

EDITORIAL

Dear Colleagues

I trust you are all safe and well.

Autumn is upon us already and 2021 is one third gone! Our Undergraduate students are all settled into their studies.



Congratulations to staff featured in our newsletter on their great achievements.

The Management and Staff of CMJAH are in our thoughts due to the recent fire.

Thank you to those members of Joint staff, particularly Professors Motara and Moeng for their role in the emergency response and safe relocation of almost 800 patients, without casualties. This is a great accomplishment. We'll done to all concerned.

All the best for the coming Winter season!

Happy Reading!

Professor Daynia Ballot

Head of School

A LOOK AT OUR STAFF ACHIEVEMENTS

Staff Promotions

Congratulations to:

Dr Craig Keyes with his promotion to Senior Lecturer (see page 2)

Adjunct Professor Gita Naidu with her appointment as Academic Division Head, Paediatric Hamatology (see page 2)

Adjunct Professor Kebashni Thandrayen with her appointment as Academic Division Head, Paediatric Endocrinology (see page 3)



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Welcome to:Visiting Professor

Associate Professor Mark Stoutenberg

Honorary Professor

Professor Paul Harris

Honorary Adjunct Professor

Adjunct Professor Chris Lundgren

Prof Hennie Lombaard

DR CRAIG KEYS

Dr Keys (PhD) was appointed as a lecturer in the Department of Forensic Medicine and Pathology in 2016. His duties in the department include lecturing, course coord-

ination of the BHSc(Hons) in Forensic Sciences, MSc(Med) in Forensic Medicine and PhD in Forensic Medicine, and he is the department's research coordinator. Dr Keys also performs forensic anthropological analysis of skeletal remains for the Gauteng Southern Cluster Forensic Pathology Services (FPS) in collaboration with the Human Variation and Identification Research Unit (HVIRU) in the School of Anatomical Sciences (WITS). Dr Keys is a member of the Identification Unit at the Johannesburg FPS

Medico-legal Mortuary. The ID Unit is a humanitarian effort, in collaboration with the Department of Forensic Medicine and Pathology (WITS), the International Com-

mittee of the Red Cross, the Gauteng Southern Cluster FPS, and the Victim Identification Centre of the South African Police Services. The ID Unit performs secondary post mortem examinations for identification purposes, largely on suspected foreign migrants. His research interests are in forensic taphonomy and forensic anthropology, with a focus on the variables that alter decomposition rates and patterns and their influence on post mortem interval estimations. He also has a vested interest in Disaster Victim Identification.

**ADJUNCT PROFESSOR GITA NAIDU**

She is a paediatric oncologist at Chris Hani Baragwanath Academic Hospital. After training as a paediatrician in both King Edward VIII Hospital, University of KwaZulu and Chris Hani Baragwanath Academic Hospital, University of the Witwatersrand she trained in paediatric oncology at the Chris Hani Baragwanath Academic Hospital with Dr Linda Wainwright. Professor Janet Poole was her supervisor for her Master's in Medicine (Paediatrics); the study investigated the prognostic factors of black children treated for acute lymphoblastic leukaemia. Professor Shabir Madhi supervised her PhD on infectious complications in the South African black child with cancer. In 2019, she received a full

scholarship from St Jude's Research Hospital, Memphis, USA for a diploma in infectious diseases in the immunocompromised child. Professor Naidu received a full academic scholarship from Johnson and Johnson for her undergraduate studies and further grants to attend international courses in paediatric oncology including funding from the British Council for Higher Education, the European Bone Marrow Transplant Society, and the European Society for Haematology. She has been the head of paediatric oncology at Chris Hani



Baragwanath Academic Hospital since 2015, the largest unit in sub-Saharan Afri-

ca and is actively involved with under- and post-graduate teaching, and outreach programmes to many hospitals in Gauteng, eSwatini and Zimbabwe. Under her supervision, four Master's in Medicine have been completed and she currently supervising four more, as well as three Master's in Science candidates, and she has trained nine paediatric oncologists. Presently she is working on various research projects including national cancer protocols for retinoblastoma, germ cell tumours, and infections, nutrition, and antimicrobial stewardship in children with cancer. She is currently an associate editor of the South African Journal of Oncology, a reviewer of national and international journals, a collaborator in several clinical trials, and on advisory boards in the pharmaceutical industry pertaining to the

treatment of childhood cancer. She is an examiner in the College of Medicine (South Africa) and an internal and external examiner for under-graduate students, Master's in Medicine, Master's in Science and PhD students. The National Department of Health has tasked Professor Naidu with drafting a National Children's Cancer Care Plan for South Africa, which she is writing together with relevant members of the World Health Organization and the Global Paediatric Department at St Jude's Research Hospital. In addition to being chairperson of the South African Children's Cancer Study Group, she is a member of the Anti-Microbial Stewardship Committee at Chris Hani Baragwanath Academic Hospital, a member of the Mentorship Committee in the School of Clinical Medicine, University of the Witwatersrand and coor-

dinator of the sub-Saharan African weekly tumour board meetings with St Jude's Research Hospital. She is a director of Reach for a Dream Foundation, a fundraising organization for children with life-threatening illnesses, a director of Kids Kicking Cancer, an international organization based in Michigan, USA, and a board member of Children's Haematology Oncology Clinics (CHOC), a national parent-based organization. Her current project is the building of a new children's oncology outpatient clinic at Chris Hani Baragwanath Academic Hospital, for which she secured a R65 million donation from the Stan and Daphne Nkosi Foundation. The focus of her work is to promote and expand the training, teaching, and research in paediatric oncology including national, continental and global collaboration.

ADJUNCT PROFESSOR KEBASHNI THANDRAYEN



She is an Adjunct Professor in Paediatric Endocrinology since December 2018 at the University of the Witwatersrand, Faculty of Health Sciences.

Prof Thandrayen is qualified with 5 degrees: MBCh (Wits), FCPaed (SA), MMED (Wits), Certificate in Paediatric Endocrinology and Metabolism and PhD (Wits).

She obtained her PhD in 2014 on "Bone mass and fractures in South African children" that was co-supervised by Prof JM Pettifor and Prof SA Norris.

She has been the Head of the Metabolic Bone clinic at Chris Hani Baragwanath Academic hospital (CHBAH) since 2011 and positioned as the Head of Paediatric Endocrinology at CHBAH since October 2020.

Her long-term research interests pertain to metabolic bone disorders in children and bone health.

She has first authored and co-authored 17 peer-reviewed articles mainly on metabolic bone

disorders and presented talks or papers at national and international conferences in this field.

Prof Thandrayen also has substantial experience in clinical trials on Metabolic Bone disorders such as Osteogenesis Imperfecta and through these trials; she has networked with international experts

in this field.

Her current research project is on "Bone mass and fractures in South African children on prolonged oral glucocorticoids for chronic non-malignant illnesses" which is funded by the MRC Self-initiated researcher grant. Other grants received include the WITS FRC individual research grant (2008-2009) and KIC travel grant from the National Research Foundation (2015).

She has previously been awarded the Sanofi Aventis travel award from SEMDSA for the best original paper in the field of osteoporosis (2009) and the Faculty Research prize; the most prestigious prize awarded by the Faculty of Health Sciences in 2012 for the paper: "Heterogeneity of fracture pathogenesis in urban South African children: the Birth to Twenty cohort." Finally, she received the New Investigator Award on the occasion of the 6th International Conference on Children's Bone Health, 22nd-25th June 2013, Rotterdam, Netherlands for an oral abstract "Fracture patterns and bone mass in

South African adolescent-mother pairs: the Birth to Twenty Cohort”.

She is currently the Chairperson of the Paediatric and Adolescent Endocrinology and Diabetes Society- South Africa (PAEDS-SA) and has organized the annual PAEDS-SA academic meetings since 2014. In addition, she is a recently appointed executive member of NOFSA (2020).

Her other fundamental role is the Head/

Chairperson of the Paediatric Research committee and she has been the research coordinator of the Paediatric Department since 2017 promoting MMed research within the department.

She has supervised 6 MMed students and 1 MSc student to completion and she is currently supervising an additional 7 MMed students.

Her current research interests pertain

mainly to bone health, endocrinology including diabetes and metabolic bone disorders. The majority of her practice involves paediatric clinical endocrinology at CHBAH and her focus now is to promote and expand the training, teaching and research in Paediatric endocrinology and diabetes at the University of the Witwatersrand, together with inter-departmental, inter-provincial and international collaborations.

PROFESSOR ROY SHIRES WINS INTERNATIONAL EXCELLENCE IN ENDOCRINOLOGY AWARD

24 March 2021 - Wits University

The Endocrine Society in Washington, D.C. has named Wits Professor Roy Shires as the recipient of the 2020 International Excellence in Endocrinology Award. He was recognised at the virtual 2020 Laureate Awards presentation hosted by the Endocrine Society on 21 March 2021.

The annual award for international excellence in endocrinology recognises an endocrinologist who resides outside the U.S and has made exceptional contributions to the field of endocrinology in geographic areas with underdeveloped resources for endocrine research, education, clinical practice, or administration.

Endocrinology is the study of hormones. An endocrinologist is a doctor that treats diseases related to problems with hormones (chemical messengers).

Prof Shires is a Professor of Medicine in the Department of Internal Medicine, School of Clinical Medicine at Wits and in the Division of Endocrinology and Metabolism at Chris Hani Baragwanath Academic Hospital (Bara) in Soweto.

Although his interest in endocrinology is in bone and mineral metabolism, he most recently initiated a programme for transgender people at Bara to meet a growing need.

Prof Shires joined Bara in 1986, when he was the first head of the Division of Endo-

crinology and Metabolism.

This Wits teaching hospital is the largest in Africa and the only tertiary medical facility serving the largely impoverished and underprivileged population of Soweto.

Despite clinical demands at this under-resourced hospital, which places severe constraints on opportunities for research, Shires has managed to perform meaningful clinical research, often collaborating with basic scientists.

His scientific publications have won him the best annual publication award from the Society for Endocrinology, Metabolism and Diabetes of South Africa (SEMDSA) a number of times.

He is acknowledged as an inspiring mentor by students, postgraduates, and fellows.

Shires has often served as an examiner and examination coordinator for the endocrinology subspecialty diploma of the College of Medicine of South Africa and has also served as chairperson of the organising committee for many SEMDSA annual conferences.



In recognition of his multifaceted contributions to endocrinology in South Africa, he was acknowledged in 2013 with a lifetime award from SEMDSA “for excellence and dedication in clinical services, teaching and research in endocrinology”, and Wits awarded him its Distinguished Service Medal of Excellence.

In 2017, Prof Shires was made an Honorary Member of SEMDSA, the only such honor bestowed in a long time.

<https://www.youtube.com/watch?v=ODPr4UgpGY&t=4s>

OETTLÉ MEMORIAL AWARD 2020 TO PROFESSOR PAUL RUFF



Paul Ruff has been selected to receive the coveted A.G. Oettlé Memorial medal from CANSA in recognition of his outstanding contributions to cancer research. Paul clearly aligns the spirit and action required of the AG Oettlé Medal awardees. In particular, his approach entails the use of scientific evidence-based research to optimise the prevention and management of cancer in South Africa.

Professor Paul Ruff has been Chief Specialist, Professor and Head of the Division of Medical Oncology of the Department of Medicine at the University of Witwatersrand Faculty of Health Sciences and Charlotte Maxeke Johannesburg Academic Hospital since 2002.

Professor Ruff runs the Medical Oncology Research Laboratory at the University of the Witwatersrand Faculty of Health Sciences with Professor Clement Penny. This laboratory studies metastasis and angiogenesis in gastrointestinal cancer and has previously studied mutations in the oestrogen receptor and *brca-1* and *brca-2* genes in breast cancer.

In collaboration with the Wits Health Consortium, Professor Ruff also runs the Johannesburg Oncology Clinical Trial Unit

performing clinical trials in hepatocellular carcinoma, colorectal cancer, gastric cancer, lung cancer, pancreatic cancer, breast cancer, renal cell cancer, carcinoma of the nasopharynx, chronic myeloid leukaemia, lymphomas as well as with antiemetic agents.

As a medical oncologist, Professor Ruff sees all types of cancer patients, but his primary research interest is in colorectal cancer. He also has an interest in AIDS-related malignancies.

Paul serves on a number of committees appointed by the Minister of Health for the South African Department of Health, including the Medicines Control Council (MCC), the Clinical Trials Committee of the Medicines Control Council (MCC CTC), the Expert Committee on Tertiary/Quaternary Essential Medicines (EML Committee) and the Ministerial Advisory Committee on Cancer (MACC).

He is also chairman of the South African National Cancer Registry Scientific Advisory Committee and is a past member of the Inaugural South African Bone Marrow Registry Management Board. He is a member of the Research Committee of the Cancer Association of South Africa and has held various posts in the South African Society of Medical Oncology, including its chairmanship from 2008 – 2013.

Professor Ruff was also appointed as one of two African representatives to the International Affairs Committee of the American Society of Clinical Oncology (ASCO IAC) in 2013.

Paul's publication record illustrates his extensive research in the field of cancer. He has authored or co-authored over 70 papers in peer-reviewed journals, recently including a number of landmark papers on

the use of biological therapies for advanced colorectal cancer. In addition, Professor Ruff has presented over 140 papers and 45 posters at local and international scientific meetings. His overall h-index stands at 33. He has published a paper on the treatment of metastatic colorectal cancer in the *New England Journal of Medicine* in 2009, which was cited 2 937 times and for which he was named the most cited researcher in the Wits Faculty of Health Sciences in 2015. Paul has three other publications in the field of cancer that have each been cited over 830 times.

Other recent Honours are invitations to deliver the Geoffrey Falkson Honorary Lecture at SASMO Conference (2018) and University of Witwatersrand, Faculty of Health Sciences Distinguished Lecture on "Advances in the management of colorectal cancer" (2017).

CANSA honours this distinguished clinician and scientist in recognition of his remarkable contribution to the use of research and experimental evidence to advance the management of cancer.

[History of the Medal](#)



GRADUATE STUDIES AND RESEARCH COMMITTEE

The School of Clinical Medicine has approximately 1700 post-graduate students with an average of 1150 MMed students per annum and 115 PhDs. In addition, there are a number of accredited research units within the various departments, namely:

- Carbohydrate and Lipid Metabolism Research Unit
- Clinical HIV Research Unit
- Developmental Pathways for Health Research Unit (MRC)
- Effective Care Research Unit
- Empilweni Services and Research Unit
- Hepatitis Virus Diversity Research Unit
- Maternal, Adolescent and Child Health (MatCH) Research Unit
- Perinatal HIV Research Unit
- Pulmonary Infections Research Unit
- Project for Improving Neonatal Care (PRINCE) Research programme
- Wits Reproductive Health and HIV Institute

The overall publication output from the School increased by 55% from 2015 to 2019. (See figures below)



The **Graduate Studies and Research Committee (GSRC)** was an amalgamation of the Graduate Studies Committee and the Research Committee within the SOCM. The GSRC is co-chaired by Associate Professors Susan Williams and Ziyad Dangor, and has representatives from each department and research entity within the school. The aim of the GSRC is to promote postgraduate training and research, and to address barriers that limit the research output within the school.

Objectives of the GSRC

- ◆ The GSRC seeks to promote, support, celebrate and acknowledge research outputs
- ◆ The GSRC seeks to identify and address research obstacles within the school
- ◆ The GSRC will provide oversight for the various postgraduate degrees
- ◆ The GSRC promotes the submission of postgraduate degrees in the publishable format
- ◆ The GSRC will address barriers with supervision, of postgraduate degrees
- ◆ The GSRC will provide assistance with online resources
- ◆ The GSRC supports a pathway for clinician scientists
- ◆ The GSRC will facilitate collaboration with established research entities within the faculty
- ◆ The GSRC supports inter-departmental collaborations
- ◆ The GSRC supports international collaborations
- ◆ The GSRC will distribute and share research opportunities
- ◆ The GSRC promotes the Wits Journal of Clinical Medicine

The GSRC pays tribute to Professor Emeritus Saraladevi Naicker for her leadership and commitment to the GSRC. Professor Naicker chaired the Graduate Studies Committee since its inception in 2014, and then the GSRC from 2019 to 2020.



RESEARCH ENTITIES IN THE SCHOOL



Unit Director: Professor Shane Norris;
Deputy Director Professor Lisa Micklesfield

The SAMRC/Wits Developmental Pathways for Health Research Unit (DPHRU) was established in 2011 and after undergoing its second SAMRC quinquennial review at the end of 2019 its status as an SAMRC extramural unit has been renewed for a further 5 years (2021-2025). DPHRU's mandate is to investigate genet-

ic, physiological, psychosocial and lifestyle determinants of growth and development, risk of metabolic disease, and healthy ageing, through innovative multi-disciplinary methodologies across the life-course so as to improve health in South Africa. Specifically, DPHRU aims to elucidate important pathways to health and development in these areas:

- (i) maternal and child health and nutrition,
- (ii) growth, psychosocial and physical development, and
- (iii) obesity and non-communicable disease (NCD) risk in South Africa.

DPHRU is leading the science of Developmental Origins of Health and Disease (DOHaD) in South Africa, is building capacity in this field across the African continent (DOHaD Africa) and is aligned with the

International Society of DOHaD. From both scientific research and policy perspectives, confronting the developmental origins of disparities in physical and psychological development early in life and through the lifecourse, enables us to better understand how early life trajectories link to adult non-communicable disease (obesity, hypertension and diabetes), and how this science creates an important transformation strategy to ensure healthy ageing for all South Africans and across generations.

Furthermore, basic science, epidemiology, formative and intervention research in the area of DOHaD are critically needed to address current research gaps and the complex burden of disease in South Africa. Importantly, our research model frames DPHRU's increasing focus on interventions contextualised by an understand-



SAMRC/Wits Developmental Pathways for Health Research Unit (DPHRU) Team

ding that all human development involves agency (i.e., life choices, behaviours and actions) and that carefully developed, sensitively-timed interventions which target common pathways and modifiable mechanisms have the potential to improve health of both contemporary and future generations of South Africans.

Special Achievements During 2020

- Together with the SAMRC/Wits Rural Public Health and Health Transition Unit (Agincourt), we received a Joint Global Health Trial grant for a trial entitled 'Ntshembo (Hope): A complex intervention to optimise adolescent BMI pre-conception to address the double burden of malnutrition: A RCT in rural and urban South Africa'. The primary objective of this RCT, which will be completed in Soweto and Agincourt, is to determine if an 18 to 24-month intervention delivered by community health workers (CHWs) can achieve directionally appropriate changes in BMI in underweight and overweight/obese nulliparous adolescent girls.
- The unit published 131 peer-reviewed publications in 2020.
- 5 PhD and 3 Masters students graduated in 2020.
- Professor Shane Norris was elected as a Fellow of the African Academy of Sciences.
- Associate Professor Catherine Draper was promoted to Reader.
- Dr Alessandra Prioreshi received a Wellcome Trust International Training fellowship for her study entitled "Interactive play: a strategy to improve nurturing care and movement behaviours for infants".
- Various DPHRU researchers have contributed to local policies to

enhance research translation.

These include:

- Associate Prof Lisa Micklesfield was a member of the Core Writing Group that wrote Policy Brief: Physical Activity for Health in Africa: Guidance during and beyond the COVID-19 pandemic which was published by the African Physical Activity Network (AFPAN) in September.
- Associate Prof Catherine Draper was one of the co-authors who wrote Policy Brief: Physical activity for children during COVID-19 which was published by Developing Research Innovation, Localisation and Leadership (DRILL) at the University of KwaZulu-Natal in September.
- Prof Shane Norris was a co-author of the chapter, 'Food and nutrition security of the unborn child: The role of maternal nutrition' in South African Child Gauge 2020.
- Prof Shane Norris was the author of a peer-reviewed chapter, 'Ensuring healthier trajectories that start in early life to assist non-communicable disease prevention in Africa: A life-course approach' in Health in Transition: Translating developmental origins of health and disease science to improve future health in Africa published by the Stellenbosch Institute of Advanced Studies (StIAS).
- Dr Lisa Ware is a member of the South African stakeholder group (with WHO, Heart and Stroke Foundation, NDoH, national and international academic experts) to assess the impact of sodium legislation on SA population salt intake and blood pressure [2015 to date].
- DPHRU affiliated researcher, Prof Heidi van Rooyen, is a member of the Ministerial Advisory Committee

on Covid-19, appointed in September 2020.

2020 High Impact Unit Publications by DPHRU Authors

- Barnabas, R. V., Szpiro, A. A., van Rooyen, H., Asimwe, S., Pillay, D., Ware, N. C., Schaafsma, T. T., Krows, M. L., van Heerden, A., Joseph, P., Shahmanesh, M., Wyatt, M. A., Sausi, K., Turyamureeba, B., Sithole, N., Morrison, S., Shapiro, A. E., Roberts, D. A., Thomas, K. K., Celum, C. (2020). Community-based antiretroviral therapy versus standard clinic-based services for HIV in South Africa and Uganda (DO ART): A randomised trial. *The Lancet Global Health*, 8(10), e1305–e1315. [https://doi.org/10.1016/S2214-109X\(20\)30313-2](https://doi.org/10.1016/S2214-109X(20)30313-2) Impact factor 21.597
- Ceballos, F. C., Hazelhurst, S., Clark, D. W., Agongo, G., Asiki, G., Boua, P. R., Xavier Gómez-Olivé, F., Mashinya, F., Norris, S., Wilson, J. F., & Ramsay, M. (2020). Autozygosity influences cardiometabolic disease-associated traits in the AWI-Gen sub-Saharan African study. *Nature Communications*, 11(1), 5754. <https://doi.org/10.1038/s41467-020-19595-y> Impact factor 12.121
- Cluver, L. D., Rudgard, W. E., Toka, E., Zhou, S., Campeau, L., Shenderovich, Y., Orkin, M., Desmond, C., Butchart, A., Taylor, H., Meinck, F., & Sherr, L. (2020). Violence prevention accelerators for children and adolescents in South Africa: A path analysis using two pooled cohorts. *PLOS Medicine*, 17(11), e1003383. <https://doi.org/10.1371/journal.pmed.1003383> Impact factor 10.5

- Levis, B., Negeri, Z., Sun, Y., Benedetti, A., Thombs, B. D., DEPRESSION Screening Data (DEPRESSD) EPDS Group [including: RoCHAT T.J.] (2020). Accuracy of the Edinburgh Postnatal Depression Scale (EPDS) for screening to detect major depression among pregnant and postpartum women: Systematic review and meta-analysis of individual participant data. *BMJ*, Epub. <https://doi.org/10.1136/bmj.m4022> Impact factor 30.233
- McCormack, V., McKenzie, F., Foerster, M., Zietsman, A., Galukande, M., Adisa, C., Anele, A., Parham, G., Pinder, L. F., Cubasch, H., Joffe, M., Beaney, T., Quresma, M., Togawa, K., Abedi-Ardekani, B., Anderson, B. O., Schüz, J., & dos-Santos-Silva, I. (2020). Breast cancer survival and survival gap apportionment in sub-Saharan Africa (ABC-DO): A prospective cohort study. *The Lancet Global Health*, 8(9), e1203–e1212. [https://doi.org/10.1016/S2214-109X\(20\)30261-8](https://doi.org/10.1016/S2214-109X(20)30261-8). Impact factor 21.597
- Wandai ME, Aagaard-Hansen J, Manda SO, Norris SA. Transitions between body mass index categories, South Africa. *Bull World Health Organ*. 2020 Dec 1;98(12):878-885I
- Fung R, Villar J, Dashti A, Ismail LC, Staines-Urias E, Ohuma EO, Salomon LJ, Victora CG, Barros FC, Lambert A, Carvalho M, Jaffer YA, Noble JA, Gravett MG, Purwar M, Pang R, Bertino E, Munim S, Min AM, McGready R, Norris SA, Bhutta ZA, Kennedy SH, Papageorgiou AT, Ourmazd A; International Fetal and Newborn Growth Consortium for the 21st Century (INTERGROWTH-21st). Achieving accurate estimates of fetal gestational age and personalised predictions of fetal growth based on data from an international prospective cohort study: a population-based machine learning study. *Lancet Digit Health*. 2020 Jun 23;2(7):e368-e375
- Neurodevelopment at Age 2 Years: Results From the INTERBIO-21st Newborn Study. *JAMA Pediatr*. 2021 Mar 1:e206087. doi: 10.1001/jamapediatrics.2020.6087. Epub ahead of print

CHILD MALNUTRITION - WOMEN'S HEALTH MUST BE PRIORITISED

8 March 2021 - Chantell Witten and Shane Norris

Malnutrition during the first 1000 days of life can cast a long shadow over a person's life.

When we think about nurturing healthy children, we need to adopt a life course approach to maternal nutrition. In other words, a woman's health for the benefit of herself and her child must be prioritised early in life.

We know that poor nutrition during pregnancy and infancy has long-term consequences for that generation of infants – malnourished mothers, birth malnourished infants. Health and nutrition during this critical window has far-reaching consequences and casts a long shadow of the increased risk of ill-health such as

diabetes, hypertension and cardiovascular disease.

At a public health level, good health, mainly through good nutrition, contributes to the economic productivity and development of society by decreasing the costs of ill-health and ensuring a good healthy workforce.

So how healthy are South Africa's children?

South Africa is classified as a middle-income country and has high per capita spending on health. Yet the nutritional status of South Africa's children is deteriorating. While the number of children going hungry has reportedly decreased, access



to energy-dense but low micronutrient-dense food is fuelling an increase in child overweight and obesity.

In 2018, 11% of children (2.1 million) lived in households that reported child hunger. More than a quarter (27%) of children in South Africa are stunted – the most common manifestation of malnutrition.

Children are eating too much poor nutrient quality food and too little of good nutrient quality food. This profile illustrates the concept of hidden hunger or poor nutrition-security and demonstrates the insidious corruption that malnutrition meets out on children's health and lives, now and into their futures.

If the country wants to change this, it needs to implement health and nutrition policies in girlhood and in the teen years.

Our paper, written for an annual status report on South Africa's children produced by the Children's Institute at the University of Cape Town, argues that a child-centric food systems would reap benefits for society and for future generations. This food system would need to focus on food security and good nutrition. It would require multisectoral changes to the food system as well as the way in which healthcare services work.

The risks and mitigation strategies

Women who are either overweight or obese before conceiving a child or gain excessive weight during pregnancy are more likely to develop gestational diabetes. These women are also at higher risk of developing diabetes after childbirth. And babies born to women who are obese are more likely to be born large for their age and are at higher risk of being an obese child.

The mother's weight isn't the only poten-

tial risk to a child. When pregnant women experience nutrient deficiencies, it also affects the baby. For example, iron deficiency in pregnancy has negative effects on the development of the foetus's brain.

Nutrient deficiencies also contribute to the high incidence of noncommunicable diseases in low- and middle-income countries.

The International Federation of Gynaecology and Obstetrics has set out some helpful guidelines for policy makers. These call for:

Increased awareness of the impact of women's nutrition on their health and the health of future generations.

Greater attention to the links between poor maternal nutrition and increased risk of later non-communicable diseases in the offspring as a core component of meeting global health goals. Action to improve nutrition among adolescent girls and women of reproductive age.

Public health measures to improve nutritional education, particularly for adolescents, girls and young women.

Greater access to preconception services for women of reproductive age to assist with planning and preparation for healthy pregnancies and healthy children.

In addition, we argue that the government needs to adopt a comprehensive package of interventions that extends social assistance to pregnant women to improve their nutrition and mental health, and the health, care and development of their children. For example, the child support grant could start in preg-

nancy.

This package of interventions could prioritise food and nutrition at every point of contact for a mother and her infant.

South African policy is moving forward along these lines but policies need to be accelerated.

The interventions would be delivered beyond health and would require a multi-sectoral approach to ensure the optimal health and development of children from birth to age two years or older. This would also need to include early child development programmes which have seen a steady increase in utilisation over the past few years.

Healthy growing children are not only a moral and legal obligation but children remain a sustainable investment into a country's future. To achieve this South Africa can draw lessons from other countries such as Brazil, Rwanda and Bangladesh. All have prioritised child nutrition and have reduced childhood stunting. Healthier children are healthier parents.

These countries have prioritised child nutrition by investing in general public nutrition literacy campaigns and have enforced legislation to protect children from the marketing of unhealthy foods. They have also ensured the scale up and implementation of a proven set of evidenced based interventions like maternity protection, promotion and protection of breastfeeding and the promotion and support for affordable localised diversified diets.

Chantell Witten, Lecturer, University of the Free State and Shane Norris, Director, DSI-NRF Centre of Excellence in Hu-

man Development, University of the Witwatersrand. This article is republished from *The Conversation* under a Creative Commons license. Read the original article:

<https://theconversation.com/south-africa-needs-to-change-direction-on-maternal-health-to-solve-child-malnutrition-155493>

WITS JOURNAL OF CLINICAL MEDICINE

The Wits Journal of Clinical Medicine is a peer-reviewed, Open Access scientific research journal published triennially, and was established to provide a forum to showcase scientific research from the School of Clinical Medicine at the University of Witwatersrand, Johannesburg as well as from other institutions nationally and internationally. Please note that Volume 3, Number 1, March 2021 is now available online.

The Wits Journal of Clinical Medicine is now PUBMED Central accredited!

Submissions are welcomed and the journal has a particular focus to encourage clinical and translational research especially from new academics, including students, registrars, fellows and junior consultants.

The Wits Journal of Clinical Medicine also provides a space where the various Departmental Research Day abstracts can be shared.

WJCM publishes original papers, review papers, case reports and letters to the editor. Send your manuscript to: rita.kruger@wits.ac.za

For more information, visit the official website of the journal: <https://journals.co.za/content/journal/wicm>

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Prof Pravin Manga
(Editor)



March 2021

Volume 3 Number 1

UPCOMING EVENTS

SCHOOL OF CLINICAL MEDICINE

BIENNIAL RESEARCH DAY

DATE: 30 SEPTEMBER 2021

TIME: 07:30 – 18:00

VIRTUAL/HYBRID MEETING

KEY NOTE SPEAKERS

ORAL PRESENTATIONS

POSTER SESSIONS

GREAT PRIZES

CPD POINTS

SAVE THE DATE

CALL FOR ABSTRACTS TO FOLLOW IN MAY 2021



SOCM MEETING DATES

Head of Department meeting

Date	Time	Venue
08/06/2021	15h00	Microsoft teams
06/07/2021	15h00	Microsoft teams
17/08/2021	15h00	Microsoft teams
14/09/2021	15h00	Microsoft teams
05/10/2021	15h00	Microsoft teams
09/11/2021	15h00	Microsoft teams

SOCM EXCO Committee meeting

Date	Time	Venue
14/07/2021	13h00	Microsoft teams
08/09/2021	13h00	Microsoft teams
17/11/2021	13h00	Microsoft teams

SOCM Transformation Committee Meetings

Date	Time	Venue
20/05/2021	14h00	Microsoft teams
22/07/2021	14h00	Microsoft teams
23/09/2021	14h00	Microsoft teams
25/11/2021	14h00	Microsoft teams

SOCM HR & Finance Committee Meetings

Date	Time	Venue
26/05/2021	10h30	Microsoft teams
23/06/2021	10h30	Microsoft teams
28/07/2021	10h30	Microsoft teams
25/08/2021	10h30	Microsoft teams
29/09/2021	10h30	Microsoft teams
27/10/2021	10h30	Microsoft teams
24/11/2021	10h30	Microsoft teams

SUBMISSION OF CONTENT

The newsletter will be published bimonthly and we welcome all content, staff (academic & professional) achievements, profiles, and student events and achievements. Photos are always welcome. Should you wish to submit any content for publication, kindly send it to: Rita.Kruger@wits.ac.za by 31 May 2021. (Please note that due to space restrictions content may be edited)