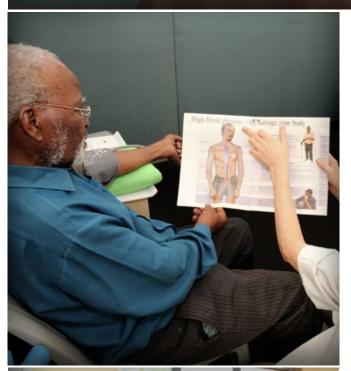


CDIA is a collaborative research initiative that develops and evaluates models for chronic disease care and prevention of risk factors.





### Overcoming the odds

In this issue: from groundbreaking research that provides a novel approach to measuring how smoking significantly increases the risk of contracting fatal diseases, to setting the agenda for non-communicable disease research in the future, we learn how the CDIA is leading the charge when it comes to ways of preventing and mitigating these conditions. Meet Dr Katherine Murphy, researcher and author of iChange4Health, a manual that utilises brief behavioural change counselling to educate people about the risk of chronic diseases of lifestyle.

Please let us have your feedback – email cdia@rothko.co.za.

#### Happy holidays!





## Ground-breaking study unloads the smoking gun

South African researchers have uncovered shocking details of how smoking kills South Africans via tobacco-related diseases.

By using a new research methodology, South Africa has become the first country in the world to gather data that allows the health impact of smoking within the population to be monitored – and has been able to get special insight into how smoking affects the risk individuals have for contracting serious smoking-related diseases like tuberculosis, lung cancer, stroke, throat and mouth cancer, as well as various lung and heart diseases.

"The study has led to a new understanding about how smoking affects people dying of serious smoking-related diseases in South Africa and it could do the same elsewhere in the world," says Professor Krisela Steyn, Associate Director of the CDIA.

Dr Debbie Bradshaw, of the Medical Research Council and a member of CDIA, is one of the leading participants in this mortality study and she says: "We have known about the link between smoking and mortality for many decades, but did not know the magnitude of the problem." She explains that, by adding a simple yes/no question about smoking history to routine death certification, researchers gained access to more than 480 000 death records between 1999 and 2007, revealing the impact of a lifelong smoking pattern. The study found particularly high tobacco-related mortality in the coloured population, for whom smoking causes one in four of all deaths in middle-aged men and one in six of all deaths in middle-aged women.

According to the latest national statistics in the South African National Health and Nutrition Examination Survey (Sanhanes -1), 16.4% of South Africans were smokers in 2012. This is a significant drop from 32% in 1993, which has been largely attributed to stricter smoking legislation, advertising limitations and steeper tobacco prices. Professor Steyn says that even though smoking has decreased in South Africa,

there are still far too many smokers. Smokers also expose family members to second-hand smoke, which also carries a health risk.

Of particular concern is smoking among young people. The Youth Risk Behaviour Survey found that 21% of Grade 8 to 11 learners smoke, with no change occurring between 2002 and 2008 – showing a resistance to warnings about smoking. "The key message is that we need to apply smoking legislation more strictly than in the past, we need to reach young people to help them understand that although they think they will live forever, they need to know they will die if they keep on smoking," says Professor Steyn. "Young people's idea that they are immune to risk is actually the biggest risk they are exposed to," she says.

#### "Smoking is already the second most important risk factor for death worldwide, right behind hypertension."

She quotes research that proves that if someone starts smoking in their late teens, their chance of dying of a smoking-related disease by the age of 60 is 50%. It is imperative to stop young people from taking up smoking, as most adult smokers start smoking before 18, she says. Getting people to give up smoking is significantly harder than preventing an individual from smoking in the first place, considering the highly addictive nature of nicotine in tobacco.

In the recent report on the Global Burden of Disease in 2010, smoking is already the second most important risk factor for death worldwide, right behind hypertension. Professor Steyn believes the new study will make a valuable contribution to global tobacco research. "The rest of the world can learn how to use this important new weapon in the war on smoking-attributed disease from the South African survey."

# Healthcare tool combats chronic disease epidemic

New research by the Human Sciences Research Council and the Medical Research Council shows that the rise of non-communicable diseases (NCD) in South Africa is an 'emerging epidemic' that threatens to destabilise the country's already fragile healthcare system.

Chronic diseases of lifestyle such as cardiovascular disease, cancer, diabetes, and hypertension account for 40% of all deaths in South Africa, and the National Department of Health has sounded a call to arms for health providers and the general public to work

together to improve the health profile of South Africa.

The iChange4Health initiative has emerged in response to this call. A partnership between the Chronic Disease Initiative for Africa (CDIA) and leading local generics manufacturer, Pharma Dynamics, iChange4Health seeks to help South Africans change their bad habits and put new, healthier ones in their place.

iChange4Health has produced a series of helpful motivational booklets that provide information, guidance and tips regarding lifestyle changes and also showcase other people who have broken their unhealthy habits. It has also created a training manual, which is supported by the Heart and Stroke Foundation.

The manual is the first of its kind in South Africa – it uses an evidence-based approach that forms a crucial part of effective interventions aimed at reducing the risk of chronic diseases of lifestyle by way of brief behavioural change counselling.

"Early diagnosis as a preventative measure is especially key as a healthcare intervention. Consider non-symptomatic conditions, such as high blood pressure, high blood sugar levels, and high blood cholesterol levels – if caught early, these are easily treatable. At a more developed stage, where hardening of the arteries has developed, heart attacks and strokes can possibly follow," says Doctor Kathy Murphy of the CDIA, and lead-author of the manual.

The 68-page online manual, titled Helping people change: A busy practitioner's guide to providing brief behaviour change counselling for chronic disease lifestyle risk factors, is intended for use by medical



From left: Prof Dinky Levitt, Prof Bob Mash, Prof Bongani Moyasi, Prof Krisela Steyn, Mariska Fouche, and Dr Vash Mungal-Singh.

doctors, nurses, dieticians, nutritionists, health promoters, biokineticists, and health professionals.

Professor Krisela Steyn, of the CDIA, said that in South Africa, patients have little information about how lifestyle change can help manage and avoid complications for these conditions. "According to the World Health Organisation, 80% of deaths due to heart disease could be prevented by making healthy lifestyle choices," she said.

As such, iChange4Health will inform and educate across the board. "This is the first time that healthcare providers are being offered such a comprehensive resource pack to better equip them to effectively counsel and help patients," said Steyn.

CEO of the Heart and Stroke Foundation South Africa, Dr Vash Mungal-Singh, agrees that these tools are a tremendous step towards lowering the risk of chronic disease in South Africa. "Living a healthy lifestyle has long been proven to be an effective way of preventing heart disease. It is important that people realise how dangerous unhealthy lifestyle choices are."

In order to optimise the effectiveness of the manual, training in how to use it is being carried out across the country. Physicians from the eight family medicine departments at various universities around the country have already been trained by co-author of the manual, Professor Bob Mash, Head of Family Medicine and Primary Care at Stellenbosch University and colleagues. These physicians will in turn go on to train other GPs in their respective provinces, in order to spread the message as widely as possible.



CDIA members at the 4th annual meeting.

#### CDIA 4th annual meeting

"An immense scope of activities taking place against a background of an immense burden of disease." So said Professor Dinky Levitt, summing up the presentations and discussion at the annual CDIA meeting this November.

The event gives members of the alliance an opportunity to present what they have been working on during the year and identify areas for growth and development. Members are also able to network with each other and form new alliances.

Now in its fourth year, CDIA has numerous opportunities ahead of it, but also has some challenges, said Professor Levitt. Key tasks for the year ahead include expanding the network to include more African collaborators, creating more awareness on the continent of the

work being done by CDIA, and developing a clear plan to ensure that the alliance is ready and able to respond to calls for proposals when they become available, in order to attract much-needed funding to the alliance.

As part of this, alliance member, Professor Eric Bateman, from the UCT Lung Institute said that it would be crucial for CDIA to define more clearly the research questions that it can engage with in an African context and then find appropriate avenues through which to do this.

Clarifying governance issues and continuing to develop research capacity were also identified as priorities for the alliance.

"The presentations at the meeting were of an exceptionally high standard and the debate and discussion was robust. We look forward to continuing to find new ways to work together to intensify this fight," said Professor Levitt.



# Taking a **new** approach

CDIA research scientist Dr Katherine Murphy believes that by educating patients about the risk factors for non-communicable diseases, much can be done to prevent more people from contracting potentially life-threatening diseases.

Murphy is the author of a research-based resource package, issued by the iChange4Health initiative, which takes a novel approach to educating and empowering patients with non-communicable diseases (NCDs) or their risk factors.

"Our research has shown that generally health care providers are ill-equipped to counsel patients about behavioural change. Many have inadequate content knowledge; so this package aims to support and skill health care providers in providing evidence-based, brief behaviour change counselling on the four main risk behaviours for NCDs – namely smoking, harmful drinking, physical activity and an unhealthy diet".

The package consists of a manual for health care providers, and educational and motivational materials for patients, on the topics of smoking, diet, physical activity and alcohol use.

As a former teacher, education is an important part of Murphy's present work. "People can't make informed choices if they don't know enough. Our research shows that giving them the correct information and offering brief behaviour change counselling in a supportive way can help to change behaviour and improve health," she says.

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