WITSIE AT THE CUTTING EDGE: Researcher Profile

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Rural Health in Transition and Agincourt Research Unit



Who are you and what is your academic/scientific training and background?

I am a medical doctor and public health professional with an MBBCh from Wits and a Master of Public Health from Harvard University, USA (masters degrees were not offered in South Africa until the late 1990s when I became academic coordinator of the first MPH in 1998). In 2006 I obtained a PhD in Epidemiology and Public Health from Umeå University, Sweden.

In 1997 I was awarded a Helen Suzman Leadership/ Chevening Award from the British Council, which supported a 15-month sabbatical at the London School of Hygiene and Tropical Medicine. In 2008 I received an award in recognition of my contribution to the founding of the INDEPTH Network*. For my contribution to scientific collaboration and postgraduate training, I have twice received Wits University's "Academic Citizenship Team Award": for Agincourt Unit activities in 2010, and for CARTA** activities that help build research capacity of 9 African Universities in 2011 (with Sharon Fonn).

*INDEPTH: International Network for the Demographic Evaluation of Populations and Their Health – a network of African and Asian research centres that conduct longitudinal health, social and demographic research in defined communities.

**CARTA: Consortium for Advanced Research Training in Africa – part of the Wellcome Trusts' African Institutions Initiative.

Explain the nature of the research that you are currently undertaking.

My research career began 20 years ago in rural Mpumalanga Province where I lead population-based research initiatives within the MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt). My work is largely concentrated within three interlinked areas: (i) measurement of cause-of-death which has provided methodological advances freely available globally, (ii) understanding of health and population transitions; their impact on individuals, households and communities; and implications for public sector policy and practice; and (iii) investigation of this transition on child and adolescent health and nutrition specifically. Findings on increasing risk for cardiometabolic disease have led to a new area of work which focuses on prevention of risk at early stages of the life course – pre-pregnancy, during pregnancy and infancy (with Shane Norris of the MRC/Wits Developmental Pathways for Health Research Unit).

What do you think is the most pertinent/relevant/significant contribution you have made to research/science/your field?

My work has illuminated understanding of rapid health transitions in rural South Africa over a period that spanned socio-political change and emergence of the HIV/AIDS epidemic. Mortality rates in children and young and middle-aged adults worsened dramatically with life expectancy falling by 14 years in males and 12 years in females before reversing around 2006 following rollout of prevention-of-mother-to-child transmission programmes and antiretroviral therapy. Infant and child survival worsens in the months both before and after a mother's death, and when another child is very ill or recently died. There are co-existing high levels of stunting (a third of 1-year olds) and combined overweight/obesity in adolescent

females (20-25% in late adolescence), with central obesity in girls reaching 35% at the end of puberty. This combination heralds alarming levels of risk for future cardiometabolic disease. All these findings have important implications for policy and programmes in health and other related sectors.

Did you have a particular mentor or supervisor who inspired you in research?

There are several, including Sydney and Emily Kark who developed Community-Oriented Primary Care in Pholela, KwaZulu-Natal in the 1940s, and John Gear, the first professor of Community Health at Wits, who established the Wits Rural Facility.

Tell us about what you do when you're not busy at work and carrying out cutting-edge research.

My great passion is my family. My three children are all young adults and although I miss having children underfoot, there is tremendous excitement in witnessing their independent development. I read a lot (I can recommend Scandinavian crime thrillers when you need a scientific break but cognitive stimulation!) and I enjoy cooking.

<u>Read one of Kathleen's papers</u>: K, Kahn, Collinson MA, Gómez-Olivé FX, Mee P Kabudula CW, Mokoena O, Shabangu M, Tibane J, et al (2012). Profile: Agincourt Health and Socio-Demographic Surveillance System. International Journal of Epidemiology 41: 988-1001.