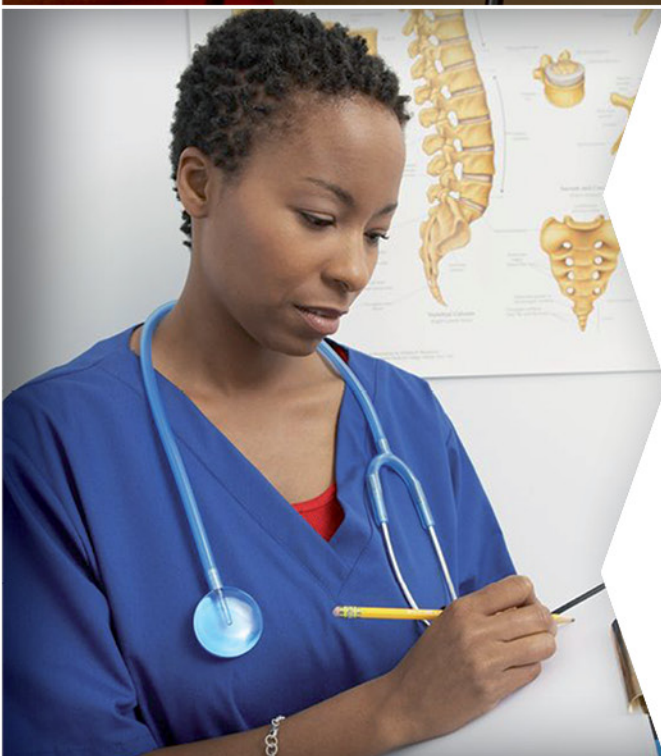


CDIA

Chronic Diseases Initiative for Africa - Mar 2013 - Issue 3



Seeking **answers**

In striving to improve the CDIA's lines of communication with funders, media and other stakeholders, we are proud to welcome you to this, our first newsletter for 2013.

Continuing to open new doors for all those involved in the CDIA initiative, in this issue you'll find an update on the Healthy Cities Initiative, whose research shows that many living environments in South Africa are having a negative effect on the health and well-being of inhabitants.

You'll also read about the Community Health Workers Project, see photos from the 2012 AGM, and meet CDIA Graduates Sam Surka and Shafika Abrahams-Gessel.

Please let us have your feedback. You can email us on cdia@rothko.co.za.



Non-communicable disease testing: are community health workers the answer?

CDIA takes part in new study to combat cardiovascular disease in lower to middle income economies.

The CDIA together with global partners is involved in a new study to see whether Community Health Workers (CHW) can use a simple risk assessment tool to screen for individuals in lower to middle income communities who are at high risk for cardiovascular disease.

Dinky Levitt of the CDIA says that people in these communities are often at risk because of lack of funding and poor infrastructure. "Lower to middle income economies are facing a lack of funding directed at non-communicable diseases care. This combined with a poor health system infrastructure and a lack of evidence for the best models for care, as well as human resource challenges, means that the burden of infectious diseases and non-communicable diseases are compounded," she says.

To try and tackle these issues, the CDIA, in conjunction with the Brigham and Women's Hospital, the Centre for Control of Chronic Diseases in Bangladesh, and collaborating centres in Guatemala and the US-Mexico border, has recently launched the study: 'An evaluation of Community Health Workers screening for cardio-vascular disease in the community in four United Health Centers of Excellence.'

The study is being run in the US-Mexico Border region, Guatemala, Bangladesh, and South Africa, and aims to see whether a basic risk assessment tool can enable CHWs to identify individuals who are at high risk for cardiovascular disease, in a community setting, and successfully refer these patients for further assessment and management at a community health center. CHWs will do this by taking appropriate measurements such as blood pressure, height, weight, and recording them, along with other risk factor information like the age, gender, smoking status, and history of diabetes mellitus of a participant, onto a pre-formatted, data collection instrument.

"The evidence from these screenings will provide important information about the effectiveness of using a simple risk assessment tool, as well as the value and effectiveness of task-shifting from trained health professionals to CHWs, as part of a team approach for managing NCDs in a community setting," says Levitt.

CDIA Annual General Meeting 2012

The recent CDIA Annual General Meeting was a productive one, and served as a showcase for the CDIA students who gave many of the presentations.

It was a particular joy to welcome our new members to Cape Town. They were from Botswana, Malawi, Kenya, and Wits University. The next step will be the planning of joint proposals. The meeting was also attended by colleagues from the World Bank who have expressed their appreciation of our work.

The attendants at the meeting all agreed that the name of CDIA should be changed to "Chronic Disease Initiative for Africa" to better reflect the focus of our work.



Masters, PhD and post-doctoral students. Pictured from left to right: Dr Kirsty Bobrow, Ms Claire Bartels, Ms Beatrice Nojilana, Ms Lungi Tsolekile, Dr Sam Surka, Dr Lindi van Niekerk, Ms Thandie Chuma, Dr Naomi Folb, Mr Kufre Okop. Seated: Dinky Levitt and Krisela Steyn.



Professor Vicki Lambert giving her lecture.



The new CDIA African collaboration members. Pictured from left to right: Dr Wilson Mandaia - Malawi, Prof Sandro Vento - Botswana, Dr Samuel Oti - Kenya, Dr Vincent Sethlare - Botswana, Prof Shane Norris - Wits. Standing front: Dinky Levitt.

The best laid urban plans: what are the health costs of living in South Africa?

New research shows that many living environments in South Africa are having a negative effect on the health and well-being of inhabitants.

Unless feedback from residents of existing settlements is taken into account in urban planning, the inhabitants of new housing projects and informal settlements will suffer poor health and well-being, according to ongoing research from the African Centre for Cities' Healthy Cities CityLab.

"The physical urban environment is seen as influencing health in a variety of ways, such as through access to shelter and services, and through its influence on physical activity and on diet and nutrition. Our research shows that in South Africa, the physical environment has effects that haven't been taken into account, and are influencing residents' health," says Dinky Levitt of the CDIA, one of the key collaborators in the research.

The Healthy Cities CityLab, an interdisciplinary research collaboration with representatives from different departments of the University of Cape Town, the African Centre for Cities, the CDIA and others, aims to develop new visions of urban health, test out new methodologies and contribute to new theories about the relationship between the physical urban environment and health.

The researchers used a variety of techniques including body-mapping, a process where participants trace the outlines of their body and then annotate the tracing to discuss their health and well-being. They also drew representations of the environment in which they live and how this impacts on their health and well-being.

"Using these techniques to determine grassroots perceptions of health and well-being, we realised that many new housing projects still tend to provide sterile living environments that are not conducive to mental health or to safe outdoor activity - both in terms of aesthetic appeal and protection from hazards, such as traffic, crime and flooding," says co-ordinator of Healthy Cities CityLab, Warren Smit.

Smit says that the stress that this results in, can also further contribute to physical illness.

"While basic needs are being met, the complexity of the South African context means that many other needs are being overlooked completely. Improving health is not an explicit objective in any of these programmes and evaluations of some interventions suggest that they can sometimes have a negative impact on the health of households. An ongoing illustration is where relocation to the urban periphery results in the disruption of livelihoods, strategies and social support networks, with very negative impacts on the health and well-being of residents," says Smit.



For example, the relocation of residents from an informal settlement in Langa, close to central Cape Town, to a relocation area in Delft, about 15 kilometres away, resulted in 20% of households losing a source of income, and an up to five times increase in monthly transport costs for those who retained their jobs.

Another failing in current urban planning is the fact that instruments for measuring 'walkability' in the creation of new settlements assume that there are clearly defined streets, plots or dwelling units and land uses, as well as clear separations between urban and rural, residential and commercial, and public and private.

Unfortunately, this is generally not how things work in Africa. "African urbanism is characterised by informality, complexity and the lack of neat separations," says Smit, "This can make the relationship between residents and their neighbourhood environment far more complex than in the conventional conception of the Western modern city, which a lot of South Africa's urban planning seems to be based upon. The main implication of this is that some of the tools relied on to create healthier urban environments in developed parts of the world, such as land-use zoning schemes, will have only a limited effect in cities of developing countries, where large segments of cities fall outside the realm of formal regulations."

Smit says that in Cape Town and other African cities, there needs to be more emphasis on guiding the physical creation and management of the urban environment through participatory processes that involve both formal and informal structures. "In going forward in new developments, planners and policy makers need to understand the physical links between the urban environment and health and well-being, and also take into account the participatory knowledge of those who live in such environments"

To this end, the CityLab project ultimately plans to produce a handbook on how policy makers can produce healthier urban environments.

"Creating healthier urban environments is primarily about governance, politics and decision-making. It is crucial to ensure that policy-makers are aware of key health issues, such as health inequity levels, and how the physical urban environment contributes to this, and how interventions that would not necessarily involve more expenditure, but a different distribution of available funds, can contribute to improving health and well-being for all," says Levitt.

eHealth answers the call of duty

The CDIA is proud to have on board Dr Sam Surka, who is working on the Community Health Workers Project, conducting research into using mobile phone technology to screen for cardiovascular disease (CVD).

Surka has a background in clinical medicine with experience working in rural and urban settings in both developed and developing countries. He first became interested in information and communication technology in healthcare (eHealth) while working in medicine in Australia, where significant advances have been made in the field.

After returning to South Africa in 2011, Surka joined the South African Medical Research Council as a senior scientist in the division of Telemedicine, to apply his new passion for eHealth.

"I believe there is great potential for mobile technology in the field of medicine – and the government is supporting this, which is nice," he says.

Not long after his return to South Africa he met a researcher working for the CDIA on the Community

Health Workers Project. Realising the benefit a mobile phone application could potentially have for the project, he joined the team as a researcher.

"The goal of my research is to develop a mobile phone application that calculates a total cardiovascular disease risk score and to investigate how this impacts on screening for cardiovascular disease by community health workers. Specifically, we plan to evaluate how an existing paper-based, non-laboratory total CVD risk assessment tool compares to a basic feature phone version of the tool in the hands of community health workers conducting screenings in the community," he says.

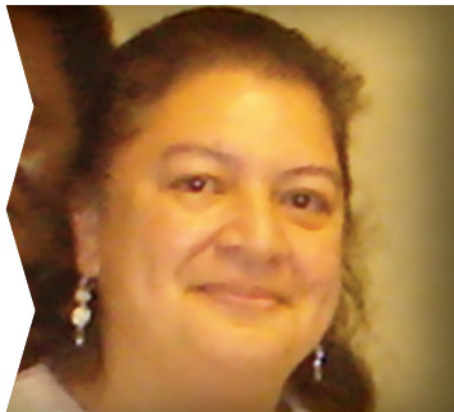
Surka is currently studying for a Masters in eHealthcare through the University of Queensland, Australia, and has successfully completed all the course work to date with distinctions. "The study will form part of my degree dissertation and I am highly motivated to successfully carry out and complete the proposed work. Once this is done I am eager to see how such technology can be taken further afield".



Dr Sam Surka

A healthy collaboration

Ms Shafika Abrahams-Gessel recently joined the CDIA team, working on a research project involving training community health workers (CHWs) to use a non-invasive risk screening tool for cardiovascular disease (CVD), developed by her colleague, Dr Tom Gaziano.



Ms Shafika Abrahams-Gessel

Abrahams-Gessel, a native of Cape Town, pursued undergraduate work in psychology, focusing her senior thesis on the postpartum depression experiences of the spouses of medical school and business school students at Dartmouth College. She obtained her Masters of Science in Epidemiology and Biostatistics from The Institute at Dartmouth Medical School. While studying at Dartmouth she also worked on a variety of epidemiology studies in the areas of reproductive cancers, including the diethylstilbestrol study and an ovarian cancer study.

After completing her Masters degree, Abrahams-Gessel moved to Boston where she continued her work in postpartum depression at Brigham and Women's Hospital. In 2008 she transitioned to working for the Harvard Global Health Institute, where she managed

projects in CVD, women's health, children's health and population health.

"At the same time I enrolled in the practice-based DrPH (Doctorate of Public Health) programme at Boston University, with a focus on maternal and child health. By happy coincidence, my work at Harvard facilitated working with Dr Tom Gaziano, a cardiologist at Harvard Medical School, who is affiliated with the CDIA through the Centers of Excellence grant. This relationship has developed into a full-time collaboration with Dr Gaziano on

projects involving CVD in low-resource settings, allowing me to contribute to the work being done in South Africa," says Abrahams-Gessel.

She is now in the dissertation phase of her programme and her thesis is embedded in the community health worker trial funded by the NHLBI in 2011. The trial assesses whether CHWs can be effectively trained to screen for persons at risk for CVD in the community and involves collaboration between Bangladesh, Guatemala, Mexico and South Africa (where the CDIA is the coordinating center for the trial).