, increased vascular tone and reactivity, microvascular structural adaptations as well as increased aortic stiffness resulting in elevated central and brachial blood pressures during the day and night, when compared to whites. Together with knowledge on the contributions of sympathetic activation and abnormal renal sodium handling, these pathophysiological adaptations result in subclinical and clinical organ damage at younger ages. This overall enhanced understanding on the determinants of blood pressure elevation in blacks encourages (a) novel approaches to assess and manage hypertension in Africa better, (b) further scientific discovery to develop more effective prevention and treatment strategies and (c) policymakers and health advocates to collectively contribute in creating health-promoting environments in Africa.

Director: Prof Michael S Pepper



Article:

Chaudhry M, Alessandrini M, Rademan J, Dodgen TM, Steffens FE, van Zyl DG, Gaedigk A, Pepper MS. Impact of CYP2D6 genotype on amitriptyline efficacy for the treatment of diabetic peripheral neuropathy: A pilot study. *Pharmacogenomics*. 2017 Mar 28. [Original]
DOI: 10.2217/pgs-2016-0185
Impact Factor: 2.710

Summary

Aim: Therapy with low-dose amitriptyline is commonly used to treat painful diabetic peripheral neuropathy. There is a knowledge gap, however, regarding the role of variable CYP2D6-mediated drug metabolism and side effects (SEs). We aimed to generate pilot data to demonstrate that SEs are more frequent in patients with variant CYP2D6 alleles.

Method: To that end, 31 randomly recruited participants were treated with low-dose amitriptyline for painful diabetic peripheral neuropathy and their CYP2D6 gene sequenced.

Results: Patients with predicted normal or ultra-rapid metabolizer phenotypes presented with less SEs compared with individuals with decreased CYP2D6 activity.

Conclusion: Hence, CYP2D6 genotype contributes to treatment outcome and may be useful for guiding drug therapy. Future investigations in a larger patient population are planned to support these preliminary findings.

1. INTRAMURAL RESEARCH UNITS

Alcohol, Tobacco and Other Drug

1. Ferreira-Borges C, **Parry CD**, Babor TF. Harmful use of alcohol: A shadow over Sub-Saharan Africa in need of workable solutions. *International Journal of Environmental Research and Public Health*. 2017 Mar 27;14(4): E346. [Original]
DOI: 10.3390/ijerph14040346
Impact Factor: 2.035
2. Kalberg WO, Marais A-S, de Vries MM, Seedat S, **Parry C**, May PA. Neuropsychological aspects of prevention and intervention for FASD in South Africa. *Journal of Pediatric Neuropsychology*. 2017 Mar;3(1): 68-78. [Review]
DOI: 10.1007/s40817-017-0035-2
Impact Factor: None
3. Probst C, Simbayi LC, **Parry CD**, Shuper PA, Rehm J. Alcohol use, socioeconomic status and risk of HIV infections. *AIDS and Behavior*. 2017 Mar 28.
DOI: 10.1007/s10461-017-1758-x [Original]
Impact Factor: 3.063

Biomedical Research and Innovation Platform

1. **Bowles S**, Joubert E, de Beer D, **Louw J**, Brunschwig C, Njoroge M, Lawrence N, Wiesner L, Chibale K, **Muller C**. Intestinal transport characteristics and metabolism of C-Glucosyl Dihydrochalcone, Aspalathin. *Molecules*. 2017 Mar 30; 22(4): E554. [Original]
DOI: 10.3390/molecules22040554
Impact Factor: 2.465
2. Webster I, Salie R, Marais E, Fan WJ, Maarman G, **Huisamen B**, Lochner A. Myocardial susceptibility to ischaemia/reperfusion in obesity: A re-evaluation of the effects of age. *BMC Physiology*. 2017 Mar 17; 17(1): 3. [Original]
DOI: 10.1186/s12899-017-0030-y
Impact Factor: None

Centre for Tuberculosis

1. Dheda K, Gumbo T, Maartens G, Dooley KE, McNerney R, Murray M, Furin J, Nardell EA, London L, Lessem E, **Theron G**, **van Helden P**, Niemann S, Merker M, Dowdy D, van Rie A, Siu GK, Pasipanodya JG, Rodrigues C, Clark TG, **Sirgel FA**, Esmail A, Lin HH, Atre SR, Schaaf HS, Chang KC, Lange C, Nahid P, Udwadia ZF, Horsburgh CR Jr, Churchyard GJ, Menzies D, Hesselink AC, Nuermberger E, McIlleron H, Fennelly KP, Goemaere E, Jaramillo E, Low M, Jara CM, Padayatchi N, **Warren RM**. The epidemiology, pathogenesis, transmission, diagnosis, and management of multidrug-resistant, extensively drug-resistant, and incurable tuberculosis. *Lancet Respiratory Medicine*. 2017 Mar 15. [Review]
DOI: 10.1016/S2213-2600(17)30079-6
Impact Factor: 15.328
2. Mbugi EV, Katale BZ, Lupindu AM, Keyyu JD, Kendall SL, Dockrell HM, Michel AL, Matee MI, **van Helden PD**. Tuberculosis infection: Occurrence and risk factors in presumptive tuberculosis patients of the Serengeti ecosystem in Tanzania. *East African Journal of Public Health*. 2017 Mar; 1(1): 19-30. [Original]
Impact Factor: None
3. Dowdy DW, **Theron G**, Tornheim JA, Kendall EA. Drug-resistant tuberculosis in 2017: At a crossroads. *Lancet Respiratory Medicine*. 2017 Mar 15. [Letter]
DOI: 10.1016/S2213-2600(17)30081-4
Impact Factor: 15.328

Environment and Health

1. **Mathee A**, De Jager P, Naidoo S, **Naicker N**. Lead poisoning in shooting-range workers in Gauteng Province, South Africa: Two case studies. *South African Medical Journal*. 2017 Mar 29. [Original]
DOI: 10.7196/SAMJ.2017.v107i4.12176
Impact Factor: 1.500

Gender and Health

1. **van der Heijden I**, **Abrahams N**, Sinclair D. Psychosocial group interventions to improve psychological well-being in adults living with HIV. *Cochrane Database of Systematic Reviews*. 2017 Mar 14; 3: CD010806. [Review]
DOI: 10.1002/14651858.CD010806.pub2
Impact Factor: 6.103
2. McFarlane J, Karmaliani R, Maqbool Ahmed Khuwaja H, Gulzar S, Somani R, Saeed Ali T, Somani YH, Shehzad Bhamani S, Krone RD, Paulson RM, Muhammad A, **Jewkes R**. Preventing peer violence against children: Methods and baseline data of a cluster randomized controlled trial in Pakistan. *Global Health, Science and Practice*. 2017 Mar 28; 5(1): 115-137. [Original]
DOI: 10.9745/GHSP-D-16-00215
Impact Factor: None

Health Systems

1. Bärnighausen T, Tugwell P, Røttingen JA, Shemilt I, Rockers P, Geldsetzer P, Lavis J, Grimshaw J, **Daniels K**, Brown A, Bor J, Tanner J, Rashidian A, Barreto M, Vollmer S, Atun R. Quasi-experimental study designs series - Paper 4: uses and value. *Journal of Clinical Epidemiology*. 2017 Mar 29. [Original]
DOI: 10.1016/j.jclinepi.2017.03.012
Impact Factor: 4.703
2. Rockers PC, Tugwell P, Grimshaw J, Oliver S, Atun R, Røttingen JA, Fretheim A, Ranson MK, **Daniels K**, Luiza VL, Bärnighausen T. Quasi-experimental study designs series - Paper 12: Strengthening global capacity for evidence synthesis of quasi-experimental health systems research. *Journal of Clinical Epidemiology*. 2017 Mar 28. [Original]
DOI: 10.1016/j.jclinepi.2016.03.034
Impact Factor: 4.703

HIV Prevention

1. Chirenje ZM, Gundacker HM, Richardson B, Rabe L, **Gaffoor Z**, Nair GL, Mirembe BG, Piper JM, Hillier S, Marrazzo J. Risk factors for incidence of Sexually Transmitted Infections among women in a Human Immunodeficiency Virus chemoprevention trial: VOICE (MTN-003). *Sexually Transmitted Diseases*. 2017 Mar; 44(3): 135-140. [Original]
DOI: 10.1097/OLQ.0000000000000568
Impact Factor: 2.968

MRC Office of AIDS

1. Corey L, **Gray GE**. Preventing acquisition of HIV is the only path to an AIDS-free generation. *Proceedings of the National Academy of Sciences of the United States of America*. 2017 Mar 30. [Letter]
DOI: 10.1073/pnas.1703236114
Impact Factor: 9.423

Non-Communicable Disease

1. Ameh OI, Okpechi IG, Dandara C, **Kengne AP**. Association between telomere length, chronic kidney disease, and renal traits: A systematic review. *OMICS*. 2017 Mar; 21(3): 143-155. [Review]
DOI: 10.1089/omi.2016.0180
Impact Factor: 2.896
2. Matsungo TM, Kruger HS, Smuts CM, **Faber M**. Lipid-based nutrient supplements and linear growth in children under 2 years: A review. *Proceedings of the Nutrition Society*. 2017 Mar 13: 1-9. [Review]
DOI: 10.1017/S0029665117000283
Impact Factor: 4.703
3. Riddell MA, Edwards N, Thompson SR, Bernabe-Ortiz A, Praveen D, Johnson C, **Kengne AP**, Liu P, McCready T, Ng E, Nieuwlaat R, Ovbiagele B, Owolabi M, Peiris D, Thrift AG, Tobe S, Yusoff K, **de Villiers A**, He F, MacGregor G, Jan S, Neal B, Chow C, Joshi R, MacMahon S, Patel A, Rodgers A, Webster R, Keat NK, Attaran A, Mills E, Muldoon K, Yaya S, Featherstone A, Mukasa B, Forrest J, Kalyesubula R, Kamwesiga J, Lopez PC, Tayari JC, Lopez P, Casas JL, McKee M, Zainal AO, Yusuf S, Campbell N, Kilonzo K, Marr M, Yeates K, Feng X, Yuan J, Li X, Lin CP, Yan L, Zhang J, Wu Y, Ma J, Wang H, Ma Y, Nowson C, Moodie M, Goudge J, Kabudula C, Limbani F, Masilela N, Myakayaka N, Gómez-Olivé FX, Thorogood M, Arabshahi S, Evans R, Mahal A, Oldenburg B, Riddell M, Srikanth V, Heritier S, Kalyanram K, Kartik K, Suresh O, Maulik P, Salam A, Sudhir T, Thankappan K, Thirunavukkarasu S, Varma R, Thomas N, Clifford G, Prabhakaran D, Thom S, Shivashankar R, Mohan S, Reddy KS, Krishnan A, Faletose S, Ieremia M, Ulberg C, Viali S, Pillay A, Sukhu A, Schultz J, Siitia J, Snowdon W, Antonio B-O, Cárdenas MK, Gilman RH, Miranda JJ, Diez-Canseco F, Ponce-Lucero V, Sacksteder K, Gyamfi J, Ogedegbe O, Apusiga K, Cooper R, Ntim M, Plange-Rhule J, Rotich J, Binanay C, Finkelstein E, Bloomfield G, DeLong A, Hogan J, Inui T, Naanyu V, Fuster V, Horowitz C, Kimaiyo S, Kofler C, Menya D, Kamano JH, Vedanthan R, Velazquez E, Were M, Dolan J, Irazola V, Krousel-Wood M, Augustovski F, Beratarrechea A, Chen J, He J, Mills K, Poggio R, Rubinstein A, Shi L, Webber L, Akinyemi R, Arulogun O, Hurst S, Waddy S, Warth S, Gebregziabher M, Uvere E. Developing consensus measures for global programs: Lessons from the Global Alliance for Chronic Diseases Hypertension research program. *Globalization and Health*. 2017 Mar 15; 13(1): 17. [Original]
DOI: 10.1186/s12992-017-0242-8
Impact Factor: 2.540
4. Mazidi M, **Kengne AP**. Nutrient patterns and their relationship with general and central obesity in US adults. *European Journal of Clinical Investigation*. 2017 Mar 10. [Original]
DOI: 10.1111/eci.12745
Impact Factor: 2.687
5. **Nguyen KA**, Peer N, **de Villiers A**, Mukasa B, Matsha TE, Mills EJ, **Kengne AP**. Metabolic syndrome in people living with Human Immunodeficiency Virus: An assessment of the prevalence and the agreement between diagnostic criteria. *International Journal of Endocrinology*. 2017 Mar 14. [Original]
DOI: 10.1155/2017/1613657
Impact Factor: 2.376

6. Adom T, Puoane T, **de Villiers A, Kengne AP**. Protocol for systematic review of school-based interventions to prevent and control obesity in African learners. *BMJ Open*. 2017 Mar 27; 7 (3): e013540. [Review]
DOI: 10.1136/bmjopen-2016-013540
Impact Factor: 2.562
7. Maarman GJ, Mendham AE, Lamont K, **George C**. Review of a causal role of fructose-containing sugars in myocardial susceptibility to ischemia/reperfusion injury. *Nutrition Research*. 2017 Mar 14. [Review]
DOI: 10.1016/j.nutres.2017.03.003
Impact Factor: 2.523

South African Cochrane Centre

1. Adedokun ST, Uthman OA, Adekanmbi VT, **Wiysonge CS**. Incomplete childhood immunization in Nigeria: A multilevel analysis of individual and contextual factors. *BMC Public Health*. 2017 Mar 8; 17(1): 236. [Original]
DOI: 10.1186/s12889-017-4137-7
Impact Factor: 2.209
2. Naude CE, Schoonees A, Senekal M, Garner P, **Young T, Volmink J**. Reliable systematic review of low-carbohydrate diets shows similar weight-loss effects compared with balanced diets and no cardiovascular risk benefits: Response to methodological criticisms. *South African Medical Journal* 2017 Mar; 107(3): 170. [Letter]
DOI:10.7196/SAMJ. 2017.v107i3.12382
Impact Factor: 1.500

Violence, Injury and Peace

1. **Kimemia D, Van Niekerk A**. Cookstove options for safety and health: Comparative analysis of technological and usability attributes. *Energy Policy*. 2017 Mar 16. [Original]
DOI: 10.1016/j.enpol.2017.03.022
Impact Factor: 3.045
2. **Kimemia DK, van Niekerk A**. Energy poverty, shack fires and childhood burns. *South African Medical Journal*. 2017 Mar 29. [Other]
DOI: 10.7196/SAMJ. 2017.v107i4.12436
Impact Factor: 1.500
3. van As AB, **van Niekerk A**. Prevention of childhood injuries (Part 2). *South African Medical Journal*. 2017 Mar 29. [Editorial]
DOI: 10.7196/SAMJ. 2017.v107i4.12432
Impact Factor: 1.500
4. Sengoelge M, El-Khatib Z, **Laflamme L**. The global burden of child burn injuries in light of country level economic development and income inequality. *Preventive Medicine Reports*. 2017 Mar 02. [Original]
DOI: 10.1016/j.pmedr.2017.02.024
Impact Factor: None

2. EXTRAMURAL RESEARCH UNITS

Antiviral Gene Therapy

1. Counsell JR, Asgarian Z, Meng J, Ferrer V, Vink CA, Howe SJ, **Waddington SN**, Thrasher AJ, Muntoni F, Morgan JE, Danos O. Lentiviral vectors can be used for full-length dystrophin gene therapy. *Scientific Reports*. 2017 Mar 6. [Original]
DOI: 10.1038/s41598-017-00152-5
Impact Factor: 5.228

2. Baruteau J, Jameson E, Morris AA, Chakrapani A, Santra S, Vijay S, Kocadag H, Beesley CE, Grunewald S, Murphy E, Cleary M, Mundy H, Abulhoul L, Broomfield A, Lachmann R, Rahman Y, Robinson PH, MacPherson L, Foster K, Chong WK, Ridout DA, Bounford KM, **Waddington SN**, Mills PB, Gissen P, Davison JE. Expanding the phenotype in argininosuccinic aciduria: need for new therapies. *Journal of Inherited Metabolic Disease*. 2017 Mar 1. [Original]
DOI: 10.1007/s10545-017-0022-x
Impact Factor: 3.541

Anxiety and Stress Disorders

1. Dell'Osso B, Benatti B, Arici C, Palazzo C, Altamura AC, Hollander E, Fineberg N, **Stein DJ**, Nicolini H, Lanzagorta N, Marazziti D, Pallanti S, van Ameringen M, **Lochner C**, Karamustafalioglu O, Hranov L, Figeo M, Drummond L, Rodriguez CI, Grant J, Denys D, Menchon JM, Zohar J. Prevalence of suicide attempt and clinical characteristics of suicide attempters with obsessive-compulsive disorder: A report from the International College of Obsessive-Compulsive Spectrum Disorders (ICOCS). *CNS Spectrums*. 2017 Mar 16:1-8. [Original]
DOI: 10.1017/S1092852917000177
Impact Factor: 3.582
2. **Stein DJ**, Ahokas A, Jarema M, Avedisova AS, Vavrusova L, Chaban O, Gruget C, Olivier V, Picarel-Blanchot F, de Bodinat C. Efficacy and safety of agomelatine (10 or 25 mg/day) in non-depressed out-patients with generalized anxiety disorder: A 12-week, double-blind, placebo-controlled study. *European Neuropsychopharmacology*. 2017 Mar 12. [Original]
DOI: 10.1016/j.euroneuro.2017.02.007
Impact Factor: 4.409
3. Breen MS, **Uhlmann A**, Ozcan S, Chan M, Pinto D, Bahn S, **Stein DJ**. Parallel changes in serum proteins and diffusion tensor imaging in methamphetamine-associated psychosis. *Scientific Reports*. 2017 Mar 02; 7: 43777. [Original]
DOI: 10.1038/srep43777
Impact Factor: 5.228
4. de Vries J, **Stein DJ**, Kamuya D, Singh I. Psychiatric genomics: Ethical implications for public health in Lower- and Middle-Income Countries. *American Journal of Bioethics*. 2017 Mar 22. [Letter]
DOI: 10.1080/15265161.2017.1284938
Impact Factor: 6.500
5. van Steenbergen H, Weissman DH, **Stein DJ**, Malcolm-Smith S, **van Honk J**. More pain, more gain: Blocking the opioid system boosts adaptive cognitive control. *Psychoneuroendocrinology*. 2017 Mar 7. [Original]
DOI: 10.1016/j.psyneuen.2017.03.002
Impact Factor: 4.704
6. Brooks SJ, Wiemerslage L, Burch KH, Maiorana SA, Cocolas E, Schioth HB, Kamaloodien K, **Stein DJ**. The impact of cognitive training in substance use disorder: The effect of working memory training on impulse control in methamphetamine users. *Psychopharmacology (Berl)*. 2017 Mar 21. [Original]
DOI: 10.1007/s00213-017-4597-6
Impact Factor: 3.540

- King M, Rauch LH, Brooks SJ, **Stein DJ**, Lutz K. Methylphenidate enhances grip force and alters brain connectivity. *Medicine and Science in Sports and Exercise*. 2017 Mar 8. [Original]
DOI: 10.1249/MSS.0000000000001252
Impact Factor: 4.047

Developmental Pathways for Health

- Mendenhall E, Kohrt BA, **Norris SA**, Ndetei D, Prabhakaran D. Non-communicable disease syndemics: Poverty, depression, and diabetes among low-income populations. *Lancet*. 2017 Mar 4; 389(10072): 951-963. [Review]
DOI: 10.1016/S0140-6736(17)30402-6
Impact Factor: 44.002
- Prioreschi A, Munthali RJ, Soepnel L**, Goldstein JA, **Micklesfield LK**, Aronoff DM, **Norris SA**. Incidence and prevalence of type 2 diabetes mellitus with HIV infection in Africa: A systematic review and meta-analysis. *BMJ Open*. 2017 Mar 29; 7(3): e013953. [Original]
DOI: 10.1136/bmjopen-2016-013953
Impact Factor: 2.562
- Wandai M, **Aagaard-Hansen J**, Day C, Sartorius B, Hofman KJ. Available data sources for monitoring non-communicable diseases and their risk factors in South Africa. *South African Medical Journal*. 2017 Mar 29. [Original]
DOI: 10.7196/SAMJ.2017.v107i4.11438
Impact Factor: 1.500

Hypertension and Cardiovascular Disease

- Kaze AD, **Schutte AE**, Erqou S, Kengne AP, Echouffo-Tcheugui JB. Prevalence of hypertension in older people in Africa: A systematic review and meta-analysis. *Journal of Hypertension*. 2017 Mar 06. [Original]
DOI: 10.1097/HJH.0000000000001345
Impact Factor: 5.062
- Schutte AE**, Botha S, Fourie CM, Gafane-Matemane LF, Kruger R, Lammertyn L, Malan L, Mels CM, **Schutte R**, Smith W, van Rooyen JM, Ware LJ, **Huisman HW**. Recent advances in understanding hypertension development in sub-Saharan Africa. *Journal of Human Hypertension*. 2017 Mar 23. [Review]
DOI: 10.1038/jhh.2017.18
Impact Factor: 2.833
- Poulter NR, **Schutte AE**, Tomaszewski M, Lackland DT. May Measurement Month: A new joint global initiative by the International Society of Hypertension and the World Hypertension League to raise awareness of raised blood pressure. *Journal of Hypertension*. 2017 Mar 18. [Letter]
DOI: 10.1097/HJH.0000000000001346
Impact Factor: 5.062

Rural Public Health and Health Transition

- Ameh S, Gómez-Olivé FX, Kahn K, Tollman SM**, Klipstein-Grobusch K. Relationships between structure, process and outcome to assess quality of integrated chronic disease management in a rural South African setting: Applying a structural equation model. *BMC Health Services Research*. 2017 Mar 23; 17(1): 229. [Original]
DOI: 10.1186/s12913-017-2177-4
Impact Factor: 1.606

2. **Gómez-Olivé FX**, Ali SA, Made F, Kyobutungi C, Nonterah E, Micklesfield L, Alberts M, Boua R, Hazelhurst S, Debpuur C, Mashinya F, Dikotope S, Sorgho H, Cook I, Muthuri S, Soo C, Mukomana F, Agongo G, Wandabwa C, **Afolabi S**, Oduro A, Tinto H, **Wagner RG**, Haregu T, **Wade A**, **Kahn K**, Norris SA, Crowther NJ, **Tollman S**, Sankoh O, Ramsay M; as members of AWI-Gen and the H3Africa Consortium. Stark regional and sex differences in the prevalence and awareness of hypertension: An H3Africa AWI-Gen study across 6 sites in Sub-Saharan Africa. *Global Heart*. 2017 Mar 13. [Original]
DOI: 10.1016/j.gheart.2017.01.007
Impact Factor: None
3. Payne CF, **Gómez-Olivé FX**, **Kahn K**, Berkman L. Physical function in an aging population in rural South Africa: Findings from HAALSI and Cross-National comparisons with HRS Sister studies. *Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*. 2017 Mar 28. [Original]
DOI: 10.1093/geronb/gbx030
Impact Factor: 2.813

Stem Cell Research and Therapy

1. **Chaudhry M**, **Alessandrini M**, **Rademan J**, **Dodgen TM**, Steffens FE, van Zyl DG, Gaedigk A, **Pepper MS**. Impact of CYP2D6 genotype on amitriptyline efficacy for the treatment of diabetic peripheral neuropathy: A pilot study. *Pharmacogenomics*. 2017 Mar 28. [Original]
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Impact Factor: 2.710
2. Nel JG, **Durandt C**, Theron AJ, Tintinger GR, Pool R, Richards GA, Mitchell TJ, Feldman C, **Anderson R**. Pneumolysin mediates heterotypic aggregation of neutrophils and platelets in vitro. *Journal of Infection*. 2017 Mar 4.
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Impact Factor: 4.382

3. GRANT FUNDED RESEARCH

1. Giddey AD, de Kock E, Nakedi KC, Garnett S, Nel AJM, **Soares NC**, Blackburn JM. A temporal proteome dynamics study reveals the molecular basis of induced phenotypic resistance in *Mycobacterium smegmatis* at sub-lethal rifampicin concentrations. *Scientific Reports*. 2017 Mar 6; 7: 43858. [Original]
DOI: 10.1038/srep43858
Impact Factor: 5.228
2. **Mayosi BM**, Fish M, Shaboodien G, Mastantuono E, Kraus S, Wieland T, Kotta M-C, Chin A, Laing N, **Ntusi NBA**, Chong M, Horsfall C, Pimstone SN, Gentilini D, Parati G, Strom T-M, Meitinger T, Pare G, Schwartz PJ, Crotti L. Identification of Cadherin 2 (CDH2) mutations in arrhythmogenic right ventricular cardiomyopathy. *Circulation: Cardiovascular Genetics*. 2017 Mar 08. [Original]
DOI: 10.1161/CIRCGENETICS.116.001605
Impact Factor: 3.808
3. Rockwood N, Wojno J, Ghebrekristos Y, Nicol MP, **Meintjes G**, Wilkinson RJ. Utility of second generation line probe assay (Hain MTBDRplus) directly on 2-month sputa specimens to monitor tuberculosis treatment response. *Journal of Clinical Microbiology*. 2017 Mar 01. [Original]
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Impact Factor: 3.631

4. Lawn SD, Kerkhoff AD, Burton R, Schutz C, Boulle A, Vogt M, Gupta-Wright A, Nicol MP, **Meintjes G**. Diagnostic accuracy, incremental yield and prognostic value of determine TB-LAM for routine diagnostic testing for tuberculosis in HIV-infected patients requiring acute hospital admission in South Africa: A prospective cohort. *BMC Medicine*. 2017 Mar 21; 15(1): 67. [Original]
DOI: 10.1186/s12916-017-0822-8
Impact Factor: 8.005
5. Zuhlke LJ, Beaton A, Engel ME, Hugo-Hamman CT, Karthikeyan G, Katzenellenbogen JM, **Ntusi N**, Ralph AP, Saxena A, Smeesters PR, Watkins D, Zilla P, Carapetis J. Group A streptococcus, acute rheumatic fever and rheumatic heart disease: Epidemiology and clinical considerations. *Current Treatment Options in Cardiovascular Medicine*. 2017 Mar 11. [Review]
DOI: 10.1007/s11936-017-0513-y
Impact Factor: None
6. Mkhize BT, Mabaso M, Mamba T, Napier CE, **Mkhize-Kwitshana ZL**. The interaction between HIV and intestinal helminth parasites coinfection with nutrition among adults in KwaZulu-Natal, South Africa. *BioMed Research International*. 2017 Mar 22; 2017:9059523. [Original]
DOI: 10.1155/2017/9059523
Impact Factor: 2.134

4. RESEARCH CENTRES

Soweto Matlosana SAMRC Collaborating Centre for HIV/AIDS and TB

1. Karat AS, Tlali M, Fielding KL, Charalambous S, Chihota VN, Churchyard GJ, Hanifa Y, Johnson S, McCarthy K, **Martinson NA**, Omar T, Kahn K, Chandramohan D, Grant AD. Measuring mortality due to HIV-associated tuberculosis among adults in South Africa: Comparing verbal autopsy, minimally-invasive autopsy, and research data. *PLoS ONE*. 2017 Mar 23; 12(3): e0174097. [Original]
DOI: 10.1371/journal.pone.0174097
Impact Factor: 3.057

5. RESEARCH UNITS WITH NO QUALIFYING PUBLICATIONS

Intramural

- Biostatistics
- Burden of Disease
- MRC Office of Cancer
- MRC Office of Malaria
- MRC Office of Tuberculosis

Extramural

- Bioinformatics Capacity Development
- Child and Adolescent Lung Health
- Common Epithelial Cancer
- Diarrhoeal Pathogens
- Drug Discovery and Development
- Gynaecological Cancer
- Health Services to Systems
- Herbal Drugs
- HIV/TB Pathogenesis and Treatment
- Human Genetics
- Immunology of Infectious Disease
- Maternal and Infant Health Care Strategies
- Medical Imaging
- Microbial Water Quality Monitoring
- Molecular Mycobacteriology
- Prospective Gastrointestinal Cancer
- Receptor Biology
- Respiratory and Meningeal Pathogens

6. GRANTS AWARDED

SAMRC LIST OF NEW CONTRACTS FOR MARCH 2017					
SAMRC Unit	Funder	Main Funder	Project Title/Description	Contract Value	
				Rand	Foreign Currency
Biostatistics	Tufs University	USAID	Nutrition Capacity Development to Meet National Priorities – Amendment 1	349 957	\$26 000
BRIP	National Research Foundation (NRF)	National Research Foundation (NRF)	The role of beta secretases in pancreatic beta cell inflammation and ageing	120 000	-
			Epigenetic modulation of an aspalathin-enriched South African Indigenous plant extract	710 000	-
			Interaction of Aspalathus linearis (rooibos) with glucose lipid lowering medications	87 000	-
Burden of Disease	National Research Foundation (NRF)	National Research Foundation (NRF)	Evaluation of Availability and Quality of morbidity data in routine records in hospitals	590 640	-
Corporate Communications	Department of Science & Technology	Department of Science & Technology	Developing an Integrated Communication and Marketing Plan for the BIO-Economy	2 000 000	-
Environment & Health	National Research Foundation (NRF)	National Research Foundation (NRF)	IK and poisonous plants	233 187	-
GIPD	Department of Science & Technology	Department of Science & Technology	For inclusion of the South African Network of Health and Demographic Surveillance Sites (HDSS) in the implementation of the first edition of the South	99 000 000	-

			African Research Infrastructure Roadmap		
Health Systems	National Research Foundation (NRF)	National Research Foundation (NRF)	UHCASA – Achieving Universal HIV coverage among children and Adolescents in South Africa	111 105	-
			Incentive Funding for Rates Researchers (IPRR)	80 000	-
HIV Prevention	National Research Foundation (NRF)	National Research Foundation (NRF)	Community screening for diabetes and hypertension leveraged on HIV Testing to enhance linkage	199 345	-
Non-Communicable Disease	Centre for Development Innovation (CDI) Wageningen	Centre for Development Innovation (CDI) Wageningen	SPAR Nutrition Survey	138 189	€ 600
	National Research Foundation (NRF)	National Research Foundation (NRF)	Diabetic cardiomyopathy Risk Prediction	120 000	-
			The development of a Diabetes Prevention focused Community Health Workers training model for the south African Community	87 000	-
			Beneficial effects of aspalathin in fatty liver accumulation and histological changes	120 000	-
			Investing microRNA's as biomarkers for gestational diabetes	170 000	-

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