Non-communicable Diseases (NCDs)

Prof Thandi Puoane on the Rise of Non-Communicable Diseases (NCDs) in South African Townships
A summary of some shocking facts and statistics raised by Prof Puoane

What are Non-communicable diseases?
• Chronic non-communicable diseases (NCDs) refer to a group of slowly progressive medical conditions or diseases of long duration (chronic) which are characteristically non-infectious and non-transmissible among people (non-communicable)

Why should we worry about NCDs?

Facts about NCDs
• Non-communicable diseases (NCDs) kill more than 36 million people each year.
• Nearly 80% of NCD deaths occur in low- and middle-income countries.
• More than nine million of all deaths attributed to non-communicable diseases (NCDs) occur before the age of 60;

• 90% of these "premature" deaths occur in low- and middle-income countries.

**What is the situation in South Africa?**

NCDs affect large numbers of the working-age population, impacting on the workforce and productivity of the country. The major NCDs in South Africa are *cardiovascular diseases, diabetes, cancers, chronic respiratory diseases and mental illness.*

**What are the drivers of NCDs?**

- Smoking
- Alcohol intake
- The unhealthy Food Environment that promotes the intake of fatty foods
- Lack of entertainment facilities; people become bored

**South Africa’s Response**

- There has been a growing interest in tackling the burden of NCDs globally and in South Africa.
- The South African government convened a summit on the “Prevention and Control of Non-Communicable Diseases” in September 2011

**The involvement of the School of Public Health (SOPH) in NCDs**

- Since 2002 the SOPH has been involved in research on NCDs and prevention activities such as:

**Prevention Interventions:**

*Running a Promoting Healthy Lifestyle Programme, with the aim to utilise community health workers (CHWs) as change agents in their community. The Programme seeks to influence:*

  - Beliefs and attitudes
  - Environmental determinants of unhealthy behaviours
  - Develop a NCD model, whereby an urban township community can benefit*
Organise Awareness Campaigns and Days

- Arrange Fun walks
- Undertake Screening for: Height/weight (BMI); Blood pressure; Blood glucose
- Disseminate Information on Food choices and Physical activity
- Drama Performances: Performances to highlight Diabetes Awareness
- Training on Motivational interviews: Training Community Health Workers (CHWs) to use simple MI to help them communicate better with clients to influence the adoption of healthy living
- Working in Schools: In collaboration with MRC, UCT and Sports Science Institute to raise pupil perceptions about body weight and body image and implement interventions to reduce obesity in schools

Research Interventions

The SOPH has been involved in research partnerships with Medical Research Council, Western Cape Education Department, Western Cape Department of Health, University of Cape Town (Dept of Human Biology, Research Unit for Exercise Science and Sports, Medicine Division of Human Nutrition & Dietetics) and Heart and Stroke Foundation of SA

Research collaborations on NCDs include the following:
National Research Collaboration such as HealthKick: Overall Aim of the project: To develop, implement and assess the effectiveness of a school-based intervention program aimed at promoting the uptake and adoption of healthy lifestyle behaviours healthy eating and optimal physical activity) for the prevention of risk factors for the development of diabetes in children, their parents and their educators in disadvantaged communities. SOPH involvement: Development of an integrated training curriculum for use by community health workers working with chronic non communicable diseases in Khayelitsha, South Africa; Evaluation of CHW screening for cardiovascular diseases in the community

International collaboration through CDIA and PURE
CDIA: A Centre of Excellence for Chronic Disease control in Africa (CoE for CDIA) was established as a collaborative network comprised of staff from the Universities of Cape Town (UCT), Western Cape (UWC), Stellenbosch (US), and Harvard, the Medical Research Council (MRC) the Western Cape Government, South Africa, and the
Tanzanian Ministry of Health and Social Welfare and Shree Hindu Mandal Hospital of Tanzania.

PURE: This is a global Prospective Urban and Rural Epidemiology (PURE) study involving the following partners: PHRI, McMaster University/PURE International Steering Team; University of the Western Cape; Medical Research Council; University of Cape Town and the Sports Science Research Institute.

Countries involved in PURE Study

Countries involved

Low Income Countries: Zimbabwe, Bangladesh, India, and Pakistan;

Middle Income Countries: South Africa, Brazil, Argentina, Colombia, Chile, Poland, China, Malaysia, Iran, and Turkey;

High Income Countries: Canada, Sweden, and UAE

Spotlight on the National Health Insurance (NHI)

1. **NHI a Tonic for Extreme Inequality**
   
   *Mara Kardas-Nelson*
   
   *Mail and Guardian 8 Aug 2013*

   National Health Insurance (NHI) is seen by some as a gift from the middle class to the country's poorest. But experts argue that everyone is hurt by the stark divisions in South Africa’s health sector.

   As a result of unequal access to quality healthcare and the skyrocketing costs in the private sector, South Africa spends a lot on health, but, according to David Sanders, the emeritus professor at the University of the Western Cape’s School of Public Health, the country "has a similar low life expectancy and the same under-five mortality rate when compared with countries that are much poorer and spend much less on health such as Rwanda."

   **Prof David Sanders**

   According to the World Bank, South Africa spent 8.5% of its gross domestic product on health in 2011, above the World Health Organisation’s recommended 5%. But life expectancy in the country is 59.6 years, according to a 2013 mid-term estimate by Statistics South Africa,
nearly 10 years less than the average 68.81 years for less-developed countries, according to the United Nations World Population Prospects 2012 report.

While health outcomes differ greatly between race and income groups in the country, depressed health indicators are not confined to the poor: even the richest are doing worse than similarly wealthy counterparts living elsewhere.

According to Sanders, the infant mortality rate among the country's white population – the wealthiest group – is 15 deaths per 1000 live births, higher than developed countries such as Norway. "Even for the best-off in our country, infant mortality is [higher than] what it should be compared to the same income groups in other countries," he said.

Experts say inequality is partly to blame for poor outcomes. "Inequality is a source of major stress in society," said Louis Reynolds, the associate professor of paediatrics at the University of Cape Town. "It’s stressful to the poor, because they’re worried about their position, and it’s stressful for the rich because they have to throw themselves behind security gates."

Inequality breeds violence: 15 940 people were murdered in South Africa in 2010, according to the South African Police Service, and injury and violence is a key factor in the country’s high mortality rate. And inequality is rife: half of the country’s total health spending goes to only 16% of the population, with the other 84% – primarily the 35-million people reliant on the public sector – left to pick up the scraps.

Sanders said that the effect of disparate spending was seen in health outcomes: infant mortality among the country’s poorest 80% is four times that of the country’s wealthiest 20%. Some experts say the NHI scheme is necessary to transform South Africa, currently one of the most unequal societies in the world. "A decent [health] system can promote equality," said Reynolds.

The NHI could also help to stem costs for everyone, as regulation of healthcare costs in both the private and public sector is envisioned in the plan. Private-sector healthcare costs are not regulated, save for those of medicines, and costs have increased 120% in the past decade, according to Robert van Niekerk, the director and professor of social policy at the Institute of Social and Economic Research at Rhodes University.

Some experts believe that South Africa should look to countries that have been successful in bettering health outcomes with simple interventions as a model for the NHI.

In a matter of years, Rwanda has turned its indicators around by focusing on strengthening primary healthcare and utilising a large cadre of community healthcare workers. "In 1994, Rwanda had an under-five mortality rate of 270 per 1000," said Reynolds. "Now it’s the same as South Africa [40 deaths per 1000 live births, according to the 2011 department of health data]."

Despite being a least-developed country, Rwanda actually performs better than South Africa in some categories. For example, Rwanda’s immunisation coverage for DPT – a combination vaccine which protects against diphtheria, pertussis, and tetanus – is now above the regional average, whereas South Africa’s is still far below it. (DPT coverage rates are considered a good indicator of the strength of a country’s immunisation programme.)

"Rwanda has already reached its millennium development goal of decreasing under-five mortality," said Sanders. "South Africa won’t reach it."

Experts say that strong public participation, government transparency and a renewed focus on training health professionals is needed to make the NHI successful. "This is an historic opportunity. It happens once in a lifetime," said Reynolds. "The consequence of getting it wrong is another 30 to 40 years of inequality."

http://mg.co.za/article/2013-08-08-00-nhi-a-tonic-for-extreme-inequality
Panel Discussion: Making the NHI Work for All South Africans - Can It Be Achieved?

On 2 August 2013, The South African Civil Society Information Service (SACSIS) and the Friedrich Ebert Foundation (FES) co-hosted a panel discussion on the theme “Making the National Health Insurance Scheme (NHI) Work for All South Africans - Can It Be Achieved?”

Our government’s NHI scheme presents an important opportunity to develop a better healthcare system that works for all South Africans. It is a once in a lifetime opportunity to close the gap between public and private healthcare and develop a unified world-class healthcare system that all South Africans could have confidence in -- but how do we achieve this goal?

The questions we put to our panelists were: How does our government intend to develop a unified healthcare system that all South Africans feel is safe and affordable to use? What are the responsibilities of the state, the medical fraternity and the public in general towards developing such a system? Most importantly, how can we use the NHI as an opportunity to build greater social cohesion, in South Africa, around the delivery of an important social good that all South Africans can share in equally?

Our panelists made outstanding presentations that contribute enormously to developing a better understanding of what good healthcare should be.

Prof. Robert Van Niekerk of Rhodes University argued that the process of establishing the NHI is part of a bigger project about building "a new kind of South African society". He argued, "Very deeply implicated in the idea of establishing a new kind of society, which can bring classes together across the social divide, is the idea of the kind of society we want to create in South Africa. The debate about establishing a new kind of healthcare system needs to be coupled to the idea of what kind of society do we want to live in as South Africans, and not externalise the problem as something about how do we create access for poor people to healthcare, but also talk about how we contribute as citizens who are more privileged from the middle classes, largely, in terms of being part of the political elite, the policy elite and other professional sectors, about what choices are we wanting to make to create a new kind of South African society."

But, as all speakers noted, the challenges are huge, not least due to the uneven distribution of resources and capacity in the healthcare sector. Prof. David Sanders, Director of the School of Public Health at the University of the Western Cape, who talked about the challenges we face within the healthcare sector, reported that 70% of specialists and 50% of doctors are in the private sector serving just 16% of the population.

An interesting observation that he made is that, as result of our society's huge inequality, even for better off South Africans, health indicators are poor. For example, for White South Africans whose lifestyles can be equated to those in the global north, infant mortality is three times higher than the average in the global north. Inequality is bad for everyone, not just for the poor, he argued.

Louis Reynolds, a lecturer at the Education Development Unit, University of Cape Town, reinforced the point by arguing that inequality is a source of major stress in society. "Everyone suffers he said. Poverty is bad for health, but the gains in wealth you get from increasing wealth only last up to a certain degree, if there is also growing inequality," he argued.

Is the NHI a solution?
It presents a wonderful opportunity to build a more cohesive society, but as Reynolds argued, "The NHI is a bit of a black hole at the moment. None of us know what's going on. It's happening behind closed doors." He believes that the secrecy surrounding the release of the white paper, which has been delayed, is linked to the fact that there might be "a fight going on behind closed doors between people with vested interests who are benefitting from the current inequitable system."

Mark Heywood, executive director of public interest NGO, Section 27, who was the last speaker of the day said that the contest being referred to by Reynolds was one within government, "in particular between the treasury and the ministry of health about how NHI should be funded and whether there should be co-payments as a part of access to health services."

Another vested interest that Heywood referred to was the private healthcare sector. He argued, "Nobody is proposing to do away with the medical aid schemes. But an efficiently, properly instituted system of national health insurance would make those things redundant and would give cause for them to wither away and that is what they (the private sector) understand."

Heywood said that people leak him lots of documents, so he has seen what Netcare and Medicare are saying. All of them are "lawyered up", he reported. "They have made their submissions on the green paper. Their submissions have veiled lawyerly - in between the lines - hints of litigation, if the NHI system is not the type of NHI system that they will be satisfied with -- and that partially explains the delay that we have between the green paper and the white paper," he said.

Healthcare has unfortunately become a commodity in South Africa, despite the fact that access to healthcare is enshrined in our Constitution.

Heywood argued that "bad public health is good private business." Over R20 billion is spent annually out of pocket on expensive private healthcare services, which, in his view, are not world class.

"The other problem with the growth of the private healthcare sector - the unregulated, uncontrolled growth - is that even those people who think they are purchasing some sort of security through medical aid schemes, discover that they're not," Heywood argued. He illustrated this by talking about "gap plans". "A gap plan is the insurance that you take out above your medical insurance for costs that you may incur when your medical insurance has run out. In the last five years, there has been a five-fold increase in the number of gap plans people can buy. And there are today 250,000 different gap plan policies that are in existence to help you top up on your top up."

"Some of the strongest opponents of NHI will be hospital groups like Netcare, Mediclinic and so on. Netcare's return on capital employed in its hospitals has risen to 25% by 2011 from about 7% 10 years ago. Mediclinic's return on capital employed has risen to 27.3%," Heywood argued.

He also said that there will be no NHI in South Africa, if there is not a movement for a national health system. At the moment there is not a health movement in South Africa.

Panelists
Prof. Robert Van Niekerk, Director and Professor of Social Policy at the Institute of Social and Economic Research (ISER) at Rhodes University.
Prof. David Sanders, Emeritus Professor and founding Director of the School of Public Health at the University of the Western Cape.
Prof. Louis George Reynolds, Lecturer, Education Development Unit, University of Cape Town, Faculty of Health Sciences and formerly of the Red Cross Children’s Hospital.
Mark Heywood, Executive Director, Section 27.

Breastfeeding Seminar organised by Prof. Rina Swart of UWC’s Department of Human Ecology and Dietetics together with the Western Cape Department of Health

Hilary Goeiman, Deputy Director: Nutrition, WC Dept of Health

The promotion, protection and support of breastfeeding is a global, national and provincial focal point. Commitments have been made to take action to scale up interventions that will contribute to child survival and increasing wellness.

The seminar is the first of this nature in collaboration with the University of the Western Cape, Dietetics and School of Public Health departments. This seminar aims to inform and update you as health professionals of the latest research on infant feeding and how the research was translated into policy for implementation. It further presents free communication of research conducted in the Western Cape Province related to infant feeding completed by officials, university personnel and post graduate students.

“Breastfeeding Support Close to Mothers” was the 2013 theme for breastfeeding week (1–7 August 2013) held the past week and activities to raise awareness are continuing throughout the month of August. Health Care systems provide opportunities to support breastfeeding. This ranges from mother friendly antenatal care, supportive labour and delivery services to postnatal care that facilitates bonding and infant feeding. An essential component is to ensure that we as health workers have the capacity and are skilled to implement evidence based programmes and interventions to provide support to mothers.

Promoting exclusive Breastfeeding in the context of HIV: What do Nurses at the frontline have to say?

Report on a Study by Jill Wilkenson
Lecturer, UWC Dept of Human Ecology and Dietetics

Introduction

The 2010 revision of the PMTCT policy made provision for anti-retroviral treatment for HIV exposed infants and/or their mothers thereby placing stronger emphasis on early breastfeeding (EBF) as a safe feeding option than past policy versions. The latter had led, in part, to the majority of HIV-infected women opting to practice exclusive formula feeding.

As the backbone of South Africa’s public health care system nurses are tasked with implementing this and other policies related to the promotion of Exclusive breastfeeding. The researcher set out to explore the perceptions of nurses with regard to their role in the
Obstacles to Breastfeeding
The lack of commitment of young mothers
“Teenage pregnancies are still rife and with this is the problem of HIV. So the girl comes to book–in with the most tight-fitting clothing–image remains a priority for her – the attitude being ‘if I can maintain my slim figure why should I allow my breasts to say?’ The young mother’s social life does not come to an end–practising EBF would limit her freedom to socialise”

The influence of grandmothers and elders
“... the book (new Road to Health booklet) is a handy book, especially for new mothers. They can feed their baby according to that book but the goagos (grandmothers) at home will tell them ‘No, the nurses do not know anything, you were given pap at a certain age ... and look how big you are’”

The role and influence of the lay counsellor
“It is really a challenge for us and for the counsellors because most of our counsellors are (HIV) +, they used to do the formula business and it is like that–I used to BF and I will tell everybody to BF. They (counsellors) used to FF now they will tell everybody from their point of view to do that.”

The influence of doctors
“We had one of the doctors here, see when the patients come here for check-ups their intention is to BF, then babies are born and they get sick then the Doctor puts the baby on formula. Then she does not want to change/continue BF because the Doctor has put the child on formula.

Health workers lack of understanding of the socio-cultural contexts in which mothers must make decisions
The person who counsels the mother (HIV infected) about EBF does not know her home setup – in the meantime the mom can change her mind and then mix feeds the baby – so there are really pros and cons”

“These new people the Dietitians work strictly according to the book –the older generation understand that the book is one thing but reality is something else. Clashes come when a Dietitian from white culture gives advice to a Colored or Black woman–she gives advice according to what she knows –according to her beliefs, knowledge and culture–but that advice does not fit us at all.”

Study Design
- **Study setting:** Primary Health Care nurses involved in Maternal and Child Health Care (MCHC) at PHC facilities in a sub-district of Drakenstein. This peri-urban farming community has an HIV prevalence of 9% & Infant Mortality Rate around 40/1000 live births
- **Aim:** To explore the attitudes and perceptions of PHC nurses with regard to their role as EBF promoters, protectors and supporters in the context of HIV
- **Methods:** PHC Nurses who had taken part in an Infant Feeding KAPP survey in the Drakenstein sub-district were invited to participate in a Focus Group Discussion and a key informant interview was conducted with a PMTCT peer counselor.
- **Trustworthiness:** The researcher paid due consideration to 4 aspects of trustworthiness – credibility, transferability, dependability and confirmability –identified by Shenton (2004) in the design and execution of this study
- **Data Analysis:** The audiotaped proceedings were transcribed and translated by the researcher with the aid of two assistants. Transcripts were studied to identify key issues/themes emerging from the data. An interpretive approach was applied in analysis of the data (Pope, Ziebland & Mays, 2000).

Results
Nurses expressed enthusiasm about the potential of revised PMTCT feeding recommendations to reduce stigma related to formula feeding, they also voiced confusion and concern about the risks and dangers that they believe may still exist. Although they described the lack of commitment of young mothers coupled with the strong influence of grandmothers over their infant feeding decisions as a major barrier to their efforts to promote exclusive breastfeeding, they also make valuable suggestions for improving EBF promotion strategies in general.

Conclusions
- Even though the infant feeding counselor and nurses expressed enthusiasm about the potential of new feeding recommendations to reduce stigma related to formula feeding, nurses also voiced confusion and concern about the risks and dangers that still exist.
- Nurses make valuable suggestions for breastfeeding promotion strategies for their local context.
- Primary Health Care nurses need to receive the necessary training and support in order to overcome the uncertainties created by past policies and practices and become confident promoters and supporters of EBF.
Mother and Baby Friendly Initiative (MBFI)
Presentation by Nicolette Henny
Assistant Director, WC Department of Health
at the Breast-Feeding Seminar

The powerful benefits of breastfeeding for child survival, growth and development are well known. All mothers are now being encouraged to exclusively breastfeed for the first six months to ensure that babies benefit from the goodness of breastmilk.

- WHO, 2012

Research notes that:
Breastfeeding has been shown to impact positively on the health outcomes of both the mother and infant. (Bartick, Steube, Shealy, Walker and Grummer-Strawn, 2009; Graffy and Taylor, 2005).

Further highlighted is the aspect of breastfeeding support, which if provided adequately to the mother has the potential to contribute to saving the lives.

Despite the acknowledgment of breastfeeding as the optimal feeding method for infants, it is noted worldwide that less than 40% of infants younger than six months of age are being exclusively breastfed.

Historical Background

2000 BC – 20th century: Wet nursing
Latter half of the 19th Century: Link between infant mortality, poor nutrition, tainted water and milk supplies was made.

19th Century: Feeding bottle introduced

1870 – 1890: first infant formula was introduced.

1910: humanised infant formula was produced and promoted as nutritionally equal to human milk and more convenient to mothers.
• 2000 – Millennium Developmental Goals
• 2003 - Global Strategy for infant and young child Feeding
• 2007 – Infant and young child feeding policy
• 2012 – BFHI changed to MBFI
• 2012 – campaign for accelerated reduction of maternal and child mortality
• 2013 - Updated Infant and young Child policy (update)
• 2013 – Nutrition roadmap

**MFHI implementation in South Africa**

- Officially launched in 1994
- Government participation 1995: Nutrition Committee convened in 1995 by the National Minister of Health set a target of 75% of the health facilities in SA accredited with BFH status by the year 2000. (Department of Health, 2001)
- 1st public health facility in South Africa was St Monica’s – accredited 1994 (IBFAN & UNICEF); Vergelegen Mediclinic – accredited 1996
- August 2011, National Breastfeeding Summit: National Minister of Health convened a Two day summit ended with the adoption of the Tshwane Declaration for the Support of Breastfeeding in South Africa (DOH, 2011)
- Commitment of political will and stakeholders in South Africa, to work together to ensure the Call for south Africa to be a country that protects, promotes and supports of breastfeeding.

“**Nested rings of responsibilities**”
Cape Times Letter to the Editor on Breastfeeding by SOPH and MRC Academics

Dr Tanya Doherty, Prof David Sanders, Dr Ameena Goga, Prof Debra Jackson

Cape Times, 13 August 2013:
...breast-feeding is much safer than formula-feeding. In South Africa now, the contribution of HIV/Aids to child deaths is decreasing due to effective scale-up of prevention of mother-to-child HIV transmission (PMTCT) while pneumonia and diarrhoea deaths contribute 12 percent and 5 percent respectively to under-five deaths with malnutrition a common underlying cause of death. The recent decline observed in under-five mortality is extremely unlikely to continue at the same rate without attention to other leading causes of child mortality, namely newborn deaths and those due to pneumonia and diarrhoea, which can both be reduced through increased rates of exclusive breast-feeding.

We absolutely agree that the mother’s decision on how to feed her infant should be a free choice, and that women should be supported in making the choice and in maintaining safe feeding. The 2013 South African Infant and Young Child Feeding Policy explicitly states that “mothers who may still decide not to breast-feed after counselling and education and who meet specific conditions, should be educated and given information on age-specific types of infant formula to purchase, and shown how to prepare and use formula feeds safely.”

However, research has shown that free provision of formula in health facilities as part of the PMTCT programme influences choice. What women – especially a poor one – would not choose free formula even if she had intended to breast-feed? This means that most women engage in ‘mixed’ feeding. And there is now overwhelming evidence that HIV transmission is increased by mixed feeding and infections and malnutrition are worsened.

It is true that it may sound difficult for working mothers to exclusively breast-feed for about six months and continue breast-feeding thereafter; however, expressing breastmilk for feeding a baby while at work is an option. While it is time-consuming, it has been done successfully by many women, and breastmilk remains sterile unrefrigerated for at least eight hours. Furthermore, nursing mothers are protected by current SA legislation and it’s time that we seriously implement existing legislation aimed at improving maternal and child health.

We strongly support the Department of Health’s new infant and young child feeding policy, which is in line with global practice. This policy strongly promotes breast-feeding as the feeding method of choice, and with the April policy decision to adopt option B for PMTCT all HIV-positive mothers are now eligible for highly active antiretroviral treatment (HAART). This policy also supports women who choose to formula-feed given the appropriate circumstances – such as clean water and good sanitation – which generally do not exist in poor communities. But support does not mean encouragement, which is what free formula in health facilities suggests. This new policy focusing on promotion of exclusive breast-feeding in a country with one of the lowest rates of breast-feeding in the world is likely to result in improved child survival and development in South Africa.
**Effect of home based HIV counselling and testing intervention in rural South Africa: cluster randomised trial**

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*Tanya Doherty, Hanani Tabana, Debra Jackson, Reshma Naik, Wanga Zembe, Carl Lombard, Sonja Swanevelder, Matthew P Fox, Anna Thorson, Anna Mia Ekström, Mickey Chopra,

**Introduction**

Policy shifts over the past few years in South Africa are making critical HIV prevention and treatment interventions increasingly available.1 HIV counselling and testing is the first step in accessing such interventions; however, testing rates remain low. In South Africa, where the national prevalence of HIV in adults in 2009 was 17%, and the antenatal prevalence in women aged 15-49 years was 30% in 2010, a 2008 survey indicated that only 25% of those aged 15-49 years had had an HIV test in the past 12 months and knew their status.2 The situation is similar in other sub-Saharan African countries, with Botswana being the only country where more than 50% of adults aged 15-49 reported undergoing an HIV test in the past 12 months and receiving their results based on data from demographic health surveys.3 In an era where approaches such as HIV testing with immediate antiretroviral therapy (“test and treat”) are being considered as a strategy to eliminate HIV transmission, high population levels of HIV testing are critical.

**Abstract**

**Objective**

To assess the effect of home based HIV counselling and testing on the prevalence of HIV testing and reported behavioural changes in a rural subdistrict of South Africa.

**Design**

Cluster randomised controlled trial.

**Setting**

16 communities (clusters) in uMzimkhulu subdistrict, KwaZulu-Natal province, South Africa.

**Participants**

4154 people aged 14 years or more who participated in a community survey.

**Intervention**

Lay counsellors conducted door to door outreach and offered home based HIV counselling and testing to all consenting adults and adolescents aged 14-17 years with guardian consent. Control clusters received standard care, which consisted of HIV counselling and testing services at local clinics.

**Main outcome measures**

Primary outcome measure was prevalence of testing for HIV. Other outcomes were HIV awareness, stigma, sexual behaviour, vulnerability to violence, and access to care.

**Results**

Overall, 69% of participants in the home based HIV counselling and testing arm versus 47% in the control arm were tested for HIV during the study period (prevalence ratio 1.54, 95% confidence interval 1.32 to 1.81). More couples in the intervention arm had counselling and testing together than in the control arm (2.24, 1.49 to 3.03). The intervention had broader effects beyond HIV testing, with a 55% reduction in multiple partners (0.45, 0.33 to 0.62) and a stronger effect among those who had an HIV test (0.37, 0.24 to 0.58) and a 45% reduction in casual sexual partners (0.55, 0.42 to 0.73).
Conclusions

Home based HIV counselling and testing increased the prevalence of HIV testing in a rural setting with high levels of stigma. Benefits also included higher uptake of couple counselling and testing and reduced sexual risk behaviour.

Trial registration
Current Controlled Trials ISRCTN31271935.

http://www.bmj.com/content/346/bmj.f3481.full

‘Testing Together Challenges the Relationship’: Consequences of HIV Testing as a Couple in a High HIV Prevalence Setting in Rural South Africa

Hanani Tabana, Tanya Doherty, Birgitta Rubenson, Debra Jackson, Anna Mia Ekström, Anna Thorson

Introduction
Southern Africa remains the region most affected by the HIV epidemic with 31% of global new infections and 34% of global AIDS deaths despite the dramatic decrease in HIV incidence in most countries in the region in 2011. In this hyper endemic context, transmission of HIV occurs primarily through heterosexual intercourse, with a large proportion of new HIV infections occurring in discordant cohabiting couples, many of whom are unaware of each other’s sero-status. South Africa continues to have the largest number of people infected with HIV in the world. The HIV epidemic is generalized and has stabilized for the past four years at an antenatal prevalence of 30%.

A survey undertaken in 2010 found that 60% of adults in South Africa knew their HIV status. In an effort to address the high HIV prevalence, the South African government launched a national HIV counselling and testing (HCT) campaign in 2010, targeting 15 million South Africans of which 25% of the total population took a test for HIV by June 2011.

The high HIV infection rates attributable to heterosexual transmission in sub-Saharan Africa have led to increasing efforts to evaluate the extent of HIV transmission within marriages or cohabiting partnerships. This has led to the recognition of couple HCT as a strategy to improve testing rates and a gateway to prevention and treatment. However, still very few couples in high prevalence areas have been tested together and barriers to couple HCT have been documented. Couple HCT has the potential to improve use of HIV prevention strategies when both partners test together and know their HIV status as it presents opportunities to discuss concordance, and discordance and consequences thereof. The HIV status guides the type of counseling, and that has implications for the next steps that the couple has to take, for example accessing treatment or health care needed. Further, couple HCT facilitates the identification of discordant couples eligible for treatment as prevention (TASP).

Larsson et al. (2009) conducted a study in Uganda that explored men’s views on and experiences of couple HCT during antenatal care (ANC). They found that men were aware that couple HCT was available but the study highlighted a number of barriers to uptake, such as health worker attitudes, unstable and distrustful marriages, and fear of conflicts with their partners.

The Rwandan model of couple HCT, which promotes male involvement and encourages HIV disclosure, provides a supportive environment that facilitates management of sero-discordant results, especially during pregnancy. HCT within an ANC context is an entry point for prevention strategies related to HIV transmission during pregnancy, such as
encouragement of consistent condom use and the availability of antiretroviral therapy (ART) for eligible HIV positive male partners. However, barriers to couple HCT still exist due to fear of abandonment, rejection and discrimination, violence, upsetting family members, and accusations of infidelity. In an effort to address these challenges, the World Health Organization has released new guidelines on couple HCT and see it as a priority.

A number of studies have explored couple HCT to prevent HIV/AIDS transmission in settings with high HIV prevalence. However, few studies have examined the psychosocial impact of couple counselling and testing on the couple’s relationship. Rispel et al. (2012) in their exploration of experiences of living with HIV have studied social and relational challenges including gender dynamics, sexual relationships and reproductive decision making among discordant couples in South Africa. In their study, they found that, discordant couples where partners tested separately and later disclosed had to deal with the emotional and sexual impact of HIV discordance on the couple relationship, reconciling the desire for children with preventing transmission of HIV to the negative partner, disclosure of the HIV infection to friends, families and others, and well-being of the HIV positive partner. Research on social situations of couples living with HIV/AIDS needs to include discordant as well as concordant positive and negative couples to further understand how the HIV status affects the couple relationships.

Undergoing HCT together and receiving test results at the same time should avoid delayed disclosure, delayed access to care and treatment and other opportunities that couple HCT introduces. The aim of this study was to explore the experiences of couples after undergoing home-based couple HCT together and receiving the test result together in rural KwaZulu-Natal province in South Africa, a province with the country’s highest HIV prevalence of 15.8%.

Abstract

Objective
We conducted qualitative individual and combined interviews with couples to explore their experiences since the time of taking an HIV test and receiving the test result together, as part of a home-based HIV counselling and testing intervention.

Methods
This study was conducted in October 2011 in rural KwaZulu-Natal, South Africa, about 2 years after couples tested and received results together. Fourteen couples were purposively sampled: discordant, concordant negative and concordant positive couples.

Findings
Learning about each other’s status together challenged relationships of the couples in different ways depending on HIV status and gender. The mutual information confirmed suspected infidelity that had not been discussed before. Negative women in discordant partnerships remained with their positive partner due to social pressure and struggled to maintain their HIV negative status. Most of the couple relationships were characterized by silence and mistrust. Knowledge of sero-status also led to loss of sexual intimacy in some couples especially the discordant. For most men in concordant negative couples, knowledge of status was an awakening of the importance of fidelity and an opportunity for behaviour change, while for concordant positive and discordant couples, it was seen as proof of infidelity. Although positive HIV status was perceived as confirmation of infidelity, couples continued their relationship and offered some support for each other, living and managing life together. Sexual life in these couples was characterized by conflict and sometimes violence. In the concordant negative couples, trust was enhanced and behaviour change was promised.

Conclusions
Findings suggest that testing together as couples challenged relationships in both negative and positive ways. Further, knowledge of HIV status indicated potential to influence behaviour change especially among concordant negatives. In the discordant and
concordant positive couples, traditional gender roles exposed women’s vulnerability and their lack of decision-making power.

Citation:

Competing interests: The authors have declared that no competing interests exist.
Full article and references at:
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Lancet Correspondence

Excellent can be the Enemy of Good: the case of Diarrhoea Management

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We welcome the 2013 Lancet Series on Childhood Diarrhoea and Pneumonia. Although the Series recognises the stagnant coverage of oral rehydration solution (ORS), we have concerns about its emphasis and policy implications.

In Africa, children have on average 3·3 diarrhoea episodes per year. This requires frequent administration of rehydration fluid. Use of ORS plus zinc requires a well-functioning supply chain and excellent coverage by community health workers (CHWs). Even in countries with large national CHW programmes such as Rwanda and Ethiopia, ORS coverage is 29% and 26% respectively, and this masks inequalities—coverage was only 10% among the poorest people in Ethiopia.

An assessment of integrated community case management (ICCM) supply-chain barriers in Ethiopia, Malawi, and Rwanda in 2011 showed that more than half of CHWs were out of stock of at least one ICCM essential medicine, and most CHWs travel on (Malawi) to collect supplies. In many parts of Africa, supplies are much worse. In Bangladesh, the large scale production of ORS—developed over the past two decades—has many unique features, including the establishment by large non-governmental organisations of substantial pharmaceutical manufacturing capacity. Bangladesh now produces 97% of key commodities locally—a situation not possible to replicate in most countries in the medium term.

Since the 1980s in Bangladesh and Zimbabwe, and now in Niger, CHWs or volunteers promote household use of sugar-salt solution or similar (lobon and gur) as a first step before referral for ORS. The failure to recommend home fluids in The Lancet Series undermines these efforts.

We could only find one review of recommended home fluids which concluded that there is insufficient evidence to recommend their use. Little research has been done providing insufficient and low quality evidence. Yet recommended home fluids are being used and are still recommended (albeit half-heartedly) in the latest WHO/UNICEF Global Action Plan for Pneumonia and Diarrhoea.
Do we not have an ethical obligation to also train CHWs to promote recommended home fluids (including sugar-salt solution or cereal-based fluids) in the common situation where ORS is unavailable? We urgently need more research on home fluids. Furthermore, we need clear strategies, commitments, and financial investments in community mobilisation and intersectoral actions for prevention of diarrhoea through improved water quality and availability, improved sanitation, and handwashing with soap.

We declare that we have no conflicts of interest.

**Reflecting on Practice at SOPH through the CHESAI Project**

The Collaboration for Health Systems Analysis and Innovation (CHESAI) project, over the period 2012-2016 is a four year collaborative endeavour between the University of Cape Town (UCT) and the University of Western Cape (UWC), Schools of Public Health, funded by the Canadian International Development Research Centre (IDRC).

This collaboration is based on the understanding that Health Policy and Systems Research (HPSR) is an emerging field within the broader terrain of health research, with conceptual and methodological foundations that require substantial development. The overall aim for CHESAI is, therefore, to contribute to expanding and strengthening the health policy and systems knowledge base in Africa through building an intellectual hub for HPSR in Cape Town, South Africa, creating spaces for engagements between researchers and practitioners, supporting African HSPR capacity development and sharing/disseminating HPSR conceptual and methodological innovations.

**Wezile Tshali, Deputy Director, Eastern Cape Department of Health makes use of a sabbatical at SOPH offered by CHESAI**

I am Wezile Welcome Tshali, with the following qualifications: Registered Nurse, Accoucheur, National Diploma in Psychiatric Nursing and Masters in Public Administration. I am currently working in the Provincial Department of Health as Deputy Director: Policy Development and Analysis. My core functions are to co-ordinate policy development and analysis in the Eastern Cape Department of Health. I develop new policies, advise senior executives on policy development matters and assist in communicating policies developed at provincial and national level to managers of health facilities.

The opportunity to participate in the CHESAI sabbatical practitioners programme has been a great opportunity for me as an individual and the department in particular.

In the programme I was exposed to:
- Extensive literature on Health Policy and Systems Research & Analysis (HPSR&A) that emphasised policy imperatives regarding policy implementation, accountability and analysis.
- Networks with renowned academics in the field of (HPSR&A) across the Globe.
- Functional models of continuous communication between academics from UCT, UWC and Western Cape Department of Health that assisted in strengthening Health Systems.

As an individual the following can be highlighted as benefits:
- I had the opportunity to take a break from normal work routine, sit back and reflect on what I have been doing as policy analyst for the past eight years and ask myself critical questions regarding the content and the value of work I have been doing all these years.
I have been exposed to literature, tools, communication technology and academic support that have improved my technical policy skills as well as helping me refocus my approach regarding policy work beyond policy development, to policy reviews and evaluations that should inform credible policy development process.

I have access to University of the Western Cape and University of Cape Town library services and educational material thus improving reference sources to improve health outcomes.

The Department will benefit in the programme in the following but not limited to:

- The functionality of the Eastern Cape Department of Health Policy Unit will be enhanced by the new focus of policy reviews and policy implementation in addition to historical policy development focus.
- The Department will benefit in the established linkages with CHESAI academics with international clout, thus sharing of best practises form other countries can be facilitated with ease resulting in improving health outcomes. The CHESAI academics have committed themselves to respond to requests from the Department of Health.

I definitely recommend the sabbatical practitioners programme to other officials in order for them to have the opportunity to take a break from routine work so as to sharpen their theoretical understanding of the environment they operate in with the support of academics and equally, the academics gaining deeper insight of the practical experience so that they better prepare students curriculum to suit the real world.

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**Canadian PhD student Nafeesa Jalal interns at SOPH as a Research Assistant**

Greetings everyone! My name is Nafeesa Jalal, and I am here from Canada, on a Canadian International Development Agency (CIDA) funded program, implemented by the Ottawa-based Human Rights Internet. I am very excitedly joining you all at the School of Public Health until mid-January, 2014.

I come to you with a diverse academic background. I went to primary and high school all over the world, thanks to my father’s career in international development. Next I attended the University of Toronto for my Honors in International Development, Political Science and Anthropology. Following this, I went to the University of Guelph for my MSc in Capacity Development, with a focus on micro-credit and its role in women's empowerment in rural Bangladesh. Currently, I am working on my PhD in Rural Studies, with maternal health in rural and peri-urban Bangladesh being my area of concentration. Apart from academics, I have over 5 years of work experience in the Canadian non-profit sector, and previous international experience working in rural Bangladesh as a consultant for the Canadian International Development Agency’s (CIDA) maternal health projects.

I have always had a deep interest in the public health sector, and this is what brings me to South Africa, UWC and this department. While here, I will be involved in three main projects, apart from supporting the HIV Center in its overall work. I am working on a project titled 'Exploration of migration, health and social support in the Cape Metropole' with mostly cross-border migrants, to document their life stories. Among other things, the work aims to understand their vulnerabilities and where their tremendous sense of resilience stems from. Secondly, I am working on the programming portion of the upcoming Emerging Voices training program, linked to ICASA 2013, the largest HIV conference in Africa. Thirdly, I will be getting involved in the WHO/TB-Reach project, potentially to do a small research project involving TB Dots in Sisonke District. All very exciting initiatives, allowing me to get exposure to a wide range of issues!
I extend special thanks to Dr. Christina Zarowsky for allowing me to be involved in such great initiatives during my limited time here. As well, I thank you all for your support and warm welcome. I thoroughly look forward to working with each one of you in the months to come.
Thousands of people living with HIV and TB still risk death and drug-resistance in the Eastern Cape due to on-going interruptions to their supply of life-saving drugs. In January 2013, a coalition consisting of the Rural Health Advocacy Project (RHAP), Doctors Without Borders (MSF), the Treatment Action Campaign (TAC) and SECTION27 released a report "Emergency Intervention at Mthatha Depot: The Hidden Cost of Inaction" analysing the impact of a management and drug supply crisis at the Mthatha depot. It was estimated that thousands of people were forced to interrupt their HIV treatment – potentially leading to tens of excess deaths over the course of the year. Despite the report’s clear recommendations to health authorities on solving the problem, in May 2013 the situation still remained critical. A follow up report was released in June 2013 at the South African AIDS Conference calling for urgent action from the National Department of Health and Eastern Cape Department of Health (EC DoH) to resolve the crisis by facilitating proper service at the depot and resolving the systemic failings in the drug supply chain affecting more than 100,000 people who depend on 300 facilities served by the depot.

Dr Amir Shroufi and Dr Andrew Mews will discuss the situation with regard to essential drug stock-outs and civil society response in the southern and East African region, describe several examples of civil society action to prevent, monitor and respond to stock-outs, and explore how civil society can strengthen its role in monitoring and preventing stock-outs. The novel Stop Stock-outs (SSO) campaign will be introduced.

Andrew Mews is the Head of Mission of MSF South Africa and Lesotho. Amir Shroufi is the Deputy Medical Coordinator for MSF South Africa and Lesotho. Both have been closely involved in the MSF intervention and follow up of stock-outs in the Eastern Cape.

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