HUMAN AND SOCIAL DYNAMICS (HSD) RESEARCH SEMINAR SERIES

FOOD, NUTRITION, AND CARE SECURITY DURING THE FIRST 1,000 DAYS

SEMINAR REPORT

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science & technology
Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA

HSRC
Human Sciences
Research Council

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ABBREVIATIONS

ARVs	Anti-retrovirals
ASSAF	Academy of Science of South Africa
DAFF	Department of Agriculture, Forestry and Fisheries
DBE	Department of Basic Education
DHS	Demographic and Health Survey
DOH	Department of Health
DST	Department of Science and Technology
ECD	Early Childhood Development
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome
HSRC	Human Sciences Research Council
IYCF	Infant and Young Child Feeding
MNCH&N	Maternal, Newborn, Child and Women's Health and Nutrition (Dashboard)
MRC	Medical Research Council
NDP	National Development Plan
NGO	Non-Governmental Organisation
NHI	National Health Insurance
RMCH	Reducing Maternal and Child Health
SAM	Severe Acute Malnutrition
SANHANES-1	South African National Health And Nutrition Examination Survey
STIs	Sexually Transmitted Infections
TB	Tuberculosis
UNICEF	United Nations Children's Fund

EXECUTIVE SUMMARY

The Department of Science and Technology (DST) and the Human Sciences Research Council (HSRC) hosted a research seminar on *Food, Nutrition and Care Security during the First 1,000 Days* in Pretoria on 27 March 2015. The research seminar aimed to assess the situation of South African women and their children during the first 1,000 days and to map a way forward for new or improved interventions designed to address their care and nutritional status.

The seminar focused on three areas during the first 1,000 days:

- An overview of health programmes addressing malnutrition, including the key findings of the South African National Health And Nutrition Examination Survey (SANHANES–1);
- Food security and nutrition, which covered a range of topics from under-nutrition and obesity, factors influencing infant and young child feeding, and the status in South Africa of childcare in the first 1,000 days; and finally,
- A panel discussion focusing on care and effective interventions.

More than 84 registrations were received from a wide range of stakeholders that included representatives from national government departments (Health, Basic Education, Social Development, Science and Technology, Correctional Services); research councils (HSRC and the Medical Research Council); provincial, district and municipal health departments; NGOs (UNICEF, READ, Save the Children, ASSAF), universities (Northwest, Stellenbosch, Cape Town, Witwatersrand, Pretoria); as well as a delegation from Botswana.

The seminar was facilitated by Prof. Labadarios (HSRC) who also presented the findings of the SANHANES-1 survey and an overview of obesity in children and teenagers. Presentations were made by Dr Yogan Pillay (National Department of Health) on South Africa's Health Programmes to address malnutrition; Prof Dhansay (University of Stellenbosch) on preventing malnutrition, and Ms Lisanne du Plessis (University of Stellenbosch) on IYCF (infant and young child feeding). The final speaker, Prof Haroon Saloojee (University of the Witwatersrand), presented an overview of what constitutes child care, how it can be measured and what is required to move the national agenda forward.

The National Department of Health (DOH) presented an overview of its programmes and the proposed strategic directions regarding nutrition that it will take forward. The current Severe Acute Malnutrition (SAM) in-patient guidelines will be updated with the latest WHO 2013 Technical Updates. The capacity of all health workers on the promotion and support for the continuum of breastfeeding from 0-2 years will be strengthened. A policy and implementation plan for Overweight and Obesity across the continuum will be developed, underpinned by a human resource structure for nutrition programming with an accountability framework. Finally, the relevance of Vitamin A supplementation in the context of food fortification programmes will be reviewed. Specific actions now underway include the implementation of MomConnect, a mobile-based programme to provide information to about 330 000 pregnant women. There is an increased focus on severe acute malnutrition (SAM), with in-hospital and upstream interventions. The DOH is piloting "three feet plans" (detailed delivery plans) to strengthen implementation of interventions at the local level to determine how data can be used at the local level to change behaviours, and how to provide improved feedback to these levels. Partnerships have been established with NGOs to gather data on what is being spent on newborn nutrition and what should

be invested. Work has commenced on an investment case for Maternal, Neonate, Child Health & Nutrition (MNCH&N) so that the DOH can make decisions on what needs to be invested and what interventions should be prioritised.

An overview was provided of the institutional arrangements and organisational structures in place to support the Food Security and Nutrition Implementation Plan. Specific mention was made of the Food Security Agency, the roles of the National and Provincial Food Security Fora, and the Core Departments that report into the Ministers comprising the Social Cluster.

Highlights from the SANHANES-1 survey focussed on the prevalence of feeding practices in the first 1,000 days, particularly breastfeeding and the introduction of solid foods. Data on the prevalence and treatment of diarrhoea and respiratory diseases in children were described. The awareness of adults regarding what constituted healthy eating and drinking was examined as were the nutritional behaviours of older children. South African results show that about the same proportion of older children are trying to lose or gain weight.

Undernutrition is responsible for 45% of deaths of children younger than five years, amounting to more than three million deaths each year. In South Africa, compared to the previous national survey in 2005, the SANHANES data showed that there has been a slight increase in stunting in the first three years of life, but a clear decrease in wasting and underweight among children under five years of age. The policy implications of the SANHANES results are clear; nutrition-specific (addressing the immediate causes of undernutrition) and nutrition-sensitive interventions (addressing the underlying and basic causes of undernutrition) are needed to address the dual problems of stunting and the rapidly rising trend of overweight and obesity among children in South Africa. Attention should be given to care during and even before pregnancy, as well as during the first 1,000 days. The government's National Development Plan 2030 proposes to introduce a nutrition programme for pregnant women and young children. Investing in the nutrition of the population will lead to long-term benefits for the country, but will require multisectoral partnerships to reduce malnutrition and accelerate efforts for children to thrive.

The SANHANES data points to the fact that overnutrition and obesity start early in life but have long-term health effects. Obesity has increased worldwide and is becoming as much of a problem as undernutrition. In contrast, there have been improvements globally in the prevalence of stunting. Obesity is more prevalent in girls and women, and overall underweight adults (male and female) are disappearing. The problem of childhood obesity cannot be separated from that of the mother, and the increase in female obesity has to be considered in the development of short- and long-term strategies for the first 1,000 days.

The literature shows that the combination of early stunting and adolescent obesity may be an explosive combination and cannot be ignored. Overweight 2-5 year olds were four times more likely to become fat adults as were children with a BMI lower than the 50th percentile. Pregnant and overweight mothers are more prone to hypertensive disorders, gestational diabetes, respiratory complications, thromboembolic events and premature labour. An obese mother has an impact on foetal and newborn life as more complications arise. South African data show that stunting has been consistently pegged at 20+% since 1994 but Vitamin A and iron deficiency has improved and food-secure households have

grown from 19.8% (2005) to 45.6% (2012). Childhood obesity leads to a wide range of risks associated with adult obesity such as cardiovascular diseases and endocrinopathies. Mothers have not been given enough attention and a five pillar model for maternal psychosocial well-being was proposed. A draft policy on obesity is under development.

Environmental influences can impact on the mother's ability to feed her children optimally. These influences include the mother herself, the family, the community and the broader enabling environment. Using the Engesveen model the various environments were described. Grandmothers, fathers and healthcare workers may be regarded as the most influential role players in a mother's decision making about Infant and Young Child Feeding (IYCF). An evaluation of services to children under the age of five indicates many areas in need of improvement, including support and counselling for breastfeeding and complementary feeding. The role of the media as an important communication channel to the public should also be strengthened. From a political and policy perspective, three linked elements (knowledge and evidence, politics and governance, and capacity and resources) are pivotal in creating an enabling environment and to translate momentum into results for nutrition. Early indications from work done at national and local levels show that, apart from these elements, there are also five key factors to generate change, viz. local government capacity to deliver effective nutrition services; local politicians who care about nutrition and are empowered via decentralised budgets; timely data on malnutrition; nutrition funding channelled through one funding mechanism rather than fragmented funding streams; and earmarked and protected nutrition funding commitments and exploration of new revenue streams. The National Development Plan provides clear direction in terms of a vision for addressing malnutrition. This is a real opportunity to guide the various Inter-Governmental Relations (IGR) Fora on nutrition issues, including IYCF.

A ten-point definition of childcare in the first 1,000 days was described against South Africa's progress on the delivery of child care. A brief overview of the current status reveals that there is a high incidence of maternal death rates and high stillborn rates given that South Africa is a middle-income country. Low birth weight rates present at about 14%, of which the highest are in urban settings. Premature birth rates are not very different from other countries and asphyxia rates occur at 4 – 8 per 1,000, which is comparable with some developed countries. In terms of infection rates, South Africa is doing reasonably well, with syphilis occurring infrequently. Data on mother and father care are of major concern with more than 50% of children living with only a mother. Ten percent have neither a father nor a mother in the first two years of life, largely the influence of HIV which results in many single parents and no parents over time. Most children live in rural areas (54%) and one in eight children (0 - 2 years) live in informal settlements.

Birth registration has increased significantly, which may be attributed to the advantages in gaining access to grants. In terms of care, there was a dramatic decrease in infant mortality between 2009 – 2011, which can be attributed to the introduction of two new vaccines and ARVs. Poorer children are likely to live further from a clinic. The provision of child support grants, 12.5 million of the total of 18.5 million children, has been a highly effective mechanism to support children. Data should be treated cautiously as there are numerous problems with the data and the validity of the numerators and denominators.

The drafting of an Early Childhood Development policy in March 2015 can be seen as a milestone. The policy highlights activities in three areas, viz. those already in place; those that should be expanded or State-supported, and new services that are needed. Data also suggest that young children should be prioritised rather than older children or teenagers. The introduction of a pregnancy grant is proposed. A strong case is made for the rapid expansion of early learning, with parental support being a key component. An overarching Early Childhood Development (ECD) Agency is proposed with an emphasis on home and community based support. Other priorities include strategies to prevent stunting, and support for children with developmental difficulties and disabilities. More communication and public information is also needed about ECD. New recommendations include more attention to home and community-based support and the possible introduction of a pre-Grade R. Child care is a key component in the national agenda with the need to focus quality improvements and stronger implementation.

The research seminar concluded with a panel discussion and provided an opportunity for the seminar participants to address questions to the panel. The key points to emerge from the discussions were:

- Addressing malnutrition is important on the national agenda, but there needs to be a stronger move towards implementation.
- Overnutrition is becoming as much of a problem as undernutrition, and childhood overweight and obesity are cause for concern, not only because of the rising prevalence trends but also because of the longer-term consequences associated with it.
- The drafting of the Early Childhood Development Policy is an important step, and the audience was requested to provide inputs into the policy document.
- Stronger inter- and multisectoral collaboration and linkages are needed between the key players if the underlying causes and reduction of malnutrition are to be effected.
- An effective communications strategy should underpin the implementation of future strategies.
- Investments in early childhood nutrition could be seen as long-term drivers of growth and as an investment in economic growth. However, without sufficient and more streamlined funding for nutrition and related areas, many of the proposed strategies are unlikely to materialise.

The seminar closed with the screening of a video clip that highlighted the serious issues of overfeeding, bad eating habits and the importance of changing the eating behaviours and learning of children in their early years. The closing statement echoed one of the main conclusions of the workshop, that *"there is a huge problem of overfeeding."*

1. INTRODUCTION

This seminar forms part of the Department of Science and Technology (DST) Human and Social Dynamics (HSD) Research Seminar Series, which aims to:

- Disseminate scientific research findings and transmit a body of new knowledge through an interactive process of critical dialogue and collegial critique to the social sciences and humanities (SSH) research community and other interested actors in the National System of Innovation (NSI);
- Provide an avenue for rated and other researchers, including researchers from rural-based universities to engage in knowledge dialogues across faculties and with other interested actors in the NSI;
- Present and discuss new and ongoing research, identify research gaps, and suggest new research agendas in SSH with a view to forging closer links between the research communities in these fields;
- Reinforce the visibility of SSH research to the higher education and science council sector;
- Enhance wider public understanding of the SSH, including the value and status of both individual and team-based research; and
- Strategically promote, develop, and coordinate collaborative and interdisciplinary research within and between higher education institutions and science councils.

The aim of the current seminar was to focus on food, nutrition and care security in the first 1,000 days and to assess the situation of South African women and children during this period, covering both over- and under-nutrition and the implications of early-stage interventions on future obesity and health status. The seminar aimed to chart the way forward for new or improved interventions designed to address care and the nutritional status of women and their children.

The benefits to be derived from essential interventions to improve nutrition and care in the first 1,000 days are well known. Recommendations for action are provided in reports by the three inter-ministerial committees on maternal and child health: the National Committee on Confidential Enquiries into Maternal Deaths (NCCEMD), the National Perinatal Mortality and Morbidity Committee (NaPeMMCo) and the Committee on Morbidity and Mortality in Children under-five years (CoMMiC). However, many of these recommendations have not been adequately implemented, and South Africa continues to struggle with the quality of care for women and children, and with poverty and inequalities, which affect the quality of life in the first 1,000 days. Though maternal and child mortality estimates have improved in the last few years, particularly since 2008, there are still an estimated 3,000 maternal deaths and over 30,000 deaths of newborns and children every year. South Africa is unlikely to meet its MDG goals for reducing maternal and child mortality by the end of 2015 and new, improved interventions are required.[1]

[1] More background is provided in *Annexure 1*, the information sheet provided to seminar participants.

2. SEMINAR PROCEEDINGS

The seminar focused on three areas relating to food, nutrition and care security during the first 1,000 days:[2]

- An overview of health programmes addressing malnutrition, including the key findings of the South African National Health And Nutrition Examination Survey (SANHANES–1);
- Food security and nutrition, which covered a range of topics from under-nutrition and obesity, factors influencing infant and young child feeding, and the status in South Africa of childcare in the first 1,000 days; and
- A panel discussion focusing on care and effective interventions, during which seminar participants were given the opportunity to address questions to all the seminar speakers.

More than 76 participants attended[3] with representation from a wide range of stakeholders including national government departments (Health, Basic Education, Social Development, Science and Technology, Correctional Services); research councils (HSRC, Medical Research Council); provincial, district and municipal health departments; NGOs (UNICEF, READ, Save the Children, ASSAF), universities (Northwest, Stellenbosch, Cape Town, Witwatersrand, Pretoria); as well as a delegation from Botswana.

The seminar was facilitated by Prof. Demetré Labadarios (HSRC) and presentations were made by the following speakers:[4]

- Dr Yogan Pillay (National Department of Health) on South Africa's Health Programmes to address malnutrition;
- Prof Demetré Labadarios on the findings of the SANHANES-1 survey and an overview of obesity in children and teenagers;
- Prof Ali Dhansay (University of Stellenbosch) on preventing malnutrition;
- Ms Lisanne du Plessis (University of Stellenbosch) on infant and young child feeding (IYCF); and
- Prof Haroon Saloojee (University of the Witwatersrand) on what constitutes child care, how it can be measured and what is required to move the national agenda forward.

Due to illness, Mr Thami Ngwenya (Department of Social Development, National Development Agency) was unavailable to present his address on *Food Security - Policy and Implementation*. Dr Nonhlanhla Dlamini (Department of Health) participated in the final speaker panel discussion.

All presentations have been made available in electronic format and selected abstracts are provided in *Annexure 4*.

[2] See *Annexure 2* for the seminar programme
[3] See *Annexure 5* for the full list of participants
[4] See *Annexure 3* for biosketches of the speakers

INTRODUCTION AND WELCOME

Prof. Demetré Labadarios Executive Director, HSRC

Prof Labadarios welcomed the honoured guests, speakers and participants to the seminar and mentioned that more than 84 participants had registered for this important and topical subject. The intention of the seminar was to provide a bird's eye view of recent national data together with other evidence-based information which could assist in shaping the way forward and making progress in priority areas.

Session 1: Key findings of the SANHANES-1 and nutrition in the first 1,000 days

PRESENTATION 1: OVERVIEW OF THE STRATEGIC DIRECTION OF HEALTH PROGRAMMES IN ADDRESSING MALNUTRITION

Dr Yogan Pillay, Deputy Director-General: Strategic Health Programmes, Department of Health

Dr Pillay commenced his presentation by stating that much had been written about malnutrition, with many agencies working on the issue. Yet, implementation continues to be problematic.

> *"...around the world, roughly half of all child deaths can be attributed to malnutrition, with 3.1 million young children dying every year from related causes. Another nearly 200 million are chronically malnourished and suffer from serious, often irreversible, physical and cognitive damage. And all of this is preventable ".* [5]

The problem is global and occurs even in developed countries although predominantly in Africa and Asia. The problem has largely been solved in South and Latin America (excluding Guatemala), begging the question as to how countries with similar trajectories to South Africa have been able to link the various government and other initiatives in a seamless way.

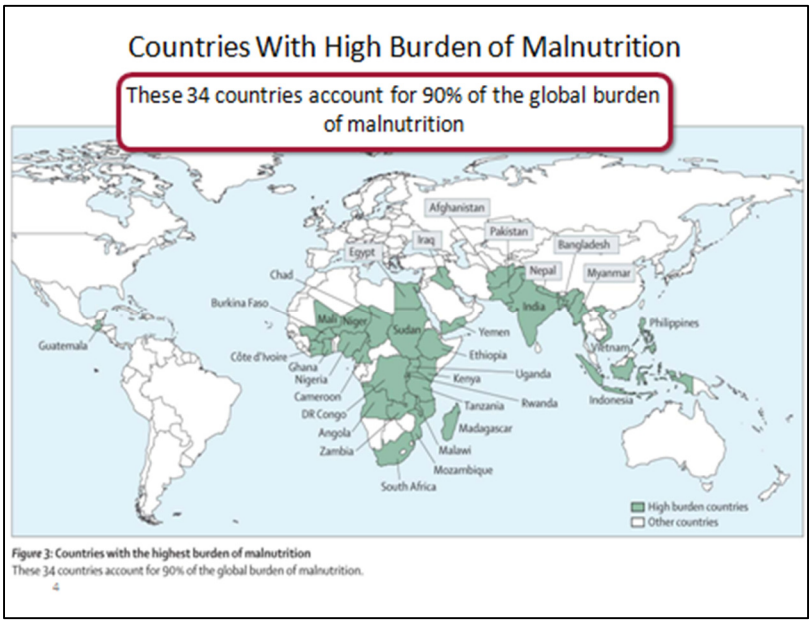


Figure 3: Countries with the highest burden of malnutrition
These 34 countries account for 90% of the global burden of malnutrition.

[5] World Food Program http://wfpusa.org/what-wfp-does/1,000-days

Reference was made to the already significant expenditure in health and education, with more than 16 million people having access to grants in South Africa.

An overview of the determinants of child nutrition, with causes and possible interventions, was presented and the speaker noted that it is known what needs to be done. However, the question is where the interventions should be directed and at what level. The Department of Health (DOH) has made the decision to focus on immediate causes, with seven areas targeted in the next five-year strategic plan, in support of the 2030 National Development Plan targets. These are not presented in any particular order:

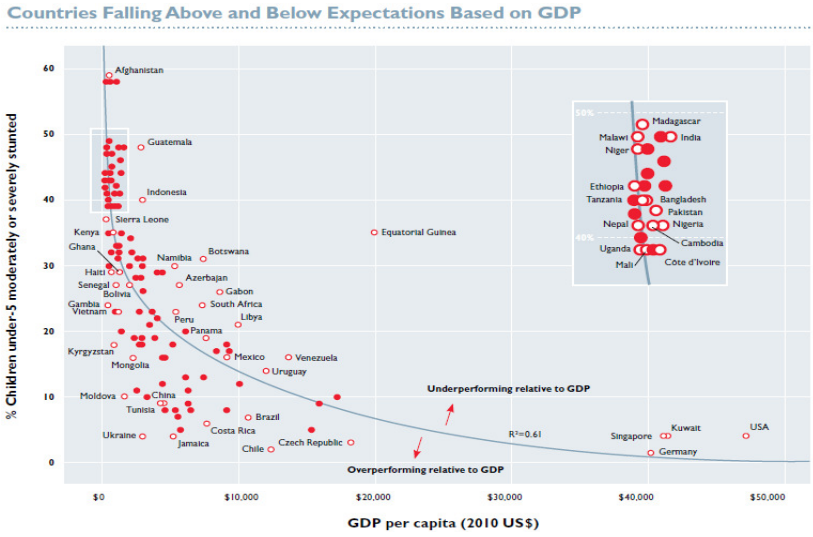
1. Achieve a life expectancy of 70 years.
   Currently the life expectancy is 62.3, with females having a higher life expectancy than males. Anti-retroviral treatment (ARVs) has, over the past three years, resulted in an increase of three years which is a significant achievement.
2. Reduce the under-five mortality to at least 30 per 1,000 live births (currently at 41 per 1,000).
3. Reduce infant mortality to at least 20 per 1,000.
4. Reduce maternal mortality to 38 per 100 000.
   Accurate data are not available but current levels are estimated at about 197, with an estimated value of about 300 in 2009.
5. Produce an HIV-free generation by 2030.
   In 2012, maternal-child transmission was 2.6% as compared to 8% in 2008.
6. Implement universal health coverage through the deployment of a National Health Insurance System.
7. Address the social determinants of health.

In order to leapfrog implementation of these key deliverables, the DOH has put in place six actions:

- Mobilise the use of technology in improving service delivery, e.g. through the use of mobile technology;
- Change the way in which business operations and processes are implemented;
- Change behaviours (possibly the most difficult to achieve);
- Doing things at speed - South Africa does not have time to take 120 years (as in countries such as Austria);
- Doing it affordably and using resources more efficiently; and
- The need to scale up and move beyond small projects and pilots.

South Africa is not positioned where it wants to be, even in relation to the BRICS countries. Ideally, South Africa should be comparing itself to those who are better positioned, e.g. Brazil and China.

Save the Children has highlighted six low-cost nutrition interventions, at a cost $20 per child for the first 1,000 days, which if scaled up globally could prevent more than two million mother and child deaths each year - iron folate supplementation, breastfeeding, complementary feeding, Vitamin A, zinc and hygiene. Nearly one million lives could be saved by breastfeeding alone.



As example, the speaker referred to the fact that the sole South African company producing iron folate was deregistered and therefore there is currently no local production.

In 2013 the University of the Witwatersrand was requested to make recommendations on the most effective ways of achieving the Millennium Development Goals (MDGs). Sixteen interventions were identified.

By 2015, 16 interventions could save 18,000 maternal and child lives

Maternal lives saved =1559		Child lives saved =16,661	
1	Labour and delivery management**	1	Promotion of breastfeeding
2	Early detection/ treatment of HIV	2	Hand washing with soap
3	TB management in pregnant women	3	Therapeutic feeding - for severe
4	MgSO4 - for pre-eclampsia	4	Antenatal corticosteroids for preterm
5	Clean birth practices	5	Water connection in the home
6	Hypertensive disease case management	6	KMC - Kangaroo mother care
		7	Labour and delivery management**
		8	PMTCT
		9	Case management of severe neonatal infection
		10	Oral antibiotics : case management of pneumonia in children
		11	Appropriate complementary feeding

Both the Wits and Save the Children recommendations are achievable but the speaker questioned why South Africa is struggling to deal with the "how" despite understanding the "what". The speaker continued by providing an overview of DOH activities:

Firstly, the DOH has developed two dashboards that are produced quarterly with data provided monthly through the District Health Information System. An example of the Gauteng MNCH&N (Maternal, Newborn, Child and Women's Health and Nutrition) dashboard was provided. Similar dashboards are produced for TB, STIs and HIV/AIDS. Trend analysis is used to show where targets have been met. Sadly, this data is little-used and should be filtered down to programmes in communities and households.

- A Nutrition Roadmap for South Africa was produced in 2013, although it appears that this has not been communicated sufficiently and few are aware of its existence.
- In 2012 an MNCH&N Strategy was launched, which was recently reviewed by a UNICEF-led team of specialists tasked to provide recommendations.
- The Save the Children six high-impact priorities are being implemented as is the Tshwane Declaration on Breastfeeding. The Northern Cape has shown a significant increase in breastfeeding and UNICEF is investigating the reasons for this success so that it can be scaled up.
- The programme on contraception and family planning has been strengthened to, amongst others, reduce teenage pregnancies and unwanted pregnancies.

The programme review also proposed six-high-level recommendations:

- Update the current Severe Acute Malnutrition in-patient guidelines with the latest WHO 2013 Technical Updates.
- Build the capacity of all health workers on the promotion and support for the continuum of breastfeeding from 0 to 2 years.
- Develop a policy and implementation plan for Overweight and Obesity across the continuum.
- Develop a Human Resources structure for nutrition programming, with an accountability framework, especially in view of the current DOH/HPCSA deliberations on mid-level workers for nutrition. The current Nutrition Directorates will be split so that all child-related nutrition will be dealt with in one Directorate (under Dr Dhlamini).
- Review the relevance of Vitamin A supplementation in the context of food fortification programmes.

Specific recommendations were made regarding nutrition, and the following actions have been taken:

- MomConnect is a mobile-based programme to provide information to about 330 000 pregnant women. This has resulted in the receipt of complaints about poor antenatal care and poor service in labour wards, together with compliments about the usefulness of the text-messaging service.
- There is an increased focus on severe acute malnutrition (SAM), given its high rate, with in-hospital and upstream interventions. This is particularly important in light of the late referrals of sick children, poor assessments at district hospitals and poor management.
- The DOH is piloting "three feet plans"[6] to strengthen implementation of interventions at the local level. Pilots are being conducted in the Nelson Mandela, OR Tambo and Waterberg Districts to determine how data can be used at the local level to change behaviours, and how to provide improved feedback to these levels.
- Partnerships have been established with NGOs, e.g. RMCH/DFID; Windows of Opportunity/PATH; World Vision; AMREF; Health Systems Trust; UNICEF, to gather data on what is being spent on newborn nutrition and what should be invested.
- Work has commenced on an investment case for MNCH&N so that the DOH can make decisions on what needs to be invested and what interventions should be prioritised.

Lastly, the seminar participants were requested to provide inputs into the Draft Policy Implementation Plan on Food and Nutrition Security under development by the Department of Agriculture, Forestry and Fisheries (DAFF).

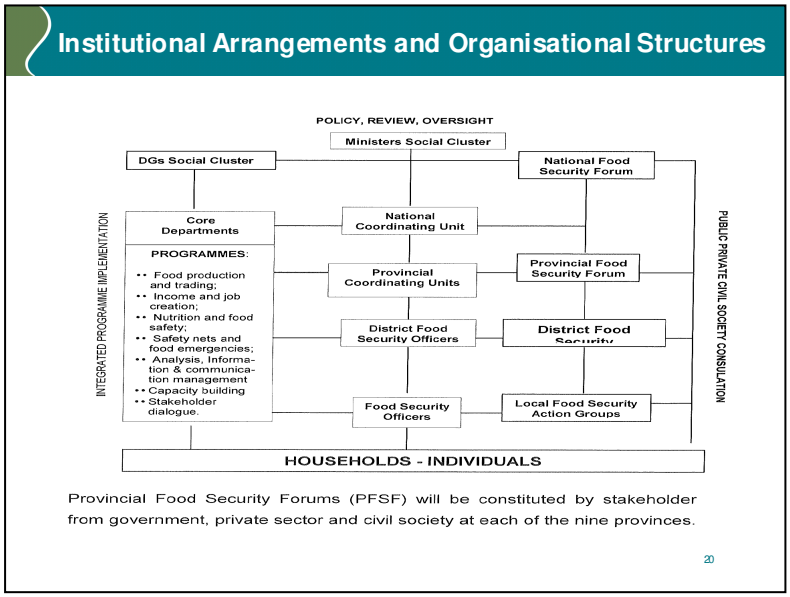
In conclusion, the speaker stated that the DOH was concerned about high rates of malnutrition in South Africa and expressed the need for a more robust intersectoral approach that would "connect the dots". The knowledge exists to determine what needs to be done globally and locally, and the DOH is committed to strengthening programming around nutrition, especially maternal and child nutrition. Partnerships are seen as the key to reducing malnutrition and strengthening health in the first 1,000 days.

[6] A three-feet plan refers to a detailed delivery plan (as opposed to a high-level plan with little detail viz. a 30 000 feet plan)

PRESENTATION 2: FOOD SECURITY - POLICY AND IMPLEMENTATION

Prof Labadarios on behalf of Mr Thami Ngwenya, Executive: Research and Development, National Development Agency, Department of Social Development

The speaker focused on a single slide representing an overview of the institutional arrangements and organisational structures in place to support the Food Security and Nutrition Implementation Plan, and indicated that the proposed structure was that of the Department of Social Development (DSD). Specific mention was made of the Food Security Agency, the roles of the National and Provincial Food Security Fora, and the Core Departments that report into the Ministers comprising the Social Cluster. Reference was made to Dr Pillay's presentation which pointed to the need for a more intersectoral approach.

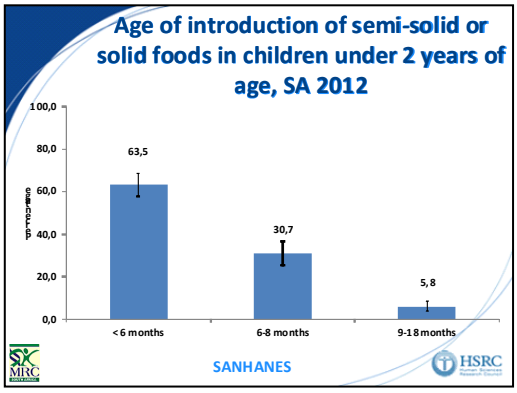


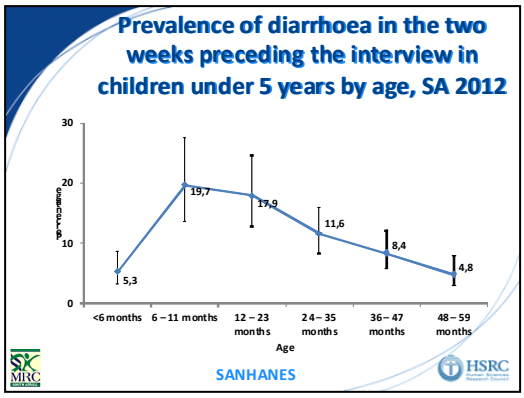
PRESENTATION 3: THE PAST AND THE PRESENT - SANHANES IN THE CONTEXT OF THE FIRST 1,000 DAYS

Prof. Demetré Labadarios Executive Director, HSRC

The speaker introduced his presentation by comparing infant feeding results from the 2003 DHS (Demographic and Health) Survey and the 2012 SANHANES Survey. Despite the larger sample in the latter, the results for breastfeeding had not improved much during this period. The speaker also expressed concern about the representivity of the data.

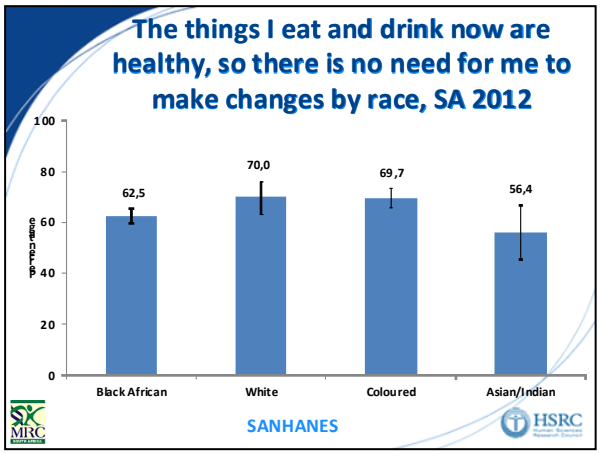
Of children between 12 – 14 months, only 35 % were still being breastfed. 63% had been introduced to solid foods before the age of six months, despite the cut-off age for exclusive breastfeeding set at that age. The most prevalent solid food under two years of age is commercial or homemade porridge.





The prevalence of diarrhoea rises, as expected, from 6 – 11 months, with about 5% incidence at 48 – 59 months. The highest prevalence of diarrhoea (10%) was found in rural informal areas, with the main forma of treatment being a homemade sugar-salt solution, even in urban formal areas.

The SANHANES study also examined the prevalence of respiratory diseases in children under five years of age. Respiratory disease, defined in this case as persistent coughing and /or fever for a period of two weeks, showed a peak between 24 and 35 months. The majority (more than 60%) received treatment through the public sector. The survey also included results on older children (10 – 14 years), and particularly dietary behaviour. The data indicate that the overwhelming majority of children are willing and susceptible to listening and changing their dietary habits.

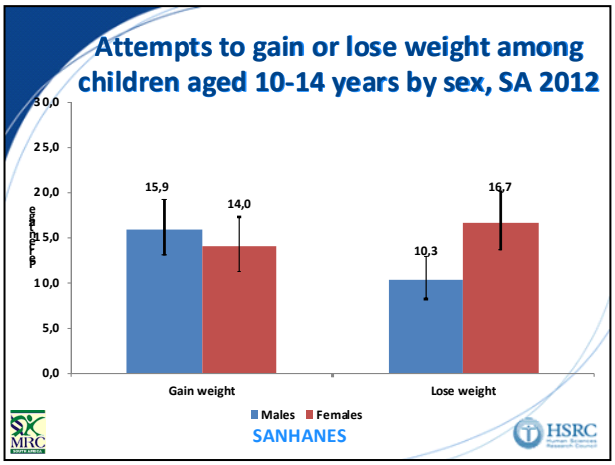


When adults were surveyed, there was a perception/belief across all race groups of what constituted healthy eating and drinking. However, the same group showed a prevalence for hypertension (35.5%) and diabetes (10.5%, and 9.1% in whom diabetes needed to be excluded), 23.9% were overweight and 26.4% were obese. These results do point to challenges that need to be addressed.

The survey also looked at the behaviour of older children, which revealed the following:

- 34% of children do not have food to eat for breakfast;
- 50% of children do not take lunchboxes to school, of which 30% have nothing to put in their lunchboxes;
- 50% take money to school every day and the other half at least 2 -3 times per week.

The speaker closed the session with a slide on attempts by older children to lose or gain weight. The results show that about the same proportion are trying to lose or gain weight. This could relate to body image distortions found in South Africa where the very thin and the very fat are recognised but not much else in-between.



Dr Pillay and Prof Labadarios closed Session 1 by answering questions from the audience.

Comments #1[*unknown & Ms Chantal Witten*]:

- It is important to understand what countries in Latin and South America have done. There is a need to unpack what is happening in Brazil, for example, where accountability lies with the NGOs, represented at the government's side.
- The SANHANES data was interesting, but very diverse and this results in dilution and difficulty in "joining the dots". Questions also need to be asked of mothers about why they have not changed their behaviours.

Responses [*Dr Pillay & Prof Labadarios*]:

- Despite being a democracy there is a need to get things done and to hold people accountable. Rwanda was held up as an example where things are being achieved. Data are important in showing what is being done correctly and what is not working. Data could be used to hold people accountable.
- The purpose of the wide range of data presented was to provide an introduction to the first 1,000 days since not everyone is aware of what this entails.
- Regarding breastfeeding behaviour, the problem lies in lack of funding to analyse the data. There are many surveys but the data have not been fully analysed.

Comments and Questions 2# [*unknown*]:

- What is the status of the NHI? What is being done about problems at local hospitals?
- How is the system in school going to be improved to deal with the problem of teenage pregnancies?
- How can the Department of Agriculture support food security through local cooperatives?

Responses #2 [*Dr Pillay*]

- NHI issues are complicated and a White Paper is being finalised. Firstly, there are many financial 'pots' which have to be considered – the public health sector, provinces, local authorities and other national government departments. This fragmentation reduces the ability to achieve economies of scale. In addition, the private sector has more than 90 medical aid schemes. The second component is to change the service delivery platform and to integrate the public and private sectors. In 2012, 11 NHI pilots were initiated but these focus only on the public sector. Overall, there is a fourteen-year trajectory to roll out the system.
- Patients are becoming more aware of their rights and more complaints are being received. In the case of MomConnect, it is possible to identify a facility and health provider, which allows for the interventions to take place with provincial focal points.
- Teenage pregnancies are a concern – there is a slow decrease but in turn there is also increased reporting. The intention is for DOH to work with the Departments of Basic Education and Social Development to strengthen school education on sex and reproductive health and to target Grade 4 girls, with further interventions in Grades 8 and 10. The intention is to offer contraception at schools by working with the Department of Basic Education.
- Regarding food security, Kwazulu Natal has adopted an interdepartmental approach in their *Operation Sukuma Sakhe* (stand up and make a difference). At the local level this includes setting

up small community-based weighing, growth monitoring, addressing food security issues as well as HIV interventions.

Comments & Questions #3 [*Dept of Education representative*]:

- Some government interventions were omitted in the presentation. For example, the national school nutrition programme is geared at the poorest of the poor schools, providing a meal a day to over 9 million learners.
- Is there enough capacity to monitor fortification and to monitoring manufacturers?

Responses #3 [*Prof Labadarios & Dr Pillay*]

- The seminar presentations will at a later stage touch on meal patterns.
- There is no capacity to monitor fortification, despite the legislation in place which requires this to take place.

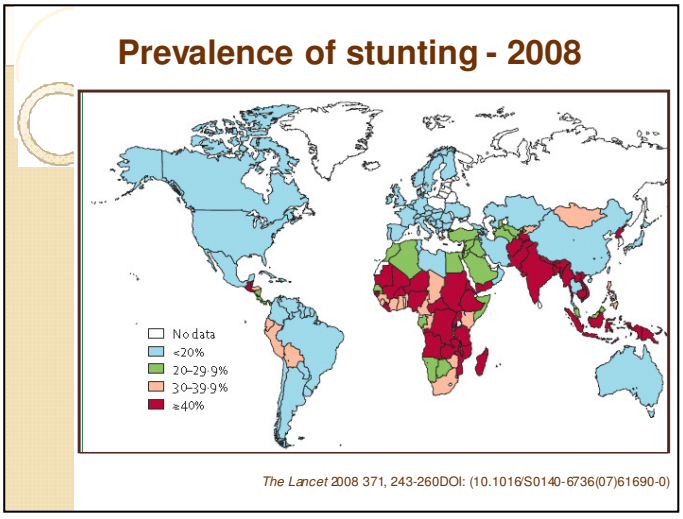
Session 2: Food security and nutrition in the first 1,000 days

Chair: Dr Lumbwe Chola, HSRC
Dr Chola opened the second session after the break by defining the concept of 1,000 days, the period between pregnancy till 1,000 days (+2 years), after which the next speaker was introduced.

PRESENTATION 4: PREVENTING UNDERNUTRITION IN CHILDREN – A MORAL IMPERATIVE AND AN EFFECTIVE INVESTMENT

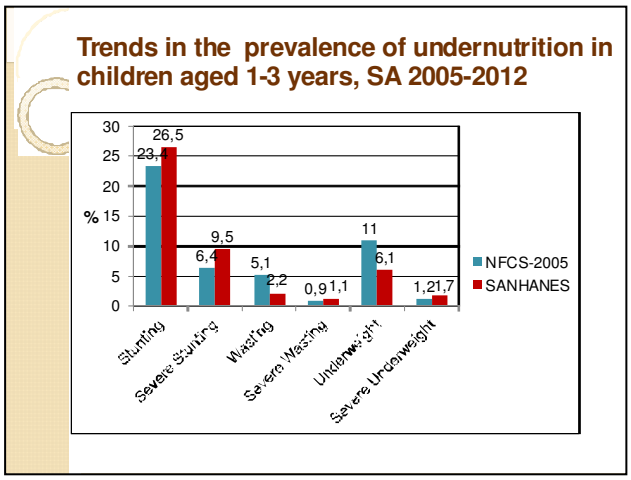
Prof. M A Dhansay, South African Medical Research Council; Division of Human Nutrition and Department of Paediatrics and Child Health, Stellenbosch University

In introducing his presentation, the speaker touched on the importance of the moral imperative, ethics and professional integrity in addressing undernutrition in children. He also emphasised the importance of context and taking local nuances into consideration. Undernutrition requires attention because it is associated with 45% of child deaths, resulting in 3.1 million deaths annually. In 2011, at least 165 million children younger than five years showed stunted growth, the main indicator for undernutrition. Poor nutrition during the first 1,000 days after conception leads to irreversible consequences such as stunted growth and



impaired cognitive (and non-cognitive) development.

The World Health Assembly has set global nutrition targets for 2025, with a 40% reduction of the global number of children below 5 years who are stunted, a 30% reduction of low birth weight and no increase in childhood overweight. According to 2008 data, South Africa shows a prevalence of 30 – 39% in stunting, whereas the UNICEF Global Nutrition Survey (2009 – 2013) shows that no data are available. There are therefore questions about the data integrity.

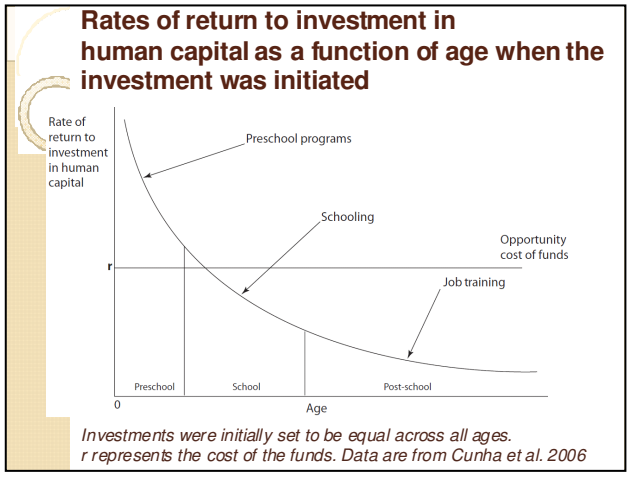


A comparison of data from the 2005 NFCS and SANHANES Survey shows an increase in stunting prevalence from 23 to 26.5%. Of interest is the decrease in the underweight figure.

The presentation provided examples from other countries (Ghana, Bolivia, Brazil and India) where declines in stunting were achieved. For example, Ghana achieved a decline from 35% (2003) to 28% in 2008 through addressing agriculture, IYCF and having a stable political environment. In the Maharashtra State of India a 'whole-of-government' approach was adopted which resulted in a decline from 44 to 22.8% between 2005 and 2012.

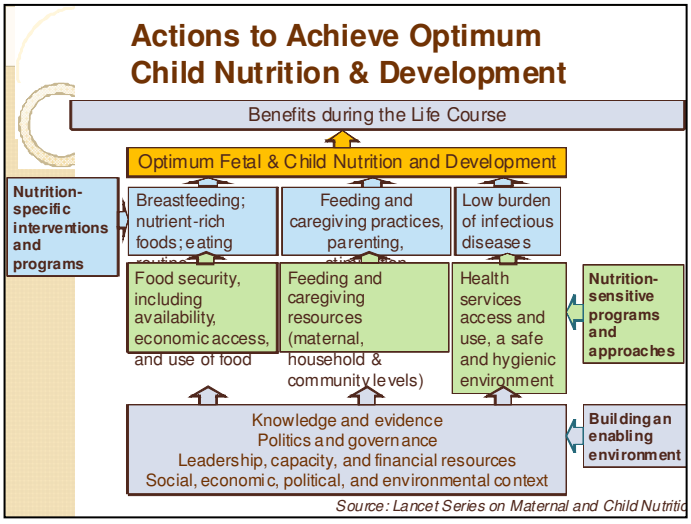
The question was asked whether an investment in nutrition is worthwhile, and whether this should be a focus for South Africa. Further, environmental factors and the large inequality in South Africa cannot be ignored, nor can the need for coordination due to the multisectoral nature of the problem.

Data were presented which illustrate that the Return on Investment is greater the earlier the investment is made, and is greatest when preschool programmes are targeted. Recovery is possible if interventions are applied later, but optimal solutions are unlikely.



The speaker proceeded to provide an overview of the numerous initiatives already underway in South Africa, e.g. the 2030 NDP, the MDGs, the Roadmap for Nutrition in South Africa (2012 – 2016), SUN (Scaling Up Nutrition), and the Early Childhood Development Policy released in late March 2015. Special mention was made of the Post-2015 Sustainable Development Goals which specifically direct attention to child nutrition.

The presentation concluded with a number of recommended actions to achieve optimum child nutrition and development. Nutrition needs to look beyond child survival if the child's full potential is to be realised. Multisectoral partnerships will be required for implementing integrated and coordinated interventions. Attention to broad implementation, quality, and establishing an enabling environment are essential. Finally, investments in early childhood nutrition could be seen as long-term drivers of growth and a sound economic investment.

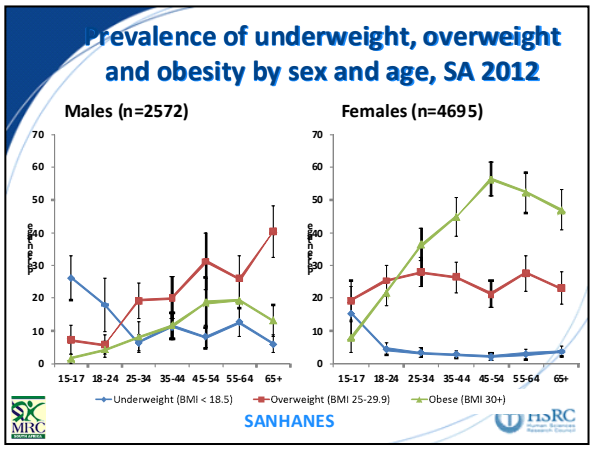


PRESENTATION 5: OVERWEIGHT AND OBESITY: AN EARLY START WITH LONG-TERM HEALTH CONSEQUENCES

Prof. Demetré Labadarios, Executive Director, PHHSI, HSRC

The speaker presented data from SANHANES and *repeatedly* emphasised that overnutrition starts early in life but has long-term health effects. Obesity has increased worldwide and is becoming as much of a problem as undernutrition. In contrast, stunting is slowing down.

- 43 million children (35 million in developing countries) were estimated to be overweight and obese in 2010; 92 million were at risk of overweight;
- The worldwide prevalence of childhood overweight and obesity increased from 4.2% in 1990 to 6.7% in 2010, a trend which is expected to reach 9.1%, (60 million) by 2020; and
- The estimated prevalence of childhood overweight and obesity in Africa in 2010 was 8.5% and is expected to reach 12.7% in 2020.



The SANHANES data shows that obesity starts early and reaches 16.7% in girls by 10 – 14 years. Obesity is more prevalent in girls and women, and overall underweight adults (male and female) are disappearing. The problem of childhood obesity cannot be separated from that of the mother, and the increase in female obesity has to be considered in the development of short- and long-term strategies for the first 1,000 days.

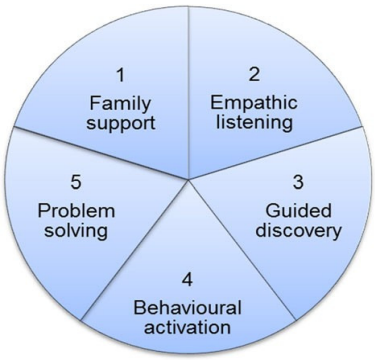
The literature shows that the combination of early stunting and adolescent obesity may be an explosive combination and cannot be ignored. Overweight 2-5 year olds were four times more likely to become fat adults as were children with a BMI lower than the 50th percentile. Pregnant and overweight mothers are more prone to hypertensive disorders, gestational diabetes, respiratory complications, thromboembolic events and premature labour. An obese mother has an impact on foetal and newborn life as more complications arise, e.g. congenital defects, large for gestational age infants, stillbirths, and shoulder dystocia. This does not mean that successes should be forgotten. South African data show that stunting has been consistently pegged at 20+% (since 1994 and in the recent SANHANES), but Vitamin A and iron deficiency has improved and food-secure households have grown from 19.8% (2005) to 45.6% (2012).

National surveys and key findings: Data on Children

Prevalence	SAVACG 1994	NFCS, 1999	NFCS-1, 2005	SANHANES -1, 2012
Stunting	20+%	20+%	20+%	20+%
Vitamin A deficiency	33.3%	-	63.6%	43.6%
Iron def. anaemia	5.0%	-	7.6%	1.9%
Food secure HH	-	25%	19.8%;	45.6%

SANHANES

Childhood obesity leads to a wide range of risks associated with adult obesity such as cardiovascular diseases and endocrinopathies. There are however windows of opportunity, keeping in mind that plasticity diminishes as life progresses, whereas detrimental effects increase. This points to the need to invest in the young rather than the old.



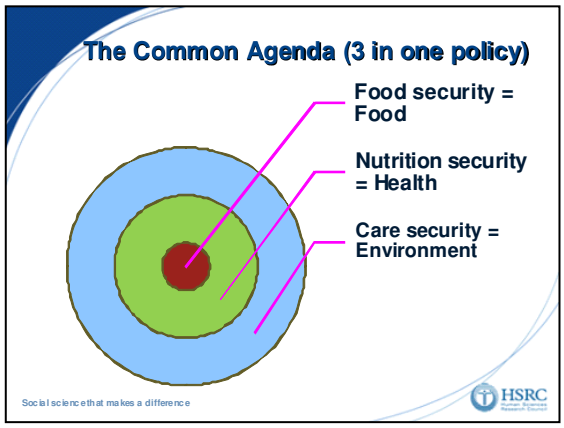
The presentation proceeded to discuss some of the pre- and postnatal influences that affect child obesity. There are no answers as yet as to whether these have synergistic effects, but they do require more thought. Mothers have not been given enough attention and the speaker presented a five pillar model for maternal psychosocial well-being (as proposed by Zafar *et al,* 2014*)*.[7]

In conclusion, a number of core actions were proposed but not discussed. Mention was made of the draft policy on obesity which is almost ready and participants were requested to provide inputs. Global standards are also needed to manage and assess early childhood development. Individuals should be placed first in importance as they are the ones that need to be influenced.

[7] Integrating maternal psychosocial well-being into a child-development intervention: the five-pillars approach. Ann N Y Acad Sci. 2014 Jan;1308:107-17. doi: 10.1111/nyas.12339.

A common agenda is needed composed of three components:

1. Food security, which cannot be considered on its own.
2. Nutrition security, which includes food security but focuses on health. The focus should be on nutrition and food security (the latter forming part of nutrition), and
3. Care security, where the battle is taking place and being lost.

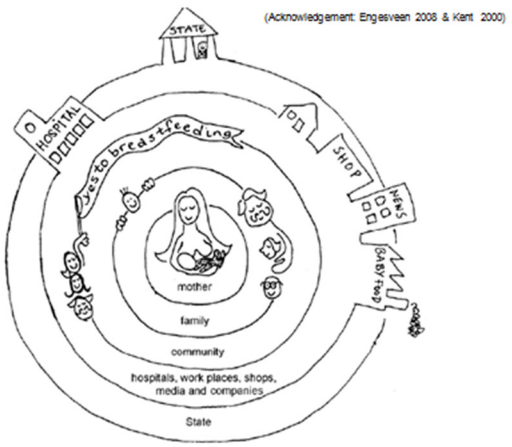


PRESENTATION 6: THE ENVIRONMENT INFLUENCING INFANT AND YOUNG CHILD FEEDING

Ms Lisanne du Plessis, University of Stellenbosch

The speaker introduced the topic by referring to a number of environmental influences which cause the dilution of interventions and efforts to focus. All these influences, and different stakeholders, can influence the mother's ability to feed her children optimally. These influences include the mother herself, the father, and the family in her environment.

The speaker used the Engesveen model to frame the presentation. The baby's first environment is the womb, and what happens in the womb affects what happens later in life to children. In the mother-and-baby environment mother overnutrition and child undernutrition co-exist in South Africa and current practices in first 1,000 days place the future development, growth and health of SA children in jeopardy. In the family environment fathers, grandmothers and healthcare workers are increasingly the most influential people in determining how women are feeding their children. However, the nutritional knowledge of these groups is poor, leading to the mother basing her decisions on poor knowledge. The UNICEF conceptual framework suggests that not only food security and health care services are necessary for child survival, but care for women and children are equally important. Food, health and care are all necessary, but none alone is sufficient for healthy growth and development. All three elements must be adequate in order for children to have the opportunity to be well nourished. Other factors such as gender inequality, violence, depression and social adversity can also influence the mother-child relationship.



In the community environment, care becomes more important when factors are adverse. Breastfeeding can provide food, health and care simultaneously. The speaker suggested that the three components referred to by Prof Labadarios need to be expanded to include responsive feeding (RF),

the reciprocal relationship between infant/child and caregiver, as this forms the foundation for the development of healthy eating behaviour and optimal skills for self-regulation and self-control of food intake in later life. The speaker also noted that non-responsive feeding practices are associated with feeding problems of both under- and over-nutrition. It would therefore be appropriate and necessary that a guideline on responsive feeding be included in the proposed South African paediatric food-based dietary guidelines.

The service environment encompasses health services for antenatal, intra-partum and postnatal care and has been described as an environment that lacks a "caring ethos". An evaluation of services to children under five years indicates many areas in need of improvement, including feeding (breastfeeding and complementary feeding support and counselling).

Media constitutes a very important communications channel in the service environment. The private sector, for example, is treated with mistrust by healthcare workers, e.g. formula milk which is inappropriately promoted. This mistrust needs to be addressed.

In the legislative environment, progress has been made in terms of resolutions in the Tshwane declaration. However, a review is needed of legislation regarding maternity protection for working mothers, including domestic and farm workers. It is not possible to determine if enforcement of the current legislation has been effective yet, since the full spectrum of the regulations only came into effect in 2014.

The enabling environment, defined as the "political and policy processes that build and sustain momentum for the effective implementation of actions that reduce undernutrition" comprises three linked elements: knowledge and evidence, politics and governance, and capacity and resources. These have been identified as pivotal in creating an enabling environment and to translate momentum into results for nutrition.

Knowledge and evidence

Most of this is already in place in terms of knowing what works, what it costs, and what must be scaled up. More is however needed about evaluation and advocacy strategies. South Africa will also need to determine how it wishes to frame and brand child feeding. The messaging and the South African story need to be branded to resonate with its people. This will require a well-planned communications strategy from the DOH, with a dedicated promotions strategy for the under-fives and collaboration with other departments. The speaker referred to the Breede Valley study which may provide evidence of the type of message that could be run through the whole system, in this case the importance of infant and young child feeding (IYCF) to support increased scholastic performance and increased human capital.

Politics and governance

Horizontal and vertical coordination are needed, together with accountability, incentives regulation, legislation and investments. Leadership is very important and nutrition champions should be put in place. Elements of a broader enabling environment exist in the Intergovernmental Relations Framework Act (IGRFA, 2007) which legislates for the establishment of appropriate IGR forums. This could offer a potential infrastructure within the three spheres of government (national, provincial, local). The National Development Plan 2030 provides clear direction in terms of a vision for addressing

malnutrition. This might be a real opportunity to guide the various IGR forums on nutrition issues, including IYCF.

Capacity and resources

Currently the government health sector budget allocates less than 0.3% of the health budget to nutrition, with most funds spent on targeted supplementary feeding. Funds are not always available for other nutrition interventions due to reallocation to other priorities.

Apart from the three linked elements already mentioned, early indications from international research have identified an additional five key factors to generate change:

1. Local government capacity to deliver effective nutrition services;
2. Local politicians who care about nutrition and are empowered via decentralised budgets;
3. Timely data on malnutrition;
4. Nutrition funding channelled through one funding mechanism rather than fragmented funding streams; and
5. Earmarked and protected nutrition funding commitments and exploration of new revenue streams.

In conclusion, the environment affecting the IYCF is a broad concept but some direction can be taken from the international literature and experience. More importantly, South Africa needs to create its own story by applying the three linked elements of knowledge and evidence; politics and governance; and capacity and resources. The speaker ended the presentation with two quotes and the point that there is a need to act fast:

> *We should remind ourselves that in order to support families in providing the best possible care, we will need to learn to conceptualize the multiple tasks of child feeding and development from the perspective of the family, rather than the service agency*" Engle et al, 2000

> *"The true character of a society is revealed in how it treats its children"*
> Nelson Mandela

PRESENTATION 7: THE STATUS OF CHILD CARE IN THE FIRST 1,000 DAYS IN SOUTH AFRICA

Prof. Haroon Saloojee, Wits University

The speaker opened the presentation by reflecting on what care security means in the context of the first 1,000 days. He noted that the status of child care needs to reflect on the available data, although data should always be treated with caution. Ideally, a definition of childcare in the first 1,000 days should include:

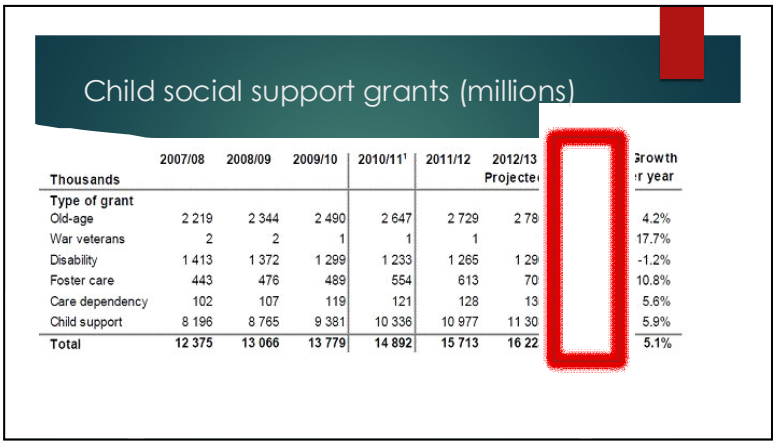
- Being born alive
- Being born healthy
- Having a mother/father/caregiver
- Receiving shelter, food, warmth
- Having a birth registered
- Surviving the neonatal period and infancy
- Being protected from disease and ill health

- Being protected from abuse, neglect and exploitation
- Receiving love and play
- Opportunities for early learning (stimulation)

All of the above seem obvious but they do provide a framework against which to measure South Africa's progress is delivering on child care. A brief overview of the current status against these indicators was presented:

- There is a high incidence of maternal death rates (197 per 100 000) and high stillborn rates given that South Africa is a middle-income country.
- South Africa has a low birth weight rate of about 14%, of which the highest are in urban settings (18% in Soweto). Stress may be one cause. Rates can be as low as 8% in Limpopo, while in the Western Cape they can be as high as 30%, possibly caused by alcohol abuse or smoking.
- Premature birth rates are not very different to other countries; asphyxia rates occur at 4 – 8 per 1,000, which is comparable with some developed countries.
- In terms of infection rates, the country is doing reasonably well, with syphilis occurring infrequently (down from about 500 cases per year).
- Data on mother and father care are of major concern – there is an 88% chance of living with parents, but more than 50% live with only a mother. 10% have neither a father nor a mother in the first two years, largely the influence of HIV which results in many single parents and no parents over time.
- Around 56% of people live in urban settings but most children live in rural areas (54%). One in eight children (0 - 2 years) live in informal settlements.
- Birth registration has been more successful (at 90%), with significant increases since the 90s when about 50% were registered in the first year. This may be attributed to the advantages in, for example, gaining access to grants.
- In terms of care, there was a dramatic decrease in infant mortality between 2009 – 2011, which can be attributed to the introduction of two new vaccines and ARVs. This is however starting to level off.
- 25% of children live more than 30 minutes from a clinic. The poorer the child, the further the distance.
- No data exist at the national level about whether children are loved and stimulated at an early age.

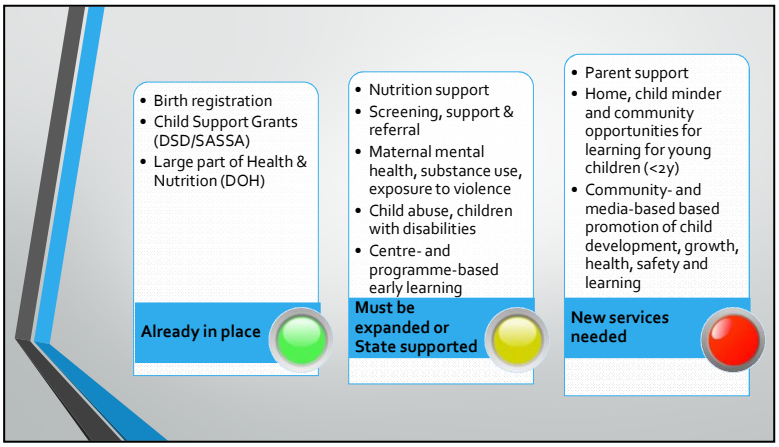
One of the success stories in South Africa is the provision of child support grants, 12.5 million of the total of 18.5 million children in the country (almost two-thirds). This has been a highly effective mechanism to support children.



Thousands	2007/08	2008/09	2009/10	2010/11[1]	2011/12	2012/13 Projecte	Growth r year
Type of grant							
Old-age	2 219	2 344	2 490	2 647	2 729	2 78	4.2%
War veterans	2	2	1	1	1		17.7%
Disability	1 413	1 372	1 299	1 233	1 265	1 29	-1.2%
Foster care	443	476	489	554	613	70	10.8%
Care dependency	102	107	119	121	128	13	5.6%
Child support	8 196	8 765	9 381	10 336	10 977	11 30	5.9%
Total	12 375	13 066	13 779	14 892	15 713	16 22	5.1%

There are numerous problems with the data and knowing the validity of the numerators and denominators.

All data should be treated cautiously, since over- and undercounting may bring the reliability of the data into question. An example was cited of a 119% vaccine administration in Johannesburg. This may be over-counting due to children from other provinces or other countries also being included.
The drafting of an early childhood development policy in March 2015 is an exciting development. Although much of the policy deals with what is already known and what is being done currently, the opportunity lies in addressing new areas and implementing existing ones more optimally.



The policy highlights activities in three areas, viz. those already in place; those that should be expanded or State-supported, and new services that are needed. For example, more than 50% of children under one year are not receiving child grants. The policy argues that the mother should be registered before the child's birth so that the grant can commence as soon as the child is born. Data also suggest that young children should be prioritised rather than older children or teenagers. The introduction of a pregnancy grant is proposed.

A strong case is made for the rapid expansion of early learning, with parental support being a key component. There are many international examples of success stories, including South Africa's Grade R coverage, but more emphasis needs to be placed on quality.

An overarching Early Childhood Development (ECD) Agency is proposed with an emphasis on home and community based support. Other priorities include strategies to prevent stunting, and support for children with developmental difficulties and disabilities. More communication and public information is also needed about ECD.

New recommendations include more attention to home and community-based support through home visits, offered by a new cadre of mother and baby community health workers; clinic- and community-based mother support groups; stronger support to early learning through support to childminders, centre- and community based early learning groups and support for parents; the introduction of toy and book libraries; and the possible introduction of a pre-Grade R.

In conclusion, the speaker noted that child care is very much on the national agenda (with budgets of 10 – 20 billion Rand) and with fairly robust data that points to variations in performance from poor to excellent. The important point is to address quality improvements and to move forward on implementation.

Comments and Questions #1

- [*Aviva Tugendhaft, Wits University*]. What has not been mentioned thus far is that there is competition with a powerful force, the marketing and advertising industries promoting specific foods as healthy when they actually contain high levels of sugars and are ultra-processed. This has

been applied to baby food and even formula milk. What should be done to address these influences?

Response #1

- [*L du Plessis, Stellenbosch University]* Advertising budgets are large (equivalent to DOH's annual budget). Regulation 991 can assist but legislation cannot do everything. There is a large knowledge gap, and this needs to be rectified if behaviour change is to be effected. This will require the transmission of consistent and repeated messages as has been used in HIV campaigning. A similar approach could be used equally well in child feeding.

Comments #2

- [*Andre Vivier, UNICEF SA*] Nutrition alone is good, but also facilitates attachments and relationships between infants and their parents. It would be good for the audience to comment on the ECD draft policy. This coincides with the development of an ECD comprehensive programme (not publicly available) which needs to be adjusted once the policy is accepted. The ECD Policy is on the government website, and not on Social Development's website. Correction: South Sudan (not Somalia) and the USA have not ratified the Convention.
- [*Unknown, Dept of Basic Education*]. DBE have developed a tuckshop guideline for operators and are mediating it at the district level to make children aware of healthy food, a healthy living lifestyle and to allow them to make the right choices. Alternative cheaper options for meals are recommended in the guidelines. The Department has initiated Ukufunda, using MXIT for sending out text messages on nutrition and understanding food groups. DBE is working with DOH to develop a policy to guide advertising, e.g. McDonald, KFC, and the intention is to get this legislated.
- [*Salome Kruger*]. There was a request for clarification from Prof Labadarios on the slide on overweight children.

Session 3: Care and effective interventions in the first 1,000 days- Panel Discussion

Chair: *Prof. Haroon Saloojee*
Panellists: Dr Nonhlanhla Dlamini, Prof. Ali Dhansay, Ms L du Plessis, Prof D Labadarios

The theme of the panel discussion moved away from data to address care and effective interventions in the first 1,000 days. The Chair proposed three themes:

1. The need for greater collaboration between government departments and others - joining the dots and creating linkages.
2. The prioritisation of scaling up and implementing at speed. What are the priority actions?
3. Dealing with the lack of financial resources while doing things differently.

Panel responses – "joining the dots"

- [*Dr Dlamini*] Different departments are working closely with the Presidency and the Development Agencies to determine the different roles of the players. This has involved working and planning together. A tender was requested to develop a communications strategy for child health, TB and HIV. Nutrition will feature very strongly in the first 1,000 days, as will obesity. Much can be learnt from HIV, particularly since they are in the same department. A further point to note is the importance of not scaling up poor quality. A new development is that seven new cadre of staff have been attached to the district office in 52 health districts – an obstetrican, anaesthetist, family physician, paediatrician, advanced midwife, paediatric nurse and primary healthcare nurse. Their mandate is to ensure that there is governance and that the guidelines are adhered to. Nurses and doctors also need to be trained, supported and mentored.
- [*Dr Dhansey*] The integrated school health programme needs to be strengthened and enforced, with linkages made to ECD. A better understanding is also needed of the *milieu* in which communities find themselves and how communities can work to improve their environment since the social context and stressors are influencing the upbringing of the children.

Questions & Comments #1

- [*Chantelle Witten*] Communication is an important aspect but an issue is the weak capacity of the DOH to deliver. What will the DOH do to build capacity of health workers? Communities value a health worker and want to hear the message from this source.
- [*unknown*] What is enough? What do we provide to children, e.g. food basket, and is it a quality basket?
- [*Andre Vivier*] How can local municipalities be brought into the discussion and the solution to ensure food security and sufficient nutrition for children at the local level?
- [*Mastoera Sadan*] The draft ECD policy is a good opportunity but needs a reality check regarding what capacity exists in terms of people and resources. Realistically, in terms of the ECD plan, how does one deliver to those children mentioned in the policy, how will this be implemented and how will the departments work together? There will need to be tradeoffs. There is talk of extending the grant to older children, but this may be a missed opportunity again for focussing on the 0-2 year children. There is mention of a pre-Grade R in the policy. Does this mean, for example, that the poor quality in Grade R will once again be scaled up?
- [*Behane Sjibule, DBE*]. There are 52 health and 85 school districts. SALGA and local government should be brought to the table to assist with coordination. Linkages are needed to the districts to assist with compliance requirements and implementation. For example, dealing with food poisoning, as well as with fortified food. The participant is anti-grant, as people do not work as a result of it. A suggestion was made of moving to a voucher scheme.

Panel Responses #1

- [*Dr Dlamini*] The DOH has an HR policy, available on its website, which is clear about the baselines in terms of staffing. It also provides information about the gaps and makes projections regarding extra cadres that are needed. With regard to staff attitudes, the DOH is introducing a WHO strategy, *Healthcare Workers for Change*. This looks at how health workers can improve and allows the opportunity for them to reflect on how they would like to be treated.

- [*L du Plessis*] In response to the question on how local government can get involved, from implementation level, research regarding stakeholder engagement shows that they found the concept interesting as it related to a transversal issue and to their immediate environment. Not many interventions have the kind of reach that the first 1,000 days could have and the movement allows stakeholders to see their roles. Who should do it? In the case of the panellist, research was the driving force for advocacy but the question remains regarding how one engages other stakeholders. There is a need to teach students skills of engagement, not only knowledge, e.g. how to build relationships and trust when there are few resources. People at the implementation level do not have enough resources, so they need to build relationships with other departments that can assist when there are no resources. Local government is very important in providing ECD services. Softer issues should be addressed, with a focus on leadership and the building of nutrition champions.

Comments #2

- [*Judy Apies, City of Tshwane*] The speaker works with social relief and the food bank that distributes food parcels to impoverished needy people. Senior management in local government should be involved and considered a partner as they do have something to bring to the table. They already partner with provincial and national players. The social relief programme is responsible for indigent registration and for mental health, rezoning and implementing bylaws and issuing of health certificates for ECD food preparation.
- [*Dishang Makgabo*, *City of Johannesburg*] Many of the issues under discussion reside at the provincial level e.g. food security, but it is critical to engage local government more meaningfully. Johannesburg has a fairly comprehensive food security programme. Metros have greater capacities than local authorities. Programmes are being led by the service providers rather than the needs of the person.

Panel responses #2

- *[Prof Labadarios]* There is no reason not to have an ambitious ECD policy but the question is how can it be implemented and where and how much money should be invested. The question was raised as to how important the DOH and Dept of Social Development are in this arena and on whom they have to exert an influence. The battle is currently being lost there because support structures are not in place to reach into the home. Family structures are being eroded and unless that environment becomes more responsive and can be supported, there is little chance of success.
- *[Dr Dlamini]* DOH's ward-based outreach with community health workers is focussed on health interventions and DOH is clear on the job descriptions of their health workers. It does not focus on family support and parenting. This would be the role of DSD.

Comments #3

- *[unknown, DSD*]. Reference was made to the slide presented by Prof Saloojee on children living with parents. Work is being done for DSD by the Children's Institute to examine the migration of children and caregivers. An understanding is needed of the dynamics driving some of the social determinants.

- [*Edmore Marinda, Mott International health)* Prof Saloojee presented a slide with three components assessing the ECD policy. A number of institutional systems are in place (birth registration, immunisations). If one looks at the red areas in the slide, most are speaking to households, the individual levels and choices that people have. Why are most women then not breastfeeding. In terms of communications we are competing with corporates with large budgets. What messages are going out to households in terms of nutrition?

Responses #4 – misuse of grants

- [*Prof Labadarios*] There is evidence of leakage in the grants and joining a scheme for benefits other than what is needed. This needs to be looked at but the problem is complex and there has been mixed experience with vouchers. There are limitations to the currency.
- [*Andre Vivier, UNICEF*] Data on child grants has shown a major impact on children and their wellbeing. At least three studies have debunked the myth about the misuse of child grants through teenage pregnancies. This has been sensationalised by the media and is not supported by research, nor should such statements be based on anecdotal observations.

Comments 5#

- [*Michael Rudoph, Wits*] There is the beginning of a good case study in connecting the dots. Wits University is working with a number of departments, e.g. with the Johannesburg Dept of Social Development on a food resilience project; with the Gauteng Department of Agriculture, Rural Development where urban farming and socioeconomic development are high priorities; with the Gauteng Dept of Economic Development where green development is a high priority; and with the Department of Trade and industry's (DTI) agroprocessing programme which is involved in urban agriculture and technology. These help in connecting the dots. People have spoken about food security in terms of food, nutrition security in terms of nutrition, but no mention has been made of soil security. With healthy soils there will be healthy plants, which will lead to healthy nutrition. And healthy nutrition will result in healthy communities. 2015 has been declared the Year of the Soil.
- [*Roeletseng ?, Wits*] Pregnancy seems to be a period where an intervention can be made on the mother. How well is South Africa doing in this period?
- [*Disego Ratshikhopha, RETDC*] Communities are not involved in making decisions about what they need. This has resulted in poor implementation of programmes because they are never owned by communities.
- [*James Majaha, Joint Aid Management*] The issuing of grants should be seen as a social cushion. Referring to the statistics on breastfeeding, have studies been carried out on mothers who may choose not to breastfeed because of their HIV-status?

Final comments were provided by the panel to close the seminar proceedings:

- [*Dr Dlamini*] The focus is on pregnancy and antenatal care - planned pregnancies and the contraception policy will be promoted as part of the DOH promotion strategy. The Department has not fared well with antenatal bookings as these are done very late. Promotion of family planning and early antenatal bookings are both indicators tracked on the DOH dashboard.

- [*Prof Dhansey*] Submissions were made to the Committee on Child Rights about two years ago by the Department of Women, Children and People with Disabilities. More importantly, this Department no longer exists. Is there a department or ministry where children are included?
- [*Ms Lizette du Plessis*] The DOH communications strategy is a good move, if the message can be matured through the whole system. This would be on the right track. The second is a question relating to whether the grant is enough. Research shows that it is not enough but departments cannot afford more and will have to work with what they have. Finally, it will be important to keep dialogue going.
- [*Prof Labadarios]* Unless nutrition and nutrition-related domains including ECD receive sufficient funding, and unless there is greater accountability for the funding, the excitement expressed at this seminar will not materialise.

The Chair thanked the panellists and audience and concluded the seminar with a video clip on ECD,[8] which provided a relevant closing summary to the workshop in that it highlighted the serious issues of overfeeding, bad eating habits and the importance of changing the eating behaviours and learning of children in their early years. Salient points highlighted in the eNCA video-clip reflect a number of the key issues that emerged during the workshop presentations and discussion:

- Lifestyle diseases are reaching epidemic proportions with black men being the most at risk. Fat intake has increased by over 60% in urban blacks over the past 50 years, with black South Africans having a stroke rate that is twice as high as that of white South Africans.
- Few people are aware of their own health indicators such as blood pressure, cholesterol and sugar levels, and the risks of heart disease.
- *"Malnutrition is hidden in rolls of fat".* The video provided real-life experiences of the link between obese children, overfeeding with the wrong type of food, resulting in poor nutrition. Malnutrition is also linked to poor performance at school.

The closing statement echoed the conclusion of the workshop,
"There is a huge problem of overfeeding."

[8] Attached as a separate electronic copy. The video was produced by eNCA's Checkpoint (no date provided).

ANNEXURE 1: BACKGROUND DOCUMENT

HUMAN AND SOCIAL DYNAMICS (HSD) RESEARCH SEMINAR SERIES

FOOD, NUTRITION, AND CARE SECURITY DURING THE FIRST 1,000 DAYS

PURPOSE OF THE HUMAN AND SOCIAL DYNAMICS RESEARCH SEMINARS

The Department of Science and Technology (DST) Human and Social Dynamics (HSD) Research Seminar Series aims to:

- Disseminate scientific research findings and transmit a body of new knowledge through an interactive process of critical dialogue and collegial critique to the social sciences and humanities (SSH) research community and other interested actors in the National System of Innovation (NSI);
- Provide an avenue for rated and other researchers, including researchers from rural-based universities to engage in knowledge dialogues across faculties and with other interested actors in the NSI;
- Present and discuss new and ongoing research, identify research gaps, and suggest new research agendas in SSH with a view to forging closer links between the research communities in these fields;
- Reinforce the visibility of SSH research to the higher education and science council sector;
- Enhance wider public understanding of the SSH, including the value and status of both individual and team-based research; and
- Strategically promote, develop, and coordinate collaborative and interdisciplinary research within and between higher education institutions and science councils.

BACKGROUND TO THE SEMINAR

Good nutrition is important to both individual and national development, and the foundations for future health and development are known to be affected significantly in the first 1,000 days of life.

Undernutrition is the underlying cause of more than two million child deaths every year. Worldwide, millions more children have compromised cognitive development and physical capabilities. Childhood overnutrition is also increasingly becoming a concern in low-and middle-income countries. Maternal pre-pregnancy, overweight and obesity, and excess pregnancy weight gain increase the risk of macrosomia, altered infant glucose metabolism and the risk of diabetes in future. Rapid infant weight gain is also a risk factor for childhood and adult obesity.

The first 1,000 days from conception to the child's second birthday is a critical period in a child's and family's life, which offers a unique opportunity to shape the child's adult life. Addressing the nutritional needs of mothers and children in this period is very important as it has implications for society's long-term health, stability and prosperity.

Poor maternal and child nutrition can have far-reaching consequences beyond health. It has been shown that interventions in the first 1,000 days can:

- avert more than one million deaths of mothers and children annually;
- significantly reduce the human and economic burden of diseases such as tuberculosis, malaria and HIV/AIDS;
- reduce the risk for developing various non-communicable diseases such as diabetes, and other chronic conditions later in life;

- improve educational achievements and the earning potential of individuals; and
- increase a country's economic growth.

Focusing on nutrition is thus of utmost importance. Nutrition is a precondition for achieving most of the Millennium Development Goals (MDGs), including the eradication of poverty and hunger, reduction of child mortality, improvement of maternal health, combating disease, women empowerment and achieving universal primary education. Nutrition is also at the core of meeting the post-2015 sustainable development goals.

Interventions to improve nutrition and health in the first 1,000 days that make a difference

The essential interventions to improve nutrition and health in the in the first 1,000 days are readily available and have been shown to be cost-effective. They include:

1. Provision of micronutrients to mothers and young children;
2. The promotion of good nutritional practices for mothers and their children, including exclusive breastfeeding and appropriate complementary feeding; and
3. Treatment for undernourished children.

Key interventions in the 1st 1,000 days of birth

Adolescence/pregnancy	Birth	0 – 5 months	6 – 23 months
Improved use of locally available foods	Early initiation of breastfeeding within one hour of delivery (including colostrum)	Exclusive breastfeeding	Timely introduction of adequate, safe and appropriate complementary feeding
Food fortification, including salt iodization	Appropriate infant feeding practices for HIV-exposed infants, and antivirals (ARV)	Appropriate infant feeding practices for HIV-exposed infants, and ARV	Continued breastfeeding
Micronutrient supplementation and deworming		Vitamin A supplementation in first eight weeks after delivery	Appropriate infant feeding practices For HIV-exposed infants, and ARV
Fortified food supplements for undernourished mothers		Multi-micronutrient supplementation	Micronutrient supplementation, including vitamin A, multi-micronutrients; zinc treatment for diarrhoea; deworming
Antenatal care, including HIV testing		Improved use of locally available foods, fortified foods, micronutrient supplementation/home fortification for undernourished women	Community-based management of severe acute malnutrition; management of moderate acute malnutrition
			Food fortification, including salt iodization
			Prevention and treatment of infectious disease; hand washing with soap and improved water and sanitation practices
			Improved use of locally available foods, fortified foods, micronutrient supplementation/home fortification for undernourished women, hand washing with soap

Interventions for women of reproductive age and mothers

NUTRITIONAL STATUS OF WOMEN AND CHILDREN IN SOUTH AFRICA

The SANHANES-1 provides data on the situation of women and children in South Africa:

Food security

- Overall, 45.6% of the population were food secure, 28.3% were at risk of hunger and 26.0% experienced hunger (were food insecure).Nearly 40% of the population had a dietary variety score of less than 4, indicating a diet that is insufficiently diverse to provide all nutrients in amounts sufficient to meet requirements.

Child nutritional status

- The prevalence of overweight and obesity was significantly higher in girls (16.5% and 7.1%, respectively) than in boys (11.5% and 4.7%, respectively).
- Children under five years of age (1-3 years of age) had the highest prevalence of stunting (26.9% and 25.9%).
- The prevalence of anaemia in under-five children was 10.7% overall, mild anaemia 8.6% and moderate anaemia 2.1%.
- The prevalence of iron depletion was 8.1% of iron deficiency anaemia 1.9%.
- At the national level, the prevalence of vitamin A deficiency was 43.6%, which remains a problem of severe public health significance, despite the decrease from the 2005 reported prevalence (63.6%).

Woman's health

- The prevalence of anaemia in women of reproductive age was 23.1%.
- The prevalence of iron depletion was 15.3% and iron deficiency anaemia in 9.7% in women of reproductive age.
- The prevalence of vitamin A deficiency in women of reproductive age was 13.3%.

OBJECTIVES OF THE SEMINAR

The current seminar focuses on food, nutrition, and care security in the first 1,000 days with the aim to assess the situation of South African women and children during that period, and to chart the way forward for new or improved interventions designed to address care and the nutritional status of women and their children.

The benefits to be derived from essential interventions to improve nutrition and care in the first 1,000 days are well known. Recommendations for action are provided in reports by the three inter-ministerial committees on maternal and child health: NCCEMD, National Perinatal Mortality and Morbidity Committee (NaPeMMCo) and Committee on Morbidity and Mortality in Children under-five years – CoMMiC. However, many of these recommendations have not been adequately implemented, and South Africa continues to struggle with the quality of care for women and children, and with poverty and inequalities, which affect the quality of life in the first 1,000 days. Though maternal and child mortality estimates have improved in the last few years, particularly since 2008, there are still an estimated 3,000 maternal deaths and over 30,000 deaths of newborns and children every year. South Africa may also not meet its MDG goals for reducing maternal and child mortality by the end of 2015.

Consideration will also be given to the preventive measures for non-communicable diseases (NCDs) in the context of the first 1,000 days. This is critical in South Africa, which has the highest prevalence of obesity in sub-Saharan Africa, and has seen a rise in the burden of NCDs. The National Department of Health 5 year strategic plan for the prevention and control of non-communicable diseases (2013-2017), emphasises the need to reduce obesity and other related risk factors in order to control non-communicable diseases. Focus should thus be made on the first 1,000 days and the implications of interventions at this early stage in life on future obesity and health status.

ANNEXURE 2: PROGRAMME

Human and Social Dynamics Research Seminar
Food, Nutrition and care security during the first 1,000 days

Venue:	**Rubica Hall, Casa Toscana, Pretoria**
Date:	**27 March 2015**
Chair:	Prof. Charles Hongoro, Population Health, Health Systems HSRC
Rapporteur:	Ms Tina James, FEMTECH (Pty) Ltd
08:00 – 09:00	**Registration, Tea & Coffee**
09:00 – 9:10	**Introduction**
	Welcome *Dr Temba Masilela, DCEO, HSRC*
09:10 – 09:55	**Session 1: Key findings of the SANHANES-1 and nutrition in the first 1,000 days**
9:10 – 9: 20	Key note: Overview of the strategic direction of health programmes in addressing malnutrition *Dr Yogan Pillay, Deputy Director-General: Strategic Health Programmes, Department of Health*
9:20- 9:30	Key note: Maternal and child health: policy and implementation *Dr Nonhlanhla Dlamini, Chief Director: Child, Adolescent and School Health, Department of Health*
09:30- 09:40	Key note: Food security: policy and implementation *Mr Thami Ngwenya, Executive: Research and Development, National Development Agency, Department of Social Development*
9:40 – 9:55	Key note: The past and the present: SANHANES in the context of the first 1,000 days *Prof. Demetré Labadarios Executive Director, HSRC*
09:55 – 10:10	**Tea break**
10:10 – 11:30	**Session 2: Food security and nutrition in the first 1,000 days**
Chair:	Chair: Dr Lumbwe Chola, HSRC
10:10 – 10:30	Preventing under-nutrition in children – a moral imperative and an effective investment. *Prof. M A Dhansay, South African Medical Research Council; Division of Human Nutrition and Department of Paediatrics and Child Health, Stellenbosch University*
10:30 – 10:50	Overweight and obesity: An early start with long-term health consequences. *Prof. Demetré Labadarios, Executive Director, PHHSI, HSRC*

10:50 – 11:10	The environment influencing infant and young child feeding *Ms Lisanne du Plessis, University of Stellenbosch*
11:10 – 11:30	The status of child care in the first 1,000 days in South Africa *Prof. Haroon Soloojee, Wits University*
11:30 – 13: 00	**Session 3: Care and effective interventions in the first 1,000 Panel Discussion**
Chair:	*Prof. Demetré* Labadarios *Dr Nonhlanhla Dlamini, Mr Thami Ngwenya, Prof. Ali Dhansay, Ms L du Plessis*
13:00 – 13:15	**Closure & the way ahead**
	Mr Thami Ngwenya, *National Development Agency, Department of Social Development*
Lunch and Departure	

ANNEXURE 3: BIOSKETCHES

DR LUMBWE CHOLA

Dr Lumbwe Chola is a researcher in the Population Health, Health Systems and Innovation (PHHSI) research programme.

His main interests are in the area of priority setting for health. He has worked for several years as a Health Economist, to produce research that can aid informed decision making for the improvement of maternal, newborn and child health. Dr Chola is also interested in the economic impact of interventions to prevent obesity and its related diseases. He has thus participated in several research projects aimed at providing policy and decision support for maternal, newborn and child health, as well as obesity and non-communicable disease prevention. He has authored several peer reviewed publications in scientific journals.

PROF. MUHAMMAD ALI DHANSAY

Prof. Ali Dhansay is the immediate past Director of the MRC's Nutritional Intervention Research Unit, previous MRC Vice-President: Research, previous MRC acting CEO, and currently Chief Specialist Scientist at the MRC. He holds honorary positions in the Division of Human Nutrition and the Department of Paediatrics and Child Health at Stellenbosch University. Prof. Dhansay is a qualified paediatrician, with specific interests and experience in maternal and child health, nutrition, human rights and ethics. He is chair of the National Science and Technology Forum (NSTF), a member of various bodies, and President of the Nutrition Society of South Africa. He has served on two consensus panels on nutrition for the Academy of Science of South Africa, was co-PI on the SANHANES 2012 survey, responsible for the sections on child nutrition, and is Medical Director of the SA Demographic and Health Survey 2015.

DR NONHLANHLA DLAMINI

Dr Nonhlanhla Rose-Marie Dlamini is a paediatrician and chief director of Child, Adolescent & School Health at the National Department of Health. Before that she was the national director of HIV Prevention Strategies. She has worked at all levels of the healthcare system as well as in academia.

Dr Dlamini is a member of the WHO Technical Working Group responsible for the new WHO ART Guidelines 2013 as well as the WHO global Paediatric, Infant Feeding and PMTCT guidelines and a participant in the SA delegation at the 2011 and 2012 World Health Assembly. She has led in the development of the national implementation of HPV (Human Papilloma Virus) vaccine programme, the Antiretroviral treatment (ART) guidelines of 2010 and 2013, the paediatric HIV treatment guidelines, the finalization and launch of the Integrated School Health Policy as well as the updating and aligning the IMCI (Integrated management of Childhood illnesses) training for paediatric HIV and AIDS guidelines.

MS LISANNE M DU PLESSIS

Lisanne is a senior lecturer in Community Nutrition from the Division of Human Nutrition, Faculty of Medicine and Health Sciences, Stellenbosch University. She is dually registered as dietician and nutritionist with the Health Professions Council of South Africa.

She lectures to undergraduate dietetic and medical students and provides study leadership for undergraduate and postgraduate research. She is also active in various committees and working groups that have a link to community engagement. Her field of experience is Public Health Nutrition and she has a particular interest in Maternal Health and Nutrition and Infant and Young Child Feeding (IYCF) as well as Health Promotion. She has published in topics related to these fields and has presented at national and international congresses. She is currently engaged in her PhD research project entitled: "Exploring stakeholder commitment and capacity to

address IYCF in the capital of the Breede Valley, Western Cape Province, South Africa". She served on the Association for Dietetics in South Africa (ADSA) Western Cape branch committee (1996-1997) and the ADSA Executive committee (1998-2002). Lisanne also served as the ADSA President for the term 2002-2004.

Lisanne is the recipient of the following awards: Rector's award for Teaching Excellence (2005), SU Faculty of Health Sciences – Best Postgraduate student (2007), ADSA/SASA award for excellence in Nutrition Education (2010) and the Rector's award for excellence in Research (2010).

PROF. CHARLES HONGORO

Prof. Charles Hongoro is a research director in the Population Health, Health Systems and Innovation Programme. He holds a PhD in Health Economics and Policy from the London School of Hygiene and Tropical Medicine, University of London.

Before rejoining the HSRC in July 2013, he was a unit director of the Health Systems Research Unit at the South African Medical Research Council. He previously worked as research director in the former Policy Analysis Unit at the HSRC in Pretoria; as a programme director of health economics and systems at the Aurum Institute for Health Research in Johannesburg; and as a lecturer in health economics and systems at the London School of Hygiene and Tropical Medicine, and as a senior medical research officer (health economist) in the Health Systems Research Unit at the National Institute of Health Research (formerly known as the Blair Research Institute) in Zimbabwe. He has been an extraordinary professor (Research) at Tshwane University of Technology since 2008 and serves on several technical or advisory committees locally and internationally.

His areas of research interest include health systems financing, the economics of HIV/AIDS and other infectious diseases, health systems and policy-oriented research in general, evaluation and impact studies. Prof. Hongoro's publication record spans the authoring and co-authoring of several conference presentations, peer-reviewed journal articles and book chapters.

MS TINA JAMES

Ms Tina James has more than 32 years' experience in developing countries, particularly in ICT for Development in Africa and covering a wider range of disciplines e.g. community development, SMEs, environmental management, science and technology, innovation. Work undertaken to date has drawn on her wide range of expertise in the management of multidisciplinary projects, strategic planning, programme design, and facilitation of participative processes. She has also edited several books and publications.

She established icteum consulting in 1997 and has carried out extensive consulting assignments on policy and strategy development, research and analysis, and monitoring and evaluation of programmes. She is a Cofounder and Director of FEMTECH (Pty) Ltd, which supports entrepreneurship for women in growth businesses. To date, the FEMTECH training programme has been deployed in South Africa, Namibia, Tanzania and Mozambique. Previously she was the Senior Advisor for the Canadian International Development Research Centre (focusing on ICT for Development in Southern Africa) and has served in various management positions at the CSIR in the fields of ICT and Environmental Information Management.

In 2009 she established a new business, Dancing Divas, which brings together her passion for dance, empowerment of women and the entrepreneurship development. The business was awarded the Radio 702 Small Business Award and has since featured in several leading South African magazines and DSTV's Summit TV business channel. The business is now in a national expansion phase.

PROF. DEMETRE LABADARIOS

Prof. Labadarios is the executive director of the Population Health, Health Systems and Innovation (PHHSI) research programme.

His interests centre on national surveys, social determinants of health and nutrition, nutrition training, nutrition support, Information and Communication Technology (ICT) and nutrient requirements as altered by disease and the environment. He is the author/co-author of more than 250 scientific publications. Prof. Labadarios has also co-authored the books "Pocket Manual of Clinical Nutrition, Recent Advances in Clinical Nutrition and the Epidemiology of Nutritional Diseases in Greece, and Clinical Nutrition: Early intervention. He is the founder and editor-in-chief of the South African Journal of Clinical Nutrition, the African editor of Nutrition: The International Journal of Nutritional Sciences, past President, and currently council member of the South African Society of Parenteral and Enteral Nutrition, honorary professor extraordinaire at the University of Limpopo, reviewer for a number of national and international peer reviewed journals, and an elected fellow of the American College of Nutrition. He has also served as a consultant to the World Health Organisation (WHO), the United Nation Children's Fund (UNICEF) and the International Atomic Energy Authority (IAEA) of the United Nations. He also provided technical support to national surveys sponsored by the Global Alliance for Improved Nutrition (GAIN).

DR TEMBA MASILELA

Temba Sipho B. Masilela, has been the Deputy Chief Executive Officer for Research at the Human Science Research Council (HSRC) since November 2010 and is directly responsible for research strategy, research management and the knowledge-policy interfaces of the HSRC. His wide-ranging research interests revolve around issues of knowledge, policy, and power and before joining the HSRC in July 2006, he worked for a number of years as a special adviser to the minister of social development in the government of South Africa. He has also been an Associate Fellow of the Department of Social Policy and Intervention at the University of Oxford, UK; and a Research Fellow at the Institute for Development Studies, University of Nairobi, Kenya. He has also worked in the areas of corporate citizenship and reputation management, in both commercial (Telkom SA Ltd) and academic settings (Centre for Corporate Citizenship, University of South Africa), and has cross media experience having work in both the print and telecommunications industries. He has more than 25 years of research and policy management experience and his most recent publication is a chapter "From the RDP to the National Development Plan: The mirage of a super ministry" in the State of the Nation 2013-14. Temba holds PhD and MA degrees in communication for development from the University of Iowa, USA; and a BA degree in economics and politics from the University of Nairobi, Kenya.

MR THAMI NGWENYA

Thami has led a number of Social/Developmental Research and Community Development programs in Detroit-Michigan (USA), Melbourne-Australia. He is now back in South Africa as the Head of Research, Policy and Strategic Networks for the National Development Agency (NDA) he has been responsible for Developing and implementing the research strategy on development and poverty eradication programs of the NDA which includes the development of strategic partnership networks such as the one with HSRC. He has returned from living and working abroad as an Associate Professor of Research with the Royal Melbourne Institute of Technology University (RMIT-University) where he lectured in approaches to research and research methodologies and supervised Master's classes in Leadership and Management in the Faculty of Education Language and Community Services (FELCS). He has extensive international experience in the research, social development and educational spheres. He has travelled the world broadly and has lived in the USA, Latin America and the Oceanic rim.

Thami is also Kellogg International Leadership Program Fellow and a Graduate of the Gamaliel and Kettering Foundations in the USA. He has a passion for Community and Youth Development Work including Social Research. He has worked extensively with the Aboriginal community in Melbourne and has researched and

written on Aboriginal Homelessness, including Aborigines Elders and Youth homelessness issues, in developing the Victoria Government Strategy on Homelessness. His master's and doctoral thesis topics focused on 'Effective drug Education Policy Making for Schools: A Research thesis on the Development of Individual School Drug Education Policy in 12 Victoria Government Secondary Schools' and Youth Development Policy'

In the NDA – HSRC partnership he has initiated and carried out quiet a sizable amount of research related to social development, poverty and in-equality with particular research that looks to inform the current Early Childhood Development- policy directives and Food (In)Security in South Africa.

DR YOGAN PILLAY

Dr Yogan Pillay is appointed as the Deputy Director-General responsible for HIV/AIDS, TB and MCWH at the National Department of Health since September 2008, where he is responsible for the development of national policies, guidelines, norms and standards and targets to decrease the burden of disease related to the HIV and tuberculosis epidemic; to minimize maternal and child mortality and morbidity; to optimize good health for children, adolescents and women; support the implementation of national policies, guidelines and norms and standards; and monitor and evaluate the outcomes and impact of these.

DR HAROON SOLOOJEE

Haroon Saloojee is a personal professor and head of the Division of Community Paediatrics at the University of the Witwatersrand and a principal (neonatal) specialist at the Chris Hani Baragwanath Academic Hospital in Soweto.

He has a range of research and academic interests including neonatal care, childhood malnutrition, HIV and infant feeding, medical education and health system organisation.

Prof Saloojee was part of a team that in 2012 conducted a diagnostic review of Early Childhood Development (ECD) in South Africa for the Performance Monitoring and Evaluation Department in the Presidency. He was involved in 2013-4 in the development of a new Policy and a Programme on ECD commissioned by the Department of Social Development for consideration by cabinet. His contribution mainly related to nutrition.

ANNEXURE 4: ABSTRACTS

FOOD SECURITY: POLICY AND IMPLEMENTATION

Mr Thami Ngwenya, Executive: Research and Development, National Development Agency, Department of Social Development.

Food and nutrition security is part of the Section 27 Constitutional rights in South Africa. The constitution states that every citizen has the right to access to sufficient food and water, and that the state must by legislation and other measures, within its available resources avail to progressive realization of the right to sufficient food (RSA, 1996). Food security exists when every household individual at all times have enough nutritious food for an active, healthy and productive life (FAO, 1996).

South Africa has progressively engaged in the fight against hunger and poverty through its policies and programme interventions since the democratic dispensation (1994). An integrated approach to ensuring delivery of food security programmes has been pursued through the implementation of the Integrated Food Security and Nutrition Programme (NPFNS), Government of South Africa approved the National Policy on Food and Nutrition Security and the Household Food and Nutrition Security Strategy in 2013 to continue responding to the hunger challenges in the country. The National Policy on Food and Nutrition Security provides a common reference for all players in tackling the food and nutrition insecurity problem with emphasis on synergy that will minimize undue duplication and inefficient deployment of resources. Recognizing the importance of implementing the food and nutrition security programs and plans, Government strategically assigned particular Ministries to co-lead its commitment areas.

The Household Food and Nutrition Strategy recognizes measures including social grants, feeding schemes, fortification of staples, moderation of food prices and subsistence farming supports to address household-level food and nutrition insecurity. However, the Strategy alludes to limitations of these interventions, as inadequate and recommends that they must be expanded, enhanced or better focused, used in more effective combinations, and/or complemented by additional interventions. It is also clear that, because of the complexity of both the challenge and necessary responses, better programme co-ordination and monitoring are essential. As a response to the above challenges, the Intergovernmental Technical Working Group on food and nutrition security has developed an integrated food and nutrition security implementation plan.

PREVENTING UNDER-NUTRITION IN CHILDREN – A MORAL IMPERATIVE AND AN EFFECTIVE INVESTMENT.

Prof. M A Dhansay, South African Medical Research Council; Division of Human Nutrition and Department of Paediatrics and Child Health, Stellenbosch University

Nutrition is foundational to both individual and national development. In 2012, the World Health Assembly set nutrition targets for reduction of stunting, wasting, and overweight in children. The costs of inaction are enormous, viz. undernutrition, overweight and poor child development outcomes with long-lasting effects on human capital formation. As economies grow and the rate of population growth slows, the returns to improved cognitive performance and psychological functioning in the workforce will expand substantially. Benefits are expected to be greater where strategies integrate the promotion of nutrition and child development.

Undernutrition is responsible for 45% of deaths of children younger than 5 years, amounting to more than 3 million deaths each year. The 165 million children with stunted growth in 2011 have compromised cognitive development and physical capabilities, making yet another generation less productive than they would otherwise have been. A study in Guatemala demonstrated that improving physical growth among children less than two years of age resulted in a 46% increase in adult wages when these children grew up. In South Africa, compared

to the previous national survey in 2005, the latest national study (SANHANES 2012) showed that there has been a slight increase in stunting, but a clear decrease in wasting and underweight among children less than five years. In the global context, the prevalence level may be classified as one of medium severity for stunting (21.5%), and low for wasting (2.6%) and underweight (5.2%).

The policy implications of the SANHANES results are clear, *nutrition-specific* (addressing the immediate causes of undernutrition) and *nutrition-sensitive interventions* (addressing the underlying and basic causes of undernutrition) are needed to address the dual problems of chronic undernutrition (stunting) and the rapidly rising trend of overweight and obesity among children in South Africa. Attention should be given to care during and even before pregnancy, as well as during the important 'window of opportunity' up to around two years of age. The government's National Development Plan 2030 proposes to introduce a nutrition programme for pregnant women and young children, which the findings of SANHANES 2012 clearly support. Investing in nutrition of the population will lead to long-term benefits for the country. Nutrition in South Africa is beyond child survival, it is about realising children's full potential, and building healthy families and a thriving nation. This requires *multi-sector partnerships* to reduce malnutrition and accelerate efforts for our children to thrive.

OVERWEIGHT AND OBESITY: AN EARLY START WITH LONG-TERM HEALTH CONSEQUENCES

Prof D Labadarios, Population health, health Systems and Innovation, HSRC

Childhood overweight and obesity is broadly accepted as a public health concern not only because of the rising prevalence trends but also because of the longer-term consequences associated with it. The rising prevalence trends appear to be greater in lower-middle-income countries. In the shorter-term, overweight and obesity in childhood is associated with an increased risk of having risk factors for cardiovascular disease (elevated cholesterol, hypertension as well as impaired glucose homeostasis and sleep apnoea) as well as orthopaedic complications (such as bone and joint pathology) and adverse social and psychological disorders arising from stigmatization and poor self-esteem. In the longer-term, overweight and obese children are more prone to develop adult health diseases such as heart disease, type 2 diabetes, stroke, several types of cancer (breast, colon, endometrium, oesophagus, kidney, pancreas, gall bladder), and osteoarthritis. Furthermore, children who became obese as early as age 2 are thought to be more likely to be obese as adults. The preconception period and the intrauterine environment are also crucial determinants in infant health and disease profile in adulthood. For instance, maternal smoking, excessive weight gain or impaired glucose homeostasis during pregnancy are known to influence foetal nutrition and disease profiles in later life. In particular, the balance of the available evidence indicates that smoking during pregnancy is associated with a 50% increased risk of childhood obesity whereas excessive weight gain during pregnancy doubles that risk. Any interventions therefore that do not consider the multi-faceted maternal-foetal and early child growth environment are not likely to impact beneficially in addressing the rising trends in childhood overweight and obesity.

THE ENVIRONMENT INFLUENCING INFANT AND YOUNG CHILD FEEDING

Mrs Lisanne Du Plessis, University of Stellenbosch

The first environment an unborn baby is exposed to is the mother's womb, her specific setting, choices and practices. Local data indicate that maternal overnutrition and child undernutrition, particularly stunting, as well as child overnutrition co-exist. When infant and young child feeding (IYCF) practices and child anthropometric profiles are considered parallel to the anthropometric profile of South African (SA) women of child-bearing age, it is clear that current practices in the first 1,000 days place the future development, growth and health of SA children in serious jeopardy.

Grandmothers, fathers and healthcare workers have been cited as the most influential role players in a mother's decision making about IYCF. However, the nutrition knowledge of these groups has been shown to be poor. The health services for antenatal, intra-partum and postnatal care provide a basket of evidence-based services, but have been described as an environment that lacks a "caring ethos". Furthermore, an evaluation of services to

children under 5 years of age indicates many areas in need of improvement, including support and counselling for breastfeeding and complementary feeding. The role of the media as an important communication channel to the public should also be strengthened.

Although progress has been made on various resolutions of the Tshwane Declaration, important issues still need to be addressed. A review of legislation regarding maternity protection for working mothers, including domestic and farm workers, is needed for them to benefit from an enabling workplace. Regulation 991 (2012) is comprehensive and appropriate for enforcing the International Code, but it is not possible to determine if enforcement is effective yet, since the full spectrum of the regulation only came into effect in 2014.

From a political and policy perspective, three linked elements (knowledge and evidence, politics and governance, and capacity and resources) are pivotal in creating an enabling environment and to translate momentum into results for nutrition. Early indications from work done at national and local levels show that, apart from these elements, there are also five key factors to generate change, namely (1) local government capacity to deliver effective nutrition services, (2) local politicians who care about nutrition and are empowered via decentralised budgets, (3) timely data on malnutrition, (4) nutrition funding channelled through one funding mechanism rather than fragmented funding streams, and (5) earmarked and protected nutrition funding commitments and exploration of new revenue streams.

In SA, elements of a broader enabling environment exist in the Intergovernmental Relations Framework Act (IGRFA, 2007), which legislates for the establishment of appropriate IGR forums at the three spheres of government. This includes the provincial sphere, through the premier's IGR forum that must engage actively with various district IGR forums convened by district mayors. It also offers a potential infrastructure for multi-sectoral engagement on malnutrition and other issues. The National Development Plan provides clear direction in terms of a vision for addressing malnutrition. This is a real opportunity to guide the various IGR forums on nutrition issues, including IYCF.

THE STATUS OF CHILD CARE IN THE FIRST 1,000 DAYS IN SOUTH AFRICA

Prof. Haroon Soloojee, Wits University

There are multiple entry points for early childhood development (ECD) services, including health care systems, community-based child care and early (pre-school) education.

The public health care system reaches more children and their families during the first 1,000 days of life than any other service. It thus has a specific responsibility to use these contact opportunities to strengthen families' efforts to promote the health, growth and development of children. However, the Department of Health does not explicitly view or refer to any of its interventions as ECD services.

This presentation will highlight the pivotal role of the public sector, and particularly the health service, in ECD service delivery, and attempt to answer the following critical questions:

- What is the status of child care in South Africa?
- What are essential public sector actions for promoting ECD?
- Why and how can the health sector play a lead role in the first 1,000 days?
- How effective are existing ECD-relevant activities offered by the health department?
- What are the opportunities and barriers to effective ECD service delivery, and how can they best be exploited/overcome?

ANNEXURE 5: LIST OF PARTICIPANTS

	Title	Surname	Name	Organisation
1	Ms	Apies	Judy	City of Tshwane
2	Ms	Baloyi	Tintswalo Patience	Tshwane Health District
3	Ms	Behane	Sijabule	Department of Basic Education
4	Dr	Bhardwaj	Sanjana	UNICEF
5	Dr	Chola	Lumbwe	HSRC
6	Ms	Cohen	Lisanne	ILIFA LABANTWANA
7	Dr	Dhansay	Ali	SA Medical Research Council (MRC)
8	Ms	Dindar	Amina	Baragwanath Hospital
9	Dr	Dlamini	Nonhlanhla	Department of Health
10	Ms	Du Plessis	Lisanne	Stellenbosch University
11	Ms	Els	Riette	Read educational Trust
12	Ms	Fichardt	Valerie	HSRC
13	Mr	Grinspun	Alejandro	UNICEF
14	Ms	Grossberg	Arlene	HSRC
15	Dr	Havemann-Nel	Lizette	North-West University
16	Ms	Henney	Nicolette	Western Cape Government: Health
17	Ms	James	Tina	FEMTECH (Pty) Ltd
18	Ms	Jones	Sue	Save the Children
19	Ms	Khuzwayo	Zuzi	HSRC
20	Miss	Koza	Bukini	
21	Ms	Kransdorff	Rose	Econocom Foods
22	Prof.	Kruger	Salome	NWU
23	Mr	Kunene	Thembi	Jhb District
24	Dr	Kwape	Lemogang	NFTRC
25	Prof.	Labadarios	Demetre	PHHSI, HSRC
26	Mr	Letshoo	Tsholofelo	
27	Ms	Letsoalo	Juliet	Dept of Social Development
28	Dr	Mabilane	Bongile	UNICEF
29	Ms	Magaya	Isabel	HSRC
30	Mr	Majaha	James	JOINT AID MANAGEMENT SOUTH AFRICA (JAMSA)
31	Mr	Makgabo	Tiishang	Dept of Social Development

	Title	Surname	Name	Organisation
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33	Ms	Mandela	Molapo	
34	Ms	Maotoe	Lydia	Department of Education
35	Dr	Marinda	Edmore	Mott MacDonald SA, International Health
36	Miss	Mastoera	Sadan	The Presidency
37	Mrs	Mavuso	Mpho	Edutak
38	Mr	Mbeki	Dlamini	Section27
39	Ms	Metiso	Zandile	
40	Ms	Mngadi	Phakamile	ASSAf
41	Ms	Modiba	Appolonia Maredi	Save the Children South Africa
42	Dr	Moodley	Sagren	Department of Science and Technology
43	Ms	Mopoletsehe	Zodwa	Jhb District
44	Ms	Motlhasedi	Jacobeth Mammoni	Department of Health
45	Ms	Motswagole	Boitumelo Stokie	National Food Technology Research Centre , Botswana
46	Miss	Mucku	Rudzani	West Rand Health District
47	Miss	Ngcobo	Dolly	Dept of Health
48	Ms	Ngobeni	Tsakani	Dietician
49	Mr	Nkala	Muzi	Dept of Social Development
50	Mr	Nkondo	Bongiwe	West Rand Health District
51	Dr	Nkosi	Busisiwe	PATH
52	Ms	Phasha	Esther	Edutak
53	Miss	Phetla	Cornelia	Sefako Makgatho Health Science University
54	Mr	Phillips	Edward	BrainBoosters NPC
55	Ms	Phofu	Helena	Correctional Services
56	Dr	Pillay	Yogan	DOH
57	Mr	Radebe	Thabo	Department of Science and Technology
58	Mr	Ramolefhe	Galase	National Food Technology Research Centre , Botswana
59	Ms	Ratshikhopha	Disego	RETDC
60	Mr	Ravhuanzwo	Eugene	HSRC
61	Miss	Reedin	Renette	Chris Hani Baragwanath Hospital
62	Ms	Roscigno	Carolina	HSRC
63	Dr	Rudolph	Michael	

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65	Prof.	Saloojee	Haroon	University of the Witwatersrand
66	Prof.	Schonfeldt	Hettie	University of Pretoria
67	Ms	Sekabate	Josephine	Jhb District Health
68	Ms	Solomon	Happy	HSRC
69	Ms	Somdyala	Babalwa	
70	Mrs	Sprinkhuizen	Jeanette	Department of Performance Monitoring and Evaluation
71	Mr	Stamper	Thabo	HSRC
72	Mrs	Taljaard	Marise	HSRC
73	Ms	Tugendhaft	Aviva	University of the Witwatersrand
74	Ms	Van Staden	Diana	Tambotie
75	Mr	Viviers	Andries	UNICEF
76	Ms	Witten	Chantell	UNICEF