EMERITUS PROF. DAVID SANDERS REFLECTS ON

...learning and teaching and the SOPH's contribution to the development of public health professionals

We pioneered multi-disciplinary, multi-professional postgraduate public health training. We were the first to offer a Masters in Public Health (MPH) degree in South Africa. Now there are, I think, six MPH offerings countrywide. The medical schools in particular resented us for that. I think that we are looked at as innovators, but also as somewhat unorthodox.

...research

I think we've undoubtedly got a profile now. We are now often approached by international institutions looking for research collaborators — such as EU-funded projects as well as Canadian, Australian, UK, US and local South African funded initiatives. Is this deserved? I think so. Our output is pretty good. I used to think that our output was, per capita, the best in our Faculty, but actually it is not. That is because we frequently publish with many other authors, and research output in higher education is calculated on the basis of whether the journal is accredited and how many authors there were. As we're involved in several multi-country studies, our units per publication do not reflect our activity. Our numbers of publications, however, almost certainly place us ahead of other units in our Faculty and many in the University. Moreover, we publish in high impact journals such as The Lancet, Health Policy and Planning, the Bulletin of the WHO and others. At the MRC [Medical Research Council], those would be quantified differently because they, unlike the Department of Education, consider journals' impact factors. By publishing in such journals we receive recognition from our peers in South Africa and beyond and this undoubtedly enhances our ability to compete for research funds — even though it does not earn the University more subsidy.

...South Africa's public health research output

South Africa could do a lot better than it does. We don't have good data on public health research. But in biomedical research approximately 40% of the Medline indexed publications from sub-Saharan Africa were generated by South Africa. Nigeria follows with 16%. South Africa, at least in the biomedical field — and I think the same would apply to public health — is leading, but leading a quite weak pack. Africa is definitely not doing well, and South Africa within that is not doing particularly well either.

...South Africa's use of research in policy development and implementation

I don't think policy makers understand how important research is. And I think they also have a caricature of research — as something done in an ivory tower. And they often say to us: "You guys don't know the real work. We're doing the real work. You're just thinking about things." That is nonsense. We are very conscious of the fact - and we try and promote in our teaching programmes — that 'research' is an umbrella term, in that it's not just formal, big research projects. It's also about what we try to teach practitioners to be able to do so they understand why their programmes are not functioning optimally. That is part of health systems research. One of the reasons things don't improve much in South Africa is because our health system is not a learning organisation. Practitioners receive policies from above and they try and interpret and implement them. They don't seem to be asking questions like: 'How can I look at what is causing our major health problems? Why is our immunization coverage so poor? Why are our outcomes in severe malnutrition so bad? Why don't people follow our advice about adherence to their antiretroviral treatment? Why are our waiting times queues so long in the system?' They don't seem to be asking those questions. So we're asking the questions for them. We should be asking them together.
The School of Public Health’s Research and project work: Producing Evidence for Health Systems Analysis and Practice

In line with the overall orientation of the School of Public Health (SOPH), most of our research focuses on health policy and systems, social determinants of health and building a district-based public health system. It addresses four inter-related programme areas, namely HIV/AIDS and TB, maternal and child health, public health nutrition, and non-communicable diseases.

Examples of research projects are:
• a multi-country research partnership aimed at compiling and analysing existing, and generating new, evidence on comprehensive primary health care globally;
• a number of projects aimed at strengthening prevention of mother-to-child transmission of HIV (PMTCT);
• research to assess the impact of global health initiatives on health service delivery;
• a prospective cohort study which aims to identify the population-level factors that drive the development of known risk factors for cardiovascular diseases; and
• an action research project in collaboration with service partners to better understand and strengthen health systems functioning in sub-districts and below.

Our research sites are located in rural and urban districts, sub-districts, facilities and communities of the Western Cape, the Eastern Cape and KwaZulu-Natal. We have field sites and offices in staff are engaged in a range of research activities – development of models for community health evaluation frameworks for these programmes. Running through these focus areas is a growing recognition of the often underestimated complexity of health to failure to translate strong policy implementation and successful programmes with the necessary undertaking by staff of the School multi-country collaboration with local and international partners.

The newly-established AIDS which is housed at wide research centre, collaboration across within the colleagues from African Centre for Research in HIV and the SOPH, but is a university-will further strengthen departments and faculties University, and with other South African and institutions.

Most of our research portfolio is funded by grants from national and international donors. This reliance on external funding (which by its very nature is cyclical and time-limited) lives in tension with our vision and increasing capacity to drive and shape health systems research and innovation – for example, proactively building new research areas for which funding is not easily available or engaging in large scale and often very expensive longitudinal studies. The risk of building a research enterprise, and the related infrastructure that this requires, increases correlative to the ability to sustain this over the medium to long term. For this reason it is now one of our key priorities to strengthen and secure the medium- and long-term sustainability of the School. On the following pages we will introduce a sample of our over 40 research projects in some detail.
MORE PEOPLE THAN EXPECTED HAVE TESTED HIV-POSITIVE IN THE NATIONAL HIV COUNSELLING AND TESTING (HCT) CAMPAIGN

When the campaign was launched in April last year, it was expected that about 1.6 million or 11% of the 15 million South Africans targeted for HIV testing, would come out HIV-positive. The projection was based on the national HIV prevalence level of 11%. But of the 10.2 million people who tested in the national HIV Counselling and Testing (HCT) campaign, about 17 – 18% or round about 1.7 million people were found to be having HIV infection. While figures vary from province to province, Mpumalanga is leading in the preliminary data, says Dr Thobile Mbengashe, Chief Director of the HIV and AIDS and STIs programme in the national Health Department.

“What we know now is that the national average of people who were positive was about 17% - 18% of the total number that have been tested. The results of the campaign itself concurred with the results that we’ve been getting on the annual antenatal survey, which actually shows where the biggest burden of the disease in relation to the provinces is and the districts. Mpumalanga was slightly more than we expected at around 24%, KwaZulu-Natal was about 22%, Gauteng was the third largest and then, we had a number of provinces which were consistently low in terms of the number of people testing positive... that’s Western Cape, Northern Cape. And, co-incidentally, Eastern Cape and Limpopo were actually more or less below the national average”, Dr Mbengashe says.

Preliminary figures show that over 12 million South Africans have been counselled for HIV since April last year when President Zuma and the Health Minister launched the national HIV Counselling and Testing campaign. Of these 12 million people, about 85% or 10.2 million have accepted the HIV test after counselling. This means that the department is almost 5 million under its target.

“When the target of 15 million people was set, that was an extremely ambitious target”, Mark Heywood, deputy chairperson of the South African National Council (SANAC), which co-ordinates the HCT campaign, admits. “I don’t think there is any parallel in the history of the global response to HIV where so many people have been offered HIV testing and so many people have been tested for HIV within such a fixed period of time. Although we may not have met 100% of the target for testing, I think that what has been achieved must be celebrated”, he adds.

“In many instances, the quality of the counselling and testing itself could have had an impact. Secondly, the demand for testing – the long queues and the time it actually takes... it takes about 30 – 45 minutes to go through the process... Most people would not have been able to do that. I think it’s also very true that there is a fear of the results of the test. People are very afraid to know the result. Some people were not ready. They exercised their right not to take the test”, says Dr Mbengashe, explaining why 15% of South Africans who were offered the HIV test did not accept it.

SANAC’s Mark Heywood finds it hard to understand why anyone wouldn’t want to know their HIV status.

“It raises the question why anybody at this point in time in our country would decide not to test because the message we’re trying to get out is that we all need to know our HIV status - that it is the best thing to know whether you’re negative or whether you are positive because whether you are negative or positive there are steps that you can take to protect and to preserve your health because part of this campaign is about: How can we get ahead of the HIV epidemic? In the past we’ve always lagged far, far, far behind the epidemic. One way to get ahead of the epidemic is to normalise HIV testing; it’s to use HIV testing as a way to try to begin to break down the stigma
around HIV; and it’s to use HIV testing to try to get much larger numbers of people onto treatment”, he says.

However, Heywood believes that the campaign has started a revolution. “In the course of just over a year – 15 months – this HCT campaign has begun a revolution in our response to HIV in this country. The challenge now is to continue with the campaign into the next National Strategic Plan. Also, the challenge is to identify what have been the weaknesses, what have been the problems with this campaign, but also fix them as rapidly as possible”.

It is not clear when the final results of the HCT campaign will be released. But what is certain is that the campaign will continue after the June deadline so as to encourage as many South Africans as possible to find out their HIV status.


HEALTH SYSTEM REVOLUTION
Anso Thom

Dr Yogan Pillay, deputy Director General in the health department, told delegates at the 5th South African AIDS conference that by agreeing to delivery targets “the minister has signed his life away to the President and by extension our lives”.

Motsoaledi has broadly agreed to increasing life expectancy, decreasing the rate of maternal and child mortality, decreasing the burden of disease from HIV and tuberculosis and improving the effectiveness of the health system.

“We start from a poor base, so the question is how far we can move by 2014,” said Pillay.

Pillay unveiled three streams of “re-engineering” the health system:
- A PHC team consisting of a professional nurse supported by at least four community health workers (CHWs) will be assigned to each of the more than 4 000 electoral districts. Depending on the need of the area, an environmental health practitioner and health promotion worker will also join each team.
- School health services will be established with a nurse assigned to a group of schools, possibly kicking off shortly with those schools educating learners from poorer households. Pillay said advertisements would be appearing in the next week calling on retired nurses to apply for these positions.
- The establishment of specialist doctor teams in the health districts.

Pillay said each PHC team would initially be responsible for 8 000 people with the aim to have 35% of households assessed and registered within the first year of the rollout.

Already 14 teams will be up and running by the end of next month with 54 in place by the end of the year. The teams will focus primarily on maternal and child health, HIV, TB and some chronic diseases.

Pillay said an audit of CHWs found that there were currently between 58 000 and 68 000 CHWs in the country, but said they were “uncoordinated, untrained and not well supported”.

He said 5 000 CHWs would be trained or re-trained by the end of the year.

In terms of the schools, Pillay said the vision was to have a health presence in each institution, but in the light of the shortage of nurses it may be more feasible to deploy nurses to a cluster of schools or target the poorer schools.

The specialist doctor teams consisting of among others obstetricians, gynaecologists, family physicians and paediatricians would target the districts and could be assigned to more than one depending on the population sizes.
Pillay said Motsoaledi was already consulting with deans of medical schools as well as the groups representing specialists with a view of getting this off the ground.

“We can’t afford to have a launch of concepts and policy. We have been tasked with getting this off the ground and when we launch it, it has to be happening already,” said Pillay, adding that the plans had to be “in sync with the National Health Insurance” plan.

Pillay said National Treasury had given the department R338-m in the current budget to make it happen. A further R400-m and R700-m has been budgeted in 2012/3 and 2013/4 for PHC and R501-m and R700-m for maternal and child health in the same periods.

Professor Helen Schneider, a member of government’s PHC task team, said the policy had political will and money behind it. Speaking in Durban, Schneider cautioned that major system change took time and that Brazil had implemented and grown its programme over four political terms and three presidents. “It won’t happen overnight,” said Schneider, who is based at the University of the Western Cape’s School of Public Health.

“The challenge is to ensure this plan goes beyond the 2019 political term,” she said.


PROFILE ON SOPH INITIATIVES AND PROJECTS

Neonatal and Child Cause of Death in South Africa

SOPH AWARDED CHERG SUB-GRANT TO UNDERTAKE NEONATAL AND CHILD CAUSE OF DEATH STUDY

Principal Investigator: Prof Debra Jackson

Background
Efforts to improve child survival are dependent on reasonably accurate information about the causes of deaths in order to prioritize interventions and to access trends in disease burden in relation to national and international goals.

According to UN estimates, each year in South Africa 73,000 children die before their fifth birthday and an estimated 30% of these deaths are in the neonatal period. South Africa is one of the less than a dozen countries where under-five mortality has increased since the MDG 4 baseline in 1990. Under the UN/CHERG, cause of deaths estimates for South Africa attribute 46% of under-five mortality to HIV/AIDS and other major causes of death being neonatal causes, diarrhea and pneumonia. However, within South Africa there is limited use of the UN child cause of death estimates in policy and programs and there is no other national estimate that is widely accepted.

In South Africa there are a variety of streams of cause of death data (e.g. vital registration, Perinatal Problem Identification Program (PPIP) and Child PIP, verbal autopsy, etc.) with different strengths and weaknesses but these have not been integrated, resulting in a lack of agreed national estimates of cause of death and poor acceptance of current UN estimates. There is inconsistency in the assessment of HIV as a contributor to neonatal and child deaths through
various pathways, including direct (e.g. the baby/child seroconverts and HIV/AIDS as the cause of death) and indirect (e.g. early immunological compromise and the social effects of ill parents or orphanhood). The interaction of HIV/AIDS and neonatal mortality is particularly poorly described in global literature. HIV/AIDS is not usually considered to be a significant direct cause of neonatal mortality, but there are few systematic analyses of this issue and South Africa datasets provide an opportunity to examine this in detail.

There is precedent for this type of work in South Africa. A new global maternal death classification has been accepted by ICD. Technical development work was led by Prof. Pattinson and includes the ability to analyse HIV as a cause of death and as a contributing factor.

**Objectives**
Under the terms of this grant, there are six (6) primary objectives for the project. These are:

1. Provide timely estimates of the causes and determinants of child mortality reflecting the effects of accelerated child survival interventions
2. Provide estimates of morbidities and disabilities for important child health conditions.
3. Improve knowledge of the causes of maternal mortality.
4. Improve knowledge of the extent of maternal morbidities and disabilities.
5. Determine the disease burden attributable to selected risk factors for maternal and child morbidity and mortality.
6. Develop better information and methodologies to enable prioritizing and monitoring maternal and child health intervention.

**Methods:**
- Establish consensus on ICD-compatible, programmatically-relevant cause of death groups including case definitions and hierarchy

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**ABOUT CHERG...**
**CHILD HEALTH EPIDEMIOLOGY REFERENCE GROUP**

**BACKGROUND**
The Child Health Epidemiology Reference Group (CHERG) was established in 2001 by the World Health Organization (WHO) as an independent source of technical expertise on child morbidity and mortality estimates at global and country levels. The CHERG process can be described as:
1) identify priority questions;
2) convene small technical working groups representing the best scientists to address the questions;
3) conduct extensive systematic reviews, analyses and modelling to develop estimates; and
4) use regular meetings involving the lead scientists from the groups to maintain progress and to provide peer review, thus ensuring high quality and transparency.

The CHERG is comprised of independent experts and is co-sponsored by WHO and UNICEF. These organizations have design-ated technical staff that assist in coordination of the activities of CHERG and are in communication concerning the questions being addressed by CHERG with other staff within their organizations.

The overall goal of CHERG is to develop and deploy new and improved evidence on the causes and determinants of maternal, neonatal and child morbidity and mortality, on intervention coverage, and on the effectiveness of interventions to inform and influence global priorities and programs.

[http://cherg.org/main.html](http://cherg.org/main.html)
- Establish a new dataset combining these various streams for cause of death for neonatal (0-27 days) and 28 days to 59 months including:
  a. Vital registration through death certificates
     i. Assess coverage of vital registration (according to the last burden of disease survey in 2000, national VR coverage for adults is around 80% and coverage for neonates is less than 50%)
     ii. Describe registration biases by child age, socio-economic status, province, etc.
  b. Facility-based perinatal mortality audit data from over 160 Perinatal Problem Identification Program (PPIP) sites, covering over 50% of births nationally
  c. Facility based child mortality audit data from pediatric wards in 30 hospitals across all 9 provinces using the Child Problem Identification Program (Child PIP) database.
  d. Verbal autopsy (to be explored)

- Generate analyses from suitable datasets:
  a. Interaction of HIV/AIDS with under nutrition
  b. Examine co-morbidity of HIV/AIDS, pneumonia, and diarrhea in under-fives

- Publish and disseminate results

**Expected Products:**
- Analytic Plan/Report of consensus on case definitions and hierarchy
- Technical report of core group and stakeholder meetings/consultations
- Cause of death estimates
- Peer review paper submitted

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**Hamba Kahle, Uncle Polly**

“The School of Public Health at the University of the Western Cape expresses its deep sadness at the untimely death of Polly Jacobs (Uncle Polly) and wishes to express its sincere condolences to his family. Many of us worked with Uncle Polly and we all knew him as a tireless fighter of people’s right to health and for the community of Belhar. He will be sorely missed.”

**Prof Uta Lehmann, Director**
**School of Public Health, UWC**

“I have known Uncle Polly since before I joined UWC in 1993. We were both involved in the successful bid, and later the funded Western Cape Community Partnerships Project. Uncle Polly was one of the community representatives. He was an exemplar for me of the important role community people were playing, and could play, in the transition to democracy.

We remained in frequent contact over the years through the Cape Metro Health Forum, his work at UWC and later through the South African chapter of the Peoples Health Movement. Polly was my Vice-Chair in this small but energetic group. He was always the one who brought us back to earth in reminding us of the persisting inequities in access to health care and the social determinants of health, exemplifying these by accounts of Belhar clinic and other formerly 'coloured' townships of Cape Town. He was an indomitable fighter for the health rights of the disadvantaged, and as such was an irritant to the powers-that-be. I (and we) shall miss him.

Hamba Kahle, Uncle Polly!”

**Professor David Sanders**
**Chairperson Peoples Health Movement, South Africa**