

Dr Hanani Tabana appointed Senior Lecturer at the School of Public Health

Interview with Hanani

Shun

Can you please tell us something about yourself and your field of study in public health?

Hanani

My undergraduate training was in biomedical sciences at the University of Cape Town (UCT). I then did an Honours degree in pharmacology, thereafter a Masters in Public Health (Epidemiology), also at UCT. While doing my MPH, I developed an interest in maternal and child health research, and was involved in a multi-country study on the effectiveness of the prevention of mother-to-child transmission programmes (PMTCT); this study became the focus of my MPH dissertation



In 2008, I entered an internship program at the South African Medical Research Council (SAMRC), in the Chronic Diseases of Lifestyle Unit. I was there for a brief period then got a post in the Health Systems Research Unit (HSRU) where I worked on a home-based HIV counselling and testing (HCT) trial that we conducted in Sisonke District in KwaZulu-Natal. Evidence from previous studies in the area showed that, whilst most women who presented for antenatal care got an opportunity to get tested, their partners were not being tested. Further, access to care in the study area was fraught with barriers ranging from geographical, economic, social to health system factors. The trial therefore sought to address some of these barriers by bringing services (specifically HCT) to the community with the aim to increase HIV testing uptake and ultimately facilitate early initiation to HIV care and support for those testing positive.

While in the HSRU at the SAMRC, I enrolled for a PhD. At the time, the HSRU was under the leadership of Prof Mickey Chopra, who had a lot of faith in young people and a strong belief in nurturing young scientists. Mickey initiated multiple collaborations with universities abroad, which opened up opportunities for young scientists in the unit to pursue PhD studies with these institutions. I became one of the researchers in the unit who took up the opportunity to study abroad and in 2013 graduated with a PhD in Public Health at Karolinska Institutet in Sweden.

My PhD was primarily focused on HIV prevention, HIV Counselling and Testing and how a strategy such as home-based testing could supplement other HCT strategies, for rural 'hard-to-reach' populations. As a secondary objective of my PhD, I conducted an economic evaluation of the home-based testing strategy to see if it was more or less cost effective compared to the standard HIV testing model.

Shun

Just to come back to your Masters work: were there any differences that you noted between South Africa and the other African countries that you covered in your study?

Hanani

The study was conducted around 2007-2008 and at the time the other countries such as Cote d'Ivoire and Zambia were at different stages of rolling out PMTCT Programmes and levels of performance differed from country to country. For instance in the PMTCT cascade

of events – there were differences and similarities in barriers and or facilitators of treatment adherence. I can't remember all the details now.

Shun

What did you do after finishing your PhD?

Hanani

I did some consultancy work with a number of organisations including Karolinska Institutet, DFID, and the WHO for some months. Thereafter, I joined Stellenbosch University, Community Health Division as a lecturer in the Masters programmes. I co-convened a module, Health Policy Analysis and was involved in management of some of the research projects that were running in the division. I have recently joined UWC, here at the School of Public Health as senior lecturer.

Shun

Welcome!

Hanani

Thank you!

I am very delighted to be here! It is like coming back home as I have worked at SOPH before - with Prof Helen Schneider on a Rapid Assessment of the Ward-based PHC reengineering outreach teams in the North West province. My appointment is now on a permanent and long term basis, which is great for both my career and the contribution I hope to make here.

Shun

What will you be doing at SOPH?

Hanani

I am responsible for convening and delivering the Measuring Health and Disease module from next year onwards. That will be my primary focus in terms of teaching. There is scope to get involved in other modules as well where I will be able to contribute my expertise in areas such as monitoring and evaluation. For instance I already see an opportunity to introduce some aspects of economic evaluation in relevant modules. As I mentioned earlier, one of my PhD sub-studies was an economic evaluation study (a cost effectiveness analysis) which provided opportunities for me to undergo training in this particular area of work. I enjoy the subject and it is something that I want to nurture and take forward.

Shun

What will be your research focus going forward?

Hanani

In terms of my research focus I really want to reignite the maternal and child health thread that I picked up an interest in a while ago. I also want to grow and apply my particular skills-set in the implementation of rigorous health systems research studies.

Shun

...and for which there is a need currently in the School.

Hanani

Indeed, and it continues to be important globally and locally as well. There are a lot of public health challenges around maternal and child health. We've made great strides- lots of efforts and achievements. For instance, in South Africa, we have managed to reduce mother to child transmission of HIV to less than 3% according to the PMTCT evaluations that the SAMRC has been undertaking over the last few years. But we continue to see problems in other aspects of maternal and child health, for example, sexual and reproductive health, family planning, teenage pregnancies and there is still evidence of alarming statistics on maternal and child morbidity and mortality.

So – broadly speaking – what interests me in maternal and child health are more HIV-related aspects of it. HIV/AIDS continues to be a problem in our setting- despite the great progress, so we cannot afford to relax. We have to continue ensuring that there are concerted efforts to curb the epidemic. And also begin to think: how do we sustain the achievements that we have gained so far?

I'm interested in using epidemiology in combination with biostatistics and economic evaluations, to design research studies on sustainability of interventions that have been proven to work. I would like to couple most of the research I undertake with economic evaluations. Research has demonstrated effectiveness of many interventions, but whether that research is translated to policy often boils down to affordability. If economic evaluations are conducted alongside most of the research we do, we provide the policy makers with an informed basis for decisions on translating research into policy. This is something that I really want to take forward.

Shun

So I am hearing you say that the research itself is to include the affordability and the sustainability of the public health issues being investigated for its usefulness for the policy maker?

Hanani

Precisely! I see so much value in presenting the policy maker with all of that information. For instance, I'm interested in the survival of pregnant mothers and children. So using quantitative methods to model, say future projections of how populations would look like, for example, how the survival trends look due to a specific intervention; so you would for instance be able to show how many lives are saved, mortality averted, deaths prevented etc. through an effective intervention that is sustained.

Shun

This is exactly what policymakers want to see, isn't it?

Hanani

Exactly. I think that carries some weight. Combining methodologies and using them to predict future trends. I think this would build a strong quantitative focus around our research work. Not to say this isn't already happening in the School, but I want it to be my strong focus and contribution to the School.

Shun

Would that be a way in which you will want to undertake your own independently initiated research, as well as guiding prospective Masters and PhD students?

Hanani

Precisely. My duties cut across teaching, supervision and research. My research focus and the particular skills-set that I bring will be a common thread in each of the components of my work in the School including guidance to Masters and PhD students. In addition, I look forward to learning from others in the School.

Shun

Are you working on anything specific in your research at this moment?

Hanani

I am writing up different pieces of work. At the School I have begun to identify colleagues who may have common research interests with me. There are definitely strong links, and opportunities for working together as a team on certain research foci.

And I hope also to pick up on the work I did with Prof Helen Schneider in 2012, research that has lots of angles that can be taken forward.

And of course I am putting down my own research ideas as well, some of which I have mentioned above, concretising and piloting them.

Shun

And I am sure that there will also be institutional collaborations with for instance the MRC and Karolinska Institutet?

Hanani

Yes definitely. I have very strong collaborations with Karolinska Institutet, and collaborations with the WHO. I am also initiating some collaborations with colleagues at Glasgow University and Newcastle in the UK. I want to develop a research niche, one that

along with the work of others, sets and responds to the agenda for priority research in South Africa, Africa and globally. To that end, I have started focusing on forging such collaborations where one draws on expertise from around the world to take the research forward.

Shun

Will being located at the UWC School of Public Health will help you do that?

Hanani

Absolutely! I'm very excited about this chapter that I've just embarked on. The School has a calibre of researchers that are stimulating, energising, and who will help one take lots of work forward aggressively. It is an environment that I definitely need at this stage.

But I also want to contribute to the School's core business in a meaningful manner through teaching, supervision and research. I am committed to doing that.

Shun

I wish you all the best!

What Does Your Workplace Look Like? An introduction to some of our MPH students of 2015

Although challenging at times, transferring our distance education modules from a paper-based system and on to the University's e-learning management system has some great advantages. One of these advantages is that we can interact very immediately – and collectively - with our students through e-tools like 'chat rooms' and blogs.

At the start of this semester, when the MPH students began our "Management for Strategies for Public Health II" module we thought that it would be interesting - given the group work in such different contexts and across many African countries, to have our students capture the 'texture' of their work by taking a picture of some aspect of their daily work life and workplace context.

Bearing in mind the privacy of their clients and/or colleagues, we asked our students to take a simple photograph using a cellphone and then share it with the group.

Here are some great pictures that provide one with a good 'window' into an aspect of the everyday working life of some of our MPH students:

Ms Evelyn Matsamura Kiapi Kampala, Uganda

I work with the United Nations Population Fund as a communications specialist with an ambition of expanding my knowledge on public health issues.

I have chosen the particular picture (taken at Lacor Hospital in Northern Uganda) because it depicts my line of duty as a journalist by profession, moving in communities documenting and giving voices to the voiceless so that they can be heard and their lives changed.

The mission of Lacor Hospital is to provide health care to the needy, to fight disease and poverty - putting human rights at the forefront of its mission.



Mr. Gabriel Essilfie-Essel
Ho, Volta Region, Ghana.

I am a Pharmacist by training. I currently work as the Deputy Volta Regional Manager of the Pharmacy Council of Ghana. My work involves regulating all pharmaceutical care practitioners in the Volta region as well as the premises within which they practice.

The picture I chose below to represent my workplace is actually two pictures merged into one to show the contrasting aspects of my regulatory work. The first half (*left*) is a picture of a licensed over-the-counter medicine practitioner dispensing medicine to a client. This is the best practice my work aims to achieve and shows practice in a licensed premises and the practitioner dispensing with all the necessary counseling.

The second half (*right*) is an itinerant medicine seller selling medicines in an open market stall. By law medicines are only allowed to be dispensed by Pharmacists in pharmacies and licensed over-the-counter medicine sellers in over-the-counter medicine facilities.

My work aims to ensure the first half is done whilst preventing the second half.

In summary I seek to protect the health interest of the Ghanaian population by ensuring the highest levels of pharmaceutical care.



Dr Penn Amaah
Bangui and Bozoum, Central African Republic

I work for a not-for-profit non-governmental Italian organisation called INTERSOS in the Central African Republic as a program manager for the INTERSOS mission in the country. I coordinate activities in health and nutrition and collaborate with other partners at the central and prefectoral (i.e. regional) levels to ensure program success. The picture below was taken during one of my supervisory tours in one of the health centres.

The Central African Republic was hit by violence in December 2013 with the destruction of public infrastructure, massive killings and displacement of population. As an aid worker, I coordinate health activities to ensure that marginalized and 'hard to reach' populations (for example, those who have been internally displaced in the country) have access to health and nutrition care.

The picture reveals community health workers assisting the Project meet its objectives.





A Cost-Effectiveness Analysis of a Home-Based HIV Counselling and Testing Intervention versus the Standard (Facility Based) HIV Testing Strategy in Rural South Africa

Hanani Tabana, Lungiswa Nkonki, Charles Hongoro, Tanya Doherty, Anna Mia Ekström, Reshma Naik, Wangamwe Zembe-Mkabile, Debra Jackson, Anna Thorson

Abstract

Introduction

There is growing evidence concerning the acceptability and feasibility of home-based HIV testing. However, less is known about the cost-effectiveness of the approach yet it is a critical component to guide decisions about scaling up access to HIV testing. This study examined the cost-effectiveness of a home-based HIV testing intervention in rural South Africa.

Methods

Two alternatives: clinic and home-based HIV counselling and testing were compared. Costs were analysed from a provider's perspective for the period of January to December 2010. The outcome, HIV counselling and testing (HCT) uptake was obtained from the Good Start home-based HIV counselling and testing (HBHCT) cluster randomised control trial undertaken in KwaZulu-Natal province. Cost-effectiveness was estimated for a target population of 22,099 versus 23,864 people for intervention and control communities respectively.

Average costs were calculated as the cost per client tested, while cost-effectiveness was calculated as the cost per additional client tested through HBHCT.

Results

Based on effectiveness of 37% in the intervention (HBHCT) arm compared to 16% in control arm, home based testing costs US\$29 compared to US\$38 per person for clinic HCT. The incremental cost effectiveness per client tested using HBHCT was \$19.

Conclusions

HBHCT was less costly and more effective. Home-based HCT could present a cost-effective alternative for rural 'hard to reach' populations depending on affordability by the health system, and should be considered as part of community outreach programs.

Tabana H, Nkonki L, Hongoro C, Doherty T, Ekström AM, Naik R, et al. (2015) A Cost-Effectiveness Analysis of Home-Based HIV Counselling and Testing Intervention versus the Standard (Facility Based) HIV Testing Strategy in Rural South Africa. *PLoS ONE* 10(8): e0135048. doi:10.1371/journal.pone.0135048



Regional Trade and the Nutrition Transition: Opportunities to Strengthen NCD Prevention Policy in the Southern African Development Community

***Anne Marie Thow, David Sanders, Eliza Drury, Thandi Puoane,
Syeda N. Chowdhury, Lungiswa Tsolekile and Joel Negin***

Background:

Addressing diet-related non-communicable diseases (NCDs) will require a multisectoral policy approach that includes the food supply and trade, but implementing effective policies has proved challenging. The Southern African Development Community (SADC) has experienced significant trade and economic liberalization over the past decade; at the same time, the nutrition transition has progressed rapidly in the region. This analysis considers the relationship between regional trade liberalization and changes in the food environment associated with poor diets and NCDs, with the aim of identifying feasible and proactive policy responses to support healthy diets.

Design:

Changes in trade and investment policy for the SADC were documented and compared with time-series graphs of import data for soft drinks and snack foods to assess changes in imports and source country in relation to trade and investment liberalization. Our analysis focuses on regional trade flows.

Results:

Diets and the burden of disease in the SADC have changed since the 1990s in parallel with trade and investment liberalization. Imports of soft drinks increased by 76% into SADC countries between 1995 and 2010, and processed snack foods by 83%. South Africa acts as a regional trade and investment hub; it is the major source of imports and investment related to these products into other SADC countries. At the same time, imports of processed foods and soft drinks from outside the region - largely from Asia and the Middle East - are increasing at a dramatic rate with soft drink imports growing by almost 1,200% and processed snack foods by 750%.

Conclusions:

There is significant intra-regional trade in products associated with the nutrition transition; however, growing extra-regional trade means that countries face new pressures in implementing strong policies to prevent the increasing burden of diet-related NCDs. Implementation of a regional nutrition policy framework could complement the SADC's ongoing commitment to regional trade policy.

An Assessment of Community Health Workers' Ability to Screen for Cardiovascular Disease Risk with a Simple, Non-invasive Risk Assessment Instrument in Bangladesh, Guatemala, Mexico, and South Africa: An Observational Study

Thomas A Gaziano, Shafi ka Abrahams-Gessel, Catalina A Denman, Carlos Mendoza Montano, Masuma Khanam, Thandi Puoane, Naomi S Levitt

Summary

Background

Cardiovascular disease contributes substantially to the non-communicable disease (NCD) burden in low income and middle-income countries, which also often have substantial health personnel shortages. In this observational study we investigated whether community health workers could do community-based screenings to predict cardiovascular disease risk as effectively as could physicians or nurses, with a simple, non-invasive risk prediction indicator in low-income and middle-income countries.

Methods

This observation study was done in Bangladesh, Guatemala, Mexico, and South Africa. Each site recruited at least ten to 15 community health workers based on usual site-specific norms for required levels of education and language competency. Community health workers had to reside in the community where the screenings were done and had to be fluent in that community's predominant language. These workers were trained to calculate an absolute cardiovascular disease risk score with a previously validated simple, non-invasive screening indicator. Community health workers who successfully finished the training screened community residents aged 35–74 years without a previous diagnosis of hypertension, diabetes, or heart disease. Health professionals independently generated a second risk score with the same instrument and the two sets of scores were compared for agreement. The primary endpoint of this study was the level of direct agreement between risk scores assigned by the community health workers and the health professionals.

Findings

Of 68 community health worker trainees recruited between June 4, 2012, and Feb 8, 2013, 42 were deemed qualified to do fieldwork (15 in Bangladesh, eight in Guatemala, nine in Mexico, and ten in South Africa). Across all sites, 4383 community members were approached for participation and 4049 completed screening. The mean level of agreement between the two sets of risk scores was 96·8% (weighted $\kappa=0\cdot948$, 95% CI 0·936–0·961) and community health workers showed that 263 (6%) of 4049 people had a 5-year cardiovascular disease risk of greater than 20%.

Interpretation

Health workers without formal professional training can be adequately trained to effectively screen for, and identify, people at high risk of cardiovascular disease. Using community health workers for this screening would free up trained health professionals in low-resource settings to do tasks that need high levels of formal, professional training.

Funding

US National Heart, Lung, and Blood Institute and National Institutes of Health, UnitedHealth Chronic Disease Initiative.

Prognostic Value of Grip Strength: Findings from the Prospective Urban Rural Epidemiology (PURE) Study

Darryl P Leong, Koon K Teo, Sumathy Rangarajan, Patricio Lopez-Jaramillo, Alvaro Avezum Jr, Andres Orlandini, Pamela Seron, Suad H Ahmed, Annika Rosengren, Roya Kelishadi, Omar Rahman, Sumathi Swaminathan, Romaina Iqbal, Rajeev Gupta, Scott A Lear, Aytekin Oguz, Khalid Yusoff, Katarzyna Zatonska, Jephath Chifamba, Ehimario Igumbor, Viswanathan Mohan, Ranjit Mohan Anjana, Hongqiu Gu, Wei Li, Salim Yusuf, on behalf of the Prospective Urban Rural Epidemiology (PURE) Study investigators

Summary

Background

Reduced muscular strength, as measured by grip strength, has been associated with an increased risk of all-cause and cardiovascular mortality. Grip strength is appealing as a simple, quick, and inexpensive means of stratifying an individual's risk of cardiovascular death. However, the prognostic value of grip strength with respect to the number and range of populations and confounders is unknown. The aim of this study was to assess the independent prognostic importance of grip strength measurement in socioculturally and economically diverse countries.

Methods

The Prospective Urban-Rural Epidemiology (PURE) study is a large, longitudinal population study done in 17 countries of varying incomes and sociocultural settings. We enrolled an unbiased sample of households, which were eligible if at least one household member was aged 35–70 years and if household members intended to stay at that address for another 4 years. Participants were assessed for grip strength, measured using a Jamar dynamometer.

During a median follow-up of 4.0 years (IQR 2.9–5.1), we assessed all-cause mortality, cardiovascular mortality, non-cardiovascular mortality, myocardial infarction, stroke, diabetes, cancer, pneumonia, hospital admission for pneumonia or chronic obstructive pulmonary disease (COPD), hospital admission for any respiratory disease (including COPD, asthma, tuberculosis, and pneumonia), injury due to fall, and fracture. Study outcomes were adjudicated using source documents by a local investigator, and a subset were adjudicated centrally.

Findings

Between January, 2003, and December, 2009, a total of 142 861 participants were enrolled in the PURE study, of whom 139 691 with known vital status were included in the analysis. During a median follow-up of 4.0 years (IQR 2.9–5.1), 3379 (2%) of 139 691 participants died. After adjustment, the association between grip strength and each outcome, with the exceptions of cancer and hospital admission due to respiratory illness, was similar across country-income strata. Grip strength was inversely associated with all-cause mortality (hazard ratio per 5 kg reduction in grip strength 1.16, 95% CI 1.13–1.20; $p < 0.0001$), cardiovascular mortality (1.17, 1.11–1.24; $p < 0.0001$), non-cardiovascular mortality (1.17, 1.12–1.21; $p < 0.0001$), myocardial infarction (1.07, 1.02–1.11; $p = 0.002$), and stroke (1.09, 1.05–1.15; $p < 0.0001$). Grip strength was a stronger predictor of all-cause and cardiovascular mortality than systolic blood pressure. We found no significant association between grip strength and incident diabetes, risk of hospital admission for pneumonia or COPD, injury from fall, or fracture. In high-income countries, the risk of cancer and grip strength were positively associated (0.916, 0.880–0.953; $p < 0.0001$), but this association was not found in middle-income and low-income countries.

Interpretation

This study suggests that measurement of grip strength is a simple, inexpensive risk-stratifying method for all-cause death, cardiovascular death, and cardiovascular disease. Further research is needed to identify determinants of muscular strength and to test whether improvement in strength reduces mortality and cardiovascular disease.

Pro-generics Policies and the Backlog in Medicines Registration in South Africa:

Implications for Access to Essential and Affordable Medicines Henry Leng PhD, David Sanders MRCP, Allyson Pollock MBChB, FFPH, MRCP (Ed), MRCGP

The backlog in medicines registration in South Africa is a result of the implementation of pro-generics policies without strengthening the regulator to handle the substantial increase in registration applications that followed. Despite the backlog, more than enough generics are registered to promote price competition and ensure access to affordable medicines

Background

The Medicines Control Council (MCC) of South Africa has been under considerable pressure to increase the rate of medicines registration and has been accused of delaying patients' access to affordable and essential medicines. A study commissioned by the Minister of Health in 2006 to investigate the slow pace at which medicines were being registered ascribed it to a lack of skilled human resources, poor infrastructure and inefficient regulatory processes. It was thought that the MCC processes did not keep pace with developments in the pharmaceutical industry. Although these factors certainly contributed to the backlog in medicines registration, which developed at the MCC, it seemed unlikely that they could have been the cause since the MCC, prior to 2005, was viewed as a highly efficient organization and did not have a backlog. In this review we followed the history of medicines registration and application submissions from 2000 to 2012 to determine whether the development of the backlog was a gradual process, which could have been due to factors mentioned above, or a sudden occurrence that may have been precipitated by one or more critical events, such as a change in policy or relaxation of standards for registration. We have found that the backlog originated with the implementation of policies to promote the availability and access to generics but without anticipating, and providing for, the impact this would have on the resources of the MCC. The new policies caused a flood of application submissions to the MCC, which was not equipped in terms of manpower or administrative processes to handle the substantial increase in submissions. In spite of the backlog, the claim that it compromised access to affordable generic medicines appears unfounded since our analysis for a group of tracer medicines showed that only 54% of registered medicines were being marketed and that a maximum of only five brands account for 80% or more of the market for a particular medicine.

Impact factor: A Valid Measure of Journal Quality?

Somnath Saha, M.D., M.P.H., Sanjay Saint, M.D., M.P.H., and Dimitri A. Christakis, M.D., M.P.H.

Abstract

Objectives:

Impact factor, an index based on the frequency with which a journal's articles are cited in scientific publications, is a putative marker of journal quality. However, empiric studies on impact factor's validity as an indicator of quality are lacking. The authors assessed the validity of impact factor as a measure of quality for general medical journals by testing its association with journal quality as rated by clinical practitioners and researchers.

Methods:

We surveyed physicians specializing in internal medicine in the United States, randomly sampled from the American Medical Association's Physician Masterfile (practitioner group, $n = 113$) and from a list of graduates from a national postdoctoral training program in clinical and health services research (research group, $n = 151$). Respondents rated the quality of nine general medical journals, and we assessed the correlation between these ratings and the journals' impact factors.

Results:

The correlation between impact factor and physicians' ratings of journal quality was strong ($r^2 = 0.82$, $P = 0.001$). The correlation was higher for the research group ($r^2 = 0.83$, $P = 0.001$) than for the practitioner group ($r^2 = 0.62$, $P = 0.01$).

Conclusions:

Impact factor may be a reasonable indicator of quality for general medical journals.

This article has been cited by other articles in PMC.



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