





## Irish Forum for Global Health Conference 2012

Book of Abstracts: 'The Global Health Workforce: Pathways to Health' Why are health workers important?

> 2<sup>nd</sup> - 3<sup>rd</sup> February 2012 RCSI, Dublin

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#### **FOREWARD**

The last 10 years, since Ireland committed to supporting and achieving the Millennium Development Goals (MDGs) in 2001, have seen a sustained increase in commitment and actions to promote Global Health, by policy makers, practitioners and researchers, working with partners in resource-poor settings, especially in the poorest countries of Africa. The health workforce has been the cornerstone in channelling efforts to achieve the Health MDGs, where much of the focus has been on women, children and those most vulnerable to – and infected and affected by – HIV and AIDS and other communicable diseases.

The aim of the Irish Forum for Global Health's (IFGH) two day conference is to synthesise, build upon and propose further actions, utilising the knowledge learned through research, programmatic evaluations and through reflections on how to train, retain and get maximum benefits from a motivated workforce.

At a time of economic recession and cut-backs, the conference will give the Irish local and global health community an opportunity to renew efforts towards getting knowledge on the health workforce into policy and practice for achievement of the MDGs and future global health goals, and stimulate debates around new initiatives and what further knowledge gaps require research and programmatic evaluation.

This February 2012 IFGH conference, at the Royal College of Surgeons in Ireland, builds on a one-day symposium and learning event hosted by the School of Nursing and Human Sciences in Dublin City University in October 2011. Submissions to the 2011 event were mainly within four themes: Community responses; Education, training and north-south partnerships; Health worker retention, motivation and management strategies; and Ethical recruitment and migration of health workers. This book of abstracts, selected from nearly 100 submissions, is also organised along these themes, with an additional theme of novel technologies for human resources management. All abstracts accepted as oral presentations, oral poster presentations and posters are included.

Submissions were from development practitioners, policy makers and researchers sharing experiences from over 22 countries (including Argentina, Bangladesh, Burundi, Egypt, Ethiopia, Haiti, India, Ireland, Lesotho, Liberia, Malawi, Mozambique, Rwanda, Sierra Leone, South Africa, South Sudan, Sudan, Tanzania, Thailand, Uganda, Zambia and Zimbabwe, as well as multi-country partnerships and studies). Topics discussed include the Global Code of Practice on the International Recruitment of Health Personnel and ethical health worker recruitment, migration, retention and motivation of health workers, task shifting, innovative practices and research methodologies, the role and challenges of information systems, the use of information and mobile technology, lessons from research, education and training partnerships, community-based, national and regional responses to health challenges. The volume of submissions to this conference is testament to the interest in this conference, both in Ireland and across partner countries, and the recognised importance of the theme of the health workforce.

On behalf of the IFGH we hope that you will enjoy the conference – and your time in Ireland, if you are a visitor – and continue to participate in these important and timely debates after the Conference by joining the discussions on the forum's eForum and website (<a href="www.globalhealth.ie">www.globalhealth.ie</a>).

Jased Weaklin

Dr David Weakliam, Chair Irish Forum for Global Health Prof Ruairi Brugha, Chair Conference Organising Committee

Ruans Bruzla

**PLENARY PRESENTERS BIOGRAPHIES** 

#### **Minister Joe Costello**

Minister Costello is a hard-working and committed public representative.

He has made a significant contribution to national politics. He has contributed to all major debates in Dáil Éireann. As a member of the Labour Party Front Bench, Joe works closely with Eamon Gilmore and other Labour colleagues seeking a better future for Ireland. He has served as spokesperson on Justice, Education, Defence, European Affairs and Human Rights. He has developed a range of policy documents in all of these areas on behalf of the Party.

Health and Education are of major concern to Joe. He has maintained a vigil at the Mater Hospital between 1pm and 2pm every Saturday for the last seven years to highlight the appalling conditions which the sick and the elderly have to endure in the Accident and Emergency units of our hospitals.

Over the years, Joe has worked with residents and community groups on a range of issues including community development, planning, housing, transport, sporting and cultural matters.

As Chairman of the Supply Control Committee of the North Inner City Drugs Task Force, Joe vigorously opposed the drug barons who brought such misery to communities in the North Inner City. In recent years he was to the fore of the successful campaign to close the Head Shops in Dublin.

#### **Professor Ruairi Brugha**

Professor Ruairí Brugha qualified as a doctor at UCD in 1980 and spent six years in Africa in the 1980s-90s as a clinician, public health specialist and researcher.

He completed his public health medicine training in the UK and joined the London School of Hygiene and Tropical Medicine in 1996 as a lecturer and then senior lecturer. He was co-editor of Health Policy and Planning from 1999 and Head of the Health Policy Unit from 2003. In 2005, he joined the Royal College of Surgeons in Ireland as the first full time Head of the Department of Epidemiology and Public Health Medicine.

He conducts health policy and health systems research, mainly in Africa and Ireland. See <a href="www.ghinet.org">www.ghinet.org</a> for outputs from a multi-country network researching the effects of global initiatives on recipient country health systems, which he co-coordinates.

#### Sheila Dickson

Sheila Dickson is President of the Irish Nurses' and Midwives' Organisation since 2008, and is a Senior Staff Nurse at St. Columbanus Home, Killarney, Co. Kerry.

The INMO is the largest professional Nursing/Midwifery Organisation in Ireland working for its members to ensure best patient care, supporting its members at work, offering advice and guidance on employment and industrial relations issues.

Sheila has been central to the initiative of the INMO to support a Wellness Centre for health workers in Ethiopia under the *Wellness Centre for Healthcare Workers Programme* of the International Council of Nurses. This programme has already been implemented successfully in the other five locations in Lesotho, Malawi, Swaziland, Uganda and Zambia.

#### **Professor Cathal Kelly**

Professor Cathal Kelly took up the position of Chief Executive/Registrar of the Royal College of Surgeons in Ireland in December 2009. A Graduate and Fellow of RCSI, Professor Kelly previously held the post of Dean of the Faculty of Medicine and Health Sciences from 2006 to 2009.

Prior to his appointment, Cathal was a Consultant General and Vascular Surgeon, with a special interest in endovascular surgery, in Beaumont Hospital. He combined this role with the chairmanship of the surgical division and an academic position in RCSI as vice Dean for curriculum change. In addition to completing his basic and higher surgical training in Dublin, Professor Kelly pursued a Research Fellowship at the University of Pennsylvania in Philadelphia, USA.

Cathal has also won the prestigious "Patey Prize" of the Association of Surgeons of Great Britain & Ireland for research he conducted at Beaumont Hospital and he has also obtained first place in the Intercollegiate Specialty Board Examinations.

In 2005, Professor Kelly was awarded a Postgraduate Diploma in Medical Education at Queen's University Belfast. In 2009 he was conferred with a Master of Business Administration Degree by Institutio de Empressa of Madrid. A native of Inishowen, Co Donegal, Cathal is married to Ruth and they have three children, MaryKate, Caroline and Charlie.

#### **Professor Father Michael Kelly**

Fr. Michael Kelly was born in Tullamore in 1929. He studied at University College Dublin and was awarded a B.A. in Maths and Mathematical Physics in 1952, both with first class honours. He went on to receive a licentiate in philosophy in 1955. He moved to Zambia and has lived and worked there for 50 years, becoming a Zambian citizen. He worked for many years as headmaster of Canislius College in Chiseki in Zambia. He completed his PhD studies in the area of child and educational psychology in 1974 and subsequently became a senior lecturer and Dean of the School of Education in the University of Zambia (UNZA), in 1975.

He served as pro-vice chancellor and deputy vice chancellor and became professor in 1989. He has received honorary degrees from University College Dublin and the University of the West Indies.

Father Kelly's work on HIV/AIDS is noted internationally, having worked with UNESCO, UNICEF, and the World Bank, and made significant contributions to our understanding of the impact of HIV on education, and education on HIV.

#### Assoc. Professor Malcolm MacLachlan

Malcolm 'Mac' is with the Centre for Global Health and the School of Psychology at Trinity College Dublin, Ireland and is currently a visiting professor at the Centre for Rehabilitation Studies, Stellenbosch University, South Africa and at the Department of Global Health and Social Medicine, Harvard University. Mac has worked as a clinician, consultant and academic, and has lived in Ireland, UK, Malawi and South Africa. His interests are in promoting inclusive global health — especially regarding disability and ethnicity — and humanitarian work psychology. He is one of the members of the Irish Forum for Global Health Executive Committee.

He has worked with a broad range of government and civil society organizations and multilateral agencies (including WHO, Unicef, UNHCR, OECD and UNESCO). He is the director of the International Doctoral School for Global Health (Indigo).

#### **Cathal Magee**

Cathal Magee took up the position as Chief Executive Officer of the Health Service Executive in Ireland on 1st September 2010.

Prior to joining the HSE, he was Managing Director of Eircom's €1.3 billion portfolio of retail businesses. He was interim Chief Executive of the Eircom Group for six months to July 2009. He held other senior management posts in that organisation as Managing Director, Eircom Ireland, Managing Director, Business Transformation and HR Director. Prior to joining Eircom, Mr Magee worked for the National Australia Bank Group in the UK and Ireland. He has also worked in a Business Transformation and HR Director capacity with Bord na Mona from 1988 to 1992.

His early career was in the Health Service.

#### **Professor Hannah McGee**

Professor Hannah McGee is the Dean of the Faculty of Medicine and Health Sciences at RCSI since January 2010.

Professor McGee joined RCSI in 1987 as a Health Psychology Research Fellow. In 1997 she became Professor of Psychology and in 2006 she became the first Head of Population Health Sciences (PHS) at RCSI. She established RCSI's Research Ethics Committee in 1998 and in 2009 became Deputy Director of Research. Hannah graduated from Trinity College Dublin (BA(Mod) Psychology, 1981 and PhD Psychology, 1988. Hannah has previously served as President of the Psychological Society of Ireland, the European Health Psychology Society and as Chair of the Cardiac Rehabilitation Section, European Association for Cardiovascular Prevention and Rehabilitation.

Her research interests have been in quality of life assessment, cardiovascular health, sexual health and ageing. Among policy activities, she has chaired the Department of Health & Children's Policy Group to produce a 10 year policy – Changing Cardiovascular Health (2010-2019).

#### **Professor Eilis McGovern**

Professor Eilis McGovern graduated from University College Dublin Medical School IN 1978. Following internship and basic surgical training she obtained her Fellowship of the Royal College of Surgeons in Ireland in 1982. She then trained in cardiothoracic surgery in Dublin, at the end of which she did a clinical fellowship in the Mayo Clinic, Rochester, Minnesota.

She was appointed as a consultant cardiothoracic surgeon to the Mater and Royal City of Dublin Hospitals in 1987. In 1999 she transferred to St James's Hospital in Dublin to oversee the opening of a new cardiac surgery unit.

In the field of undergraduate medicine she chaired the Medical Faculty Board of the Royal College of Surgeons medical school from 2001 until 2006. She is also actively involved in teaching in St James's Hospital which is one of the 2 major teaching hospitals for Trinity College Medical School and was appointed as a Clinical Professor in 2010. She has a long track record in postgraduate training. She is a past member of the Intercollegiate Board for cardiothoracic surgery (UK and Ireland) and a former examiner. She chaired the Irish Postgraduate Medical and Dental Board from 2003-2007 and currently sits on the National Medical Education, Training and Research Committee.

Professor McGovern was elected President of the Royal College of Surgeons in Ireland, for a two year term, in June 2010 having been a Council Member since 1993.

#### **Professor Kieran Murphy**

After graduating from UCD in 1987, Kieran Murphy initially trained in Internal Medicine at the Mater Misericordiae University Hospital, Dublin. Subsequently, he trained in Psychiatry at St John of God Hospital, Dublin where he also obtained a Masters Degree in Psychoanalytical Psychotherapy from UCD. He moved to Cardiff University in 1994 where he completed his higher clinical training in Psychiatry, undertook two research fellowships and obtained a PhD in Psychiatric Genetics.

In 1999, he was appointed Senior Lecturer in Behavioural Genetics at the Institute of Psychiatry, King's College London and in 2002 he took up his current appointment as Professor and Chairman of the Academic Department of Psychiatry, Royal College of Surgeons in Ireland and Consultant Psychiatrist at Beaumont Hospital, Dublin.

He was initially appointed to the Medical Council in 2004 where he chaired the Health Committee and was subsequently appointed President of the Medical Council in 2008.

#### **Dorothy Ngoma**

Ms. Ngoma knows that a health system is only as strong as the workers behind it, and she has organized Malawi's nurses to fight for their rights -- and for their patients' wellbeing.

In Malawi, sixteen women die in childbirth each day; pregnant women are said to have "one foot in the grave." As Executive Director of the National Organisation of Nurses and Midwives of Malawi (NONM), she has trained nurses and lobbied legislators to improve conditions in hospitals, clinics and schools. She argues that to save women's lives, health systems need skilled workers -- and those workers need effective management, facilities, and labor policies.

Thanks to her, NONM's membership has grown from 50 to over 7,000 members in just five years. She has stood up for both the women risking their lives to deliver their children, and the women who make safe deliveries possible.

#### Dr Tom O'Callaghan

Tom is CEO and Founder of Iheed Institute.

Tom is a practicing medical doctor with over 20 years' experience in Family and Community Health. He has been on the Frontline of developments in Primary Community Care, Health Systems Strengthening, Health Promotion and task shifting to Primary Care in Ireland. He was Founder of Living Health Clinic, Ireland's first and largest independent Not for Profit Primary Health Care Centre.

Tom is a graduate of The Royal College of Surgeons in Ireland (1991). He holds a Membership of Royal College of General Practitioners and Irish College of General Practitioners; he also holds diplomas in Child Health Care and Obstetrics and further training in High Altitude and Expedition Medicine and Health Care in remote settings.

#### Michael O'Connor

Michael O'Connor is the Manager for the Civil Society (CS) and Private Sector (PS) partnerships team at The Global Fund to fight AIDS, TB and Malaria.

He is responsible for supporting the engagement of civil society and the private sector in all aspects of Global Fund activities, from grant implementation to governance. Under his leadership the CS and PS team has introduced the innovative Community Systems Strengthening (CSS) Framework as a means to ensure a sustainable community-based response to health concerns.

His team is also leading on the implementation of Global Fund strategic priorities including promotion of human rights and enhancement of country partnerships.

#### Dr. Diarmuid O'Donovan

Diarmuid is Senior Lecturer in Social & Preventive Medicine at NUI Galway and Director of Public Health in the Health Service Executive (HSE West, Galway). He is a Project Leader in the Health Promotion Research Centre. He coordinates the Public Health content of the undergraduate medical curriculum and is director of the postgraduate Diploma/Masters programme in Health Services Research. With colleagues in Bacteriology he coordinates the undergraduate course in Global Health and Development. He qualified in medicine in NUI Galway and in Public Health at the London School of Hygiene & Tropical Medicine.

Diarmuid was one of the founders of the Irish Forum for Global Health (IFGH) and is currently a member of the IFGH Executive Committee. He trained in General Practice and Public Health Medicine in England. He lived and worked in Africa for seven years.

#### Dr Vincent O'Neill

Dr. Vincent O'Neill is Director of Policy, Planning and Effectiveness in Irish Aid, the official aid programme of the Irish Government. He has recently returned from Malawi where he was responsible for planning and overseeing the Irish Aid Programme. He has worked at senior management within Irish Aid for the past seven years and has much experience working with international organisations and planning programmes of international development cooperation.

He is a medical doctor with work experience, both at clinical and policy level, in the health sector in Africa.

#### Dr. Mphu Ramatlapeng

Dr. Ramatlapeng is a medical doctor by profession. She graduated from the Kharvov Medical Institute with a MD degree in 1971. From 1982 to 1984 she attended the Johns Hopkins School of Hygiene & Public Health and the Wilmer EYE Institute. She worked for the Government of Lesotho from 1971 to 1981 before moving to the private sector to start her own business practice. She later joined Clinton Foundation as the Chief Executive of Lesotho from 2005 to 2007.

She was appointed as the Minister of Health and Social Welfare by the newly elected Government in 2007. As the Minister of Health and Social Welfare, Dr. Ramatlapeng has been leading the health sector reform in Lesotho and championing health issues both domestically and internationally.

Dr. Ramatlapeng has been an active member in both public and private sectors. She served on the board of several international and Lesotho firms, and is a member of Women in Business Association and Musapelo Women Investment Club.

#### Dr. Mubashar Sheikh

Dr Mubashar Sheikh is the Executive Director of the Global Health Workforce Alliance.

Dr Sheikh is a specialist in health system policy and planning. He stated his professional career with the Ministry of Health in Pakistan where he served in various positions. During this period, he also designed, implemented and led a nationwide community based childcare and reproductive health network under the 'Lady Health Workers' initiative.

Dr Sheikh has served on various committees and task forces at the national, regional and international levels. He is the author of numerous policy documents, training manuals and guidelines. He is also writing regularly on various aspects of health systems and human development.

#### Dr. David Weakliam

David works as a Consultant in Public Health Medicine in the HSE.

Before joining the HSE in 2007 he worked for 18 years on improving health in developing countries, including 12 years spent in Africa and Asia. From 2003-2007 he was Health Adviser for Irish Aid, the Government's overseas aid programme. David now leads the HSE Global Health Support Programme which he helped establish in 2010.

He lectures on a range of global health topics, is Board Chairman of the relief and development agency Tearfund, and is Chair of the Executive Committee of the Irish Forum for Global Health.

#### Yvonne Chaka Chaka

Yvonne Chaka Chaka is an internationally recognized and highly respected performing diva, entrepreneur and humanitarian.

Dubbed the Princess of Africa," Yvonne experienced a meteoric rise in 1984 as a music star of infectious pop melodies and dance music during the height of apartheid. Her inimitable and distinctive alto voice delivers personal messages woven throughout every song she's written. With musical beats that span afro-traditional to a world sound, the power of the music equals the power of Yvonne's clear social and spiritual advice. As a young performer Yvonne was the first Black child to appear on South African television in 1981. Since then, she has shared the stage with megastars such as Bono, Angelique Kidjo, Annie Lennox, Youssou N'Dour, the classic rock band Queen and South Africans Johnny Clegg, Miriam Makeba and Hugh Masekela to name a few. She has performed for HRM Queen Elizabeth, US President Bill Clinton, South African President Thabo Mbeki and a host of other world leaders.

Considered a role model throughout the African continent, she has demonstrated compassion for others throughout her career. Yvonne has taught literacy in South Africa's townships, promoted the rights of women, and as works to protect children everywhere. She is a Trustee of Tomorrow Trust, which educated orphans and vulnerable children. As UNICEF's Goodwill Ambassador against malaria, and also Ambassador for Roll-Back Malaria (sponsored by the World Bank, United Nations, World Health Organization, and other institutions), Yvonne tirelessly campaigns for medications and bed nets that will help to end malaria — a preventable and curable disease that kills 3,000 people in Africa every day. Inspired by these statistics she created her own charity, the Princess of Africa Foundation.

#### The Global Health Village – a Place to Network and Exchange Ideas

The Global Health Village is a unique space within the conference that will provide an opportunity to have Irish NGO's and Higher Education Institutions gathered under one roof. A wide range of organizations will take part and will share their work. Set up like a village, it is a vibrant place for knowledge sharing and exchange of ideas. It also provides opportunities for networking, in the hope that it garners future collaborations between NGO's, Higher Education Institutions, other international partners who will be in attendance at the conference and students. Come and join us in the Global Health Village and be part of this exciting initiative

Organisations participating in the Global Health Village include:

























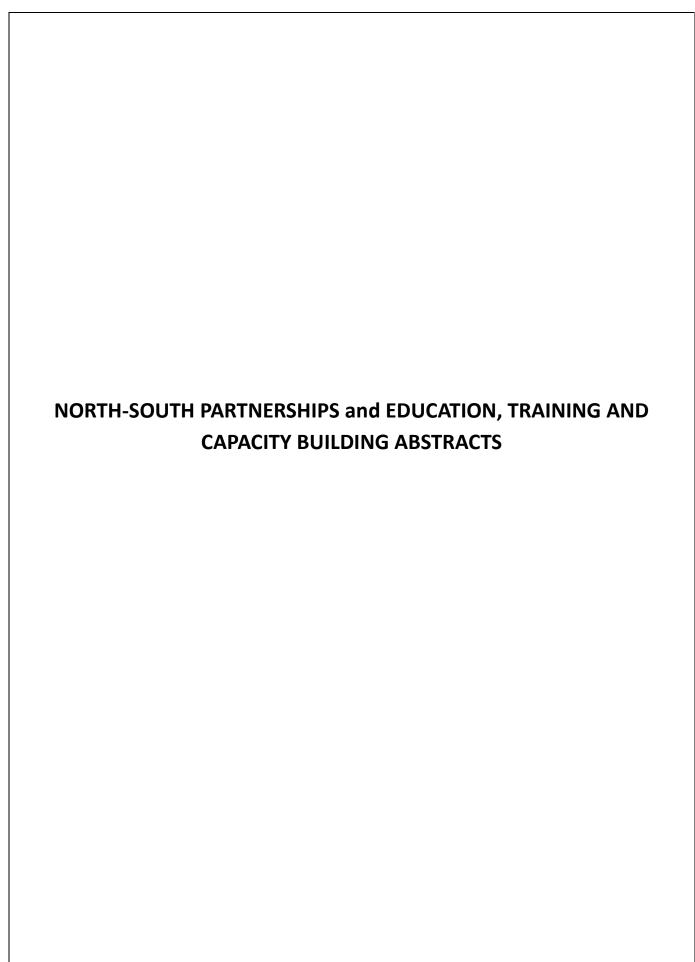












#### PhD Programme for Health Systems Research Capacity Strengthening in Africa

**Authors:** Awor A.<sup>1</sup>, Brugha R.<sup>1</sup>, Byrne E.<sup>1</sup> Maniple E.<sup>1</sup>, Thomas S.<sup>2</sup>, Connecting health Research in Africa and Ireland Consortium (ChRAIC)<sup>3</sup>

**Author Affiliations:** <sup>1</sup>Dept of Epidemiology and Public Health Medicine, Royal College of Surgeons in Ireland, RCSI, <sup>2</sup>Centre for Global Health, Trinity College Dublin, <sup>3</sup>ChRAIC is a partnership of: College of Medicine, Malawi; Makerere University School of Public health (MUSPH), Uganda; Malaria Consortium, South Sudan and Uganda; Medical Research Centre (MRC), Sierra Leone; Ministry of Health, Republic of South Sudan; National University of Ireland, Galway (NUIG), Ireland; National University of Lesotho; Royal College of Surgeons in Ireland (RCSI); Trinity College Dublin (TCD), Centre for Global Health, Ireland; University of Medical Sciences and Technology, Khartoum, Sudan. Additional support to the partnership is provided by two organizations based at the World Health Organization in Geneva, the Alliance for Health Policy and Systems Research (AHPSR) and the Council on Health Research for Development (COHRED)

**Option 2** - lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** – Poster

#### Issues:

This paper outlines and presents lessons learned from a PhD programme within Connecting health Research in Africa and Ireland Consortium (ChRAIC) - a health systems research capacity development collaboration. The PhD component is a partnership of the National University of Ireland, Galway, RCSI and Trinity College Dublin.

#### **Description:**

ChRAIC has 8 registered PhD students from Ireland, Malawi, North Sudan, Uganda and The Gambia. Five received ChRAIC scholarships and 3 are alternatively funded. Lessons are based on: (i) Individual self administered evaluation forms by students on each of the taught modules, (ii) Group feedback through end of year student feedback meetings, (iii) ChRAIC PhD student input into the 6 monthly donor reports for the programme and (iv) Telephone interviews with the ChRAIC country team investigators on links between the PhD programme and the ChRAIC research

#### PhD student responses were largely positive, focusing on the:

- PhD taught course
- Opportunity to mix with other PhD and Master students in different courses
- Exposure to different cultures and other parts of Ireland
- Level of supervision, types of assessment and feedback received
- Insights gained into different teaching styles and skills, and;
- The importance of doing contextually relevant research

#### Down-sides included:

- A PhD programme with an initial 9-12 months in Ireland is very expensive
- PhD students networked successfully with other students, supervisors and lecturers, but not with their country ChRAIC research teams
- Poor internet access and telecommunication, frustrated students (who felt isolated) and exacerbated supervisors' difficulties in maintaining regular monitoring of students' progress and diagnosing reasons underlying delayed progress

**Next steps:** We propose an enhanced role for Distance Learning (DL) training, where students remain in their home country and access bespoke DL electronic learning resources with occasional in-country workshops. Contributing DL resources to in-country academic programmes could help strengthen linkages with local research supervisors and local research networks

#### Sudan Academy of Health Sciences: an Innovative Response to Health Workforce Crisis

Authors: Badr E.

Author Affiliations: Academy of Health Sciences (AHS), Khartoum, Sudan

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation

#### Issues:

Human resources for health (HRH) are critical for health systems and population health improvement. Yet, there are global shortages of HRH reaching crisis level in several countries. Sudan witnesses overall shortage in HRH and skill mix imbalances typified by production of five physicians for every one nurse. Nursing gap is consequent upon failure of a shift from vocational to university nursing education. This situation has adversely affected health care coverage and quality

#### **Description:**

In response to the crisis, the Academy of Health Sciences (AHS) was established in 2005 by the Federal Ministry of Health to scale up university education of nurses, midwives and paramedics. Over five years, the AHS enrolled around 18.000 students through a decentralized approach based on branches in the 15 states of Sudan. Expansion was enabled through utilizing existing premises of vocational schools, and using health facilities and health providers to boost infrastructure and teaching faculty. Policies of subsidized education, provision of training jobs and quota system of intake helped in securing adequate number of qualified applicants and geographical balance.

Lessons learned:

The experience of AHS is showing success in scaling up HRH education. Despite challenges, the AHS model is now well on tract in addressing the crisis with signs of positive effects on relevance and rural retention; over 90 percent of graduates are retained in their local areas. Main lessons include the importance of advocacy, centrality of political support and partnerships, soundness of decentralized governance of education, innovative funding, and utilization of existing resources.

#### Next steps:

The AHS is embracing a consolidation phase. Main directions include strengthening supervision and quality assurance measures, utilizing potential of information technology for learning and enhancing international networking. Political commitment and partnerships need to be maintained to ensure anchoring of the AHS as strategic institution for health improvement in Sudan.

#### Contextuality of Relationships between Researchers and Decision Makers in Strengthening Health Research Capacity

**Authors:** Brugha R.<sup>1</sup>, Byrne E.<sup>1</sup>, Thomas S.<sup>2</sup>, Connecting health Research in Africa and Ireland Consortium (ChRAIC)<sup>3</sup>

**Author Affiliations:** <sup>1</sup>Dept of Epidemiology and Public Health Medicine, Royal College of Surgeons in Ireland, RCSI, <sup>2</sup>Centre for Global Health, Trinity College Dublin, <sup>3</sup>ChRAIC is a partnership of: College of Medicine, Malawi; Makerere University School of Public health (MUSPH), Uganda; Malaria Consortium, South Sudan and Uganda; Medical Research Centre (MRC), Sierra Leone; Ministry of Health, Republic of South Sudan; National University of Ireland, Galway (NUIG), Ireland; National University of Lesotho; Royal College of Surgeons in Ireland (RCSI); Trinity College Dublin (TCD), Centre for Global Health, Ireland; University of Medical Sciences and Technology, Khartoum, Sudan. Additional support to the partnership is provided by two organizations based at the World Health Organization in Geneva, the Alliance for Health Policy and Systems Research (AHPSR) and the Council on Health Research for Development (COHRED)

**Option 1 -** Scientific / Empirical Research Findings **Presented as -** Oral Presentation

#### Aims:

This paper examines the processes whereby health systems researchers, members of the Connecting health Research in Africa and Ireland Consortium (ChRAIC), worked with national policy makers and knowledge users in seven African countries

#### Methods:

(i) proceedings from a ChRAIC partner workshop in Kampala in April 2009 in which country policy-makers participated; (ii) a half day ChRAIC partner workshop in November 2010 to analyse the involvement of policy makers; and (iii) telephone interviews with the ChRAIC country team investigators (8 interviews)

#### **Results:**

Policy makers and researchers agreed that research was more likely to be relevant to their contexts and research outputs more likely to be used if policy makers were involved in the research process

Different approaches to researcher-policy maker collaborations were adopted in different countries, which depended on the broader political and environmental contexts and pre-existing personal relationships. Challenges to achieving sustained and productive involvement of policy makers in research processes included:

- Given the uncertain time-frames and high turnover of policy-makers there is the need to go beyond the individual contacts and relationships depersonalising the relationship;
- Recognition that developing and maintaining the partnership is a time-consuming process;
- Alignment and harmonisation of research processes with the activities and cycles of policy makers causes delays, which can impinge on research donor expectations

#### Discussion/conclusions/ implications:

No single approach or blueprint suited these different national contexts. However four themes emerged:

- Developing a strong institutional link and track record with the relevant government departments is necessary for trust to be established;
- expectations and motivations of the team members (researchers and policy makers alike) needs to be negotiated and reviewed periodically;
- clarity is needed on the activities, roles and responsibilities for each team member, and;
- Recognition by all parties, including research funders, that building partnerships is a time-consuming process, which may delay outputs

## The Burden of Facial Clefting and How its Global Impact can be Addressed by NGO-Led Global Partnerships

Authors: Earley MJ.

Author Affiliations: Children's University Hospital, Dublin

**Option 2** - Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** – Oral Presentation

#### Issues:

Clefts of the lip and palate occur in 1 in 800 live births, resulting in 250,000 babies annually worldwide at high risk – if they survive infancy – of being outcast, unschooled and unemployed. Lack of surgery for clefts in poor countries is due to public sector shortages, families' inability to pay for surgery, inaccessible services, and inadequately trained surgeons.

#### **Description:**

Several developed country NGOs provide cleft surgery in resource-poor countries. The author presents eight years' experience with Operation Smile missions in Belarus, Morocco, China, Cambodia, Vietnam, Paraguay and Ethiopia demonstrating the importance of an organisational structure that enables local communities to achieve a sustainable programme of high standards. Initially, in-country representatives assess local burden-of-disease; facilities and supplies; and presence of qualified personnel. Missions include screening, and 4-5 days surgery with with postoperative care.

#### **Achievements and Lessons learned:**

In 30 years Operation Smile has performed 200,000 surgical procedures in 40 countries worldwide. Best practice 'Global Standards' have been introduced – in surgery, anaesthesia, nursing, electronic patient records photographic imaging and outcome measurements (primarily of appearance and speech). These have reduced mortality and enabled routine programmatic evaluations.

A sustainable model has been developed as shown in 2009 when 60% of surgeries were performed by in-country foundations. Cleft centres have been established in Colombia, Morocco, Vietnam, China, India (Guwahati) etc. In Africa alone we collaberate with UNICEF, the Peace Corps, Action Aid, MSF, and many others.

#### **Next steps:**

Operation Smile has evolved into a self-reflective organisation using capacity-building partnerships both with other NGO's and with collaborations between countries, both North to South and East to East, increasing attention on teaching and training local communities. Provision of care in remote, impoverished areas and the retention of trained local staff in centres of excellence in the face of competing health needs, are major challenges.

#### The Utility of Brands for NGO'S and Their Stakeholders – Research Protocol

Authors: Hand KM.

Author Affiliations: Centre for Global Health, School of Psychology, Trinity College Dublin

**Option 2** - lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** – Poster

NGO's play a very important role in global development and in 2005, the Union of International Organisations have estimated that there were more than 20,000 international NGO's in the development space. The value-chain of an NGO is a complex one in which stakeholders hold at best partial understanding of what other stakeholder groups value and receive and where the weighting of stakeholders is not always based on absolute 'need. The role of an NGO's brand is at best a 'short-hand' for the essence of what the NGO actually delivers to all stakeholders (i.e. it's net social value), at worst an 'aspiration' with no connection to reality My research into this area is designed in two key studies – the first study is a 'best-practice' case study in which I interview key decision makers with OXFAM international head office and affiliates, inside and outside the marketing function, to understand how they see 'the brand' and how it's use helps and/or hinders their objectives. The second study is a psychological experiment, which looks at different communication approaches with donors and the cognitive systems they trigger and investigates the short-term and long-term consequences for NGO donor support.

## In Gestation: A Proposal to Implement a Cluster Randomized Control Trial (ICRCT) of the Helping Baby Breath (HBB) Program to Village Midwives (VMs) in Sudan

Authors: Ibriham S.<sup>1</sup>, Ahmed S<sup>2</sup>, Hamid A<sup>3</sup>, Saeed E<sup>4</sup>, Clark L<sup>5</sup>, Denk R<sup>6</sup>, Dempsey G<sup>2</sup>, Ryan CA<sup>2</sup>

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Option 1 - Scientific / Empirical Research Findings

Presented as - Poster

#### Background:

Every year an estimated four million newborns die during their first month of life, 50% dying during delivery and the first 24 hours of life. HBB is a low-cost, neonatal resuscitation curriculum developed for resource-limited circumstances. HBB emphasizes skilled attendance at birth, assessment of every baby, temperature support, stimulation to breathe, and assisted ventilation if necessary, within "The First Golden Minute" after birth.

#### Aims:

The aim of this paper is to propose an ICRCT of HBB into rural Sudan, focusing on training 14,000 VMs, distributed over 18 Regions/provinces and covering a rural population of 25 million.

#### Methodology:

An ICRCT is a trial in which groups of subjects (in this case, villages) are randomized. Advantages of ICRCT over individually RCT include the ability to study interventions while preventing "contamination" across individuals. Approximately 200 Clusters with 200-300 annual deliveries per cluster will be sufficient to obtain statistical power.

#### Implementation:

Following cluster randomization, Regional Instructors (RIs) will be trained by HBB Master Trainers. RIs will then train HBB to the VMs in the villages randomized to the intervention group. Accurate outcome data collection will be essential to the project. Thus, VMs in both the control and treatment groups will be trained on how to accurately collect perinatal outcome data. The control villages would be "controls in waiting" in that they would receive HBB training once the outcome of the trial was confirmed as positive.

#### The Outcomes:

Stillbirth rates and neonatal death in the first 7 days will be the primary outcomes. Many babies currently classified as stillborn in national statistics, will often survive with effective resuscitation. In situations where neonatal follow up is questionable, neonatal mortality within 24 hours of birth will be analyzed.

#### **Conclusion:**

ICRCTs are a powerful and feasible way to address important educational initiatives in resource poor countries.

#### The Institute of ENT and Audiology in Zambia

Authors: Kirby A., O'Connor A., O'Driscoll K.

**Author Affiliations:** Midland Regional ENT Department Tullamore Co. Offaly ENT for Zambia Trust Fund LTD Arden Road Tullamore Co. Offaly

**Option 2** - Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** – Oral Presentation

#### Objective:

This article demonstrates the culmination of partnerships both nationally and internationally which led to the development of an institute of Ear, Nose an Throat Surgery as a result of a specific need identified in Zambian society in 2003. The paper serves to illustrate how in a poverty stricken sub - saharan African country such as Zambia how significant and sustainable changes can be brought about for ENT Health care for the region.

#### Methods:

The components of the Institute of ENT and Audiology at the Beit CURE hospital in Lusaka have been published before and its operation within the last six months is presented in terms of outpatient activity and surgical work. The relationship with the regional surgical training body COSECSA is stressed and the development of a specific ENT faculty outlined.

#### **Results:**

The surgical unit in Lusaka sees in excess of 1500 patients and performs in excess of 400 operations in six months and has the facility to fit hearing aids to thousands. A Fellowship syllabus for training ENT has been accepted by COSECSA and the first intake of trainees is expected in 2012. The success of the unit is a result of collaboration nationally involving ENT Zambia LTD., Irish Aid and GORTA, and internationally with Christian Blind Mission (CBM ), Beit Trust, CURE International, and COSECSA/RCSI.

## The Impact of Geographical and Cultural Translocation on Training in a Western Medical School

Authors: Lavelle A., McGarvey A, Byrne E., Brugha R.

Author Affiliations: Royal College of Surgeons in Ireland

**Option 1** - Scientific / Empirical Research Findings **Presented as** – Oral Poster

#### Aims:

The overall aim of this study is to identify issues impacting on the journey and experience of overseas students studying in a Western medical school. We aim to identify and clarify challenges facing cohorts of students at all stages of the programme and build on existing supportive mechanisms and to assist the College in further development of student welfare policies and provision of support. This study is being conducted in 3 phases and we would like to present the preliminary findings of Phase 1 – the impact on the newly arrived student.

#### Methods:

Fifteen trained volunteer Intermediate Cycle students conducted in-depth semi-structured peer interviews with 30 first year students from a range of cultural backgrounds. Students (interviewers and interviewees) volunteered following a presentation to the class by the research team. The study group was broadly representative of the wider student population, in terms of nationality, gender and cultural background.

#### **Results:**

Initial thematic analysis has identified a number of themes including:

- cultural stereotypes exist (though this is not necessarily negative or misrepresentative of the culture);
- cultural practices of both overseas students and host country impose challenges to integrating socially;
- integration is limited and influenced by language, housing and friends made in the first semester;
- Homesickness can be severe and impact negatively on the experience of, studying overseas
- The impact of studying in a multicultural environment is largely perceived positively
- Within certain groups there is pressure to conform to norms and values of own culture;

#### Discussion/conclusions/ implications:

This study will provide an evidence base on the cultural impact of studying in western contexts to other medical education institutions recruiting international students and others considering training health workers in western higher education institutions. Already, orientation in RCSI has been influenced and considerable support for this study by management and the Student Union has been received.

#### **Turning the HEAT up for Community Health Workers**

Authors: Long, L-A

Author Affiliations: International Development Office, The Open University

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation

#### Issues:

Despite major progress, Ethiopia's health care system is one of Sub-Sahara Africa's least developed and its underfive and maternal mortality rates remain among the highest on the continent. To help address this issue the Ethiopian government launched an ambitious programme in 2004 to train 34,382 Level III Health Extension Workers (HEWs) deployed in more than 15,000 rural communities. However despite several strengths, the training had drawbacks, including variability in how the curriculum was implemented, and inadequate coverage of maternal/child health topics; and insufficient acquisition of practical skills.

#### **Description:**

In partnership with the Federal Ministry of Health, The Open University, UNICEF, AMREF and the WHO, launched the Level IV upgrading HEW pilot in February 2011. Known as HEAT (Health Education and Training in Africa) it is a "blended learning" methodology of tutor-directed self-study and hands-on practical skills training. The pilot has trained 57 Ethiopian health experts in the development of a 13-module curriculum (emphasis on maternal/child health); trained 120 tutors and 38 programme coordinators in six regions; and registered 1,182 HEWs.

#### **Lessons learned:**

Some Level III students were inadequately prepared to fully benefit from the self-study-based approach of Level IV – many started with relatively poor academic backgrounds; long distances between the Health Science Colleges and the HEWs' places of work, prevented HSC trainers from having sufficient contact with students.

#### **Next steps:**

A full evaluation of the pilot begins shortly. Potentially 5,000 more HEWs are joining the programme in 2012/13. HEAT and partners are discussing with eight more countries in Sub-Saharan Africa, and India and Bangladesh to roll out the HEAT programme. Research based on the Mental Health learning resources begins shortly; discussions are underway to develop and extend the Water & Sanitation learning resources to other countries; a randomized control pilot based on a mobile application is under development.

### Moving Mountains to Develop Public Health Knowledge and Skills in Uganda and Ireland

Authors: MacLeod F.1, Cronin M.1, Rubaihayo J.2, Collins A.1

**Author Affiliations:** <sup>1</sup>Department of Epidemiology & Public Health, University College Cork, Ireland, <sup>2</sup>Public Health Department, Mountains of the Moon University, Uganda

**Option 2** - Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** – Oral Poster

#### Issues

Collaboration between academic Public Health departments in higher educational institutions in the North and South will facilitate: (i) health worker career development (ii) capacity strengthening in teaching and learning for higher education & (iii) capacity strengthening in research. The outcome of such collaboration(s) will strengthen public health practice from a global perspective.

#### **Description:**

The Mountains of the Moon University (MMU), established in 2002, is located in the Western Ugandan town of Fort Portal. MMU has initiated an innovative Bachelor of Science degree in Public Health to address the shortage of Public Health professionals in Uganda, and to assist in strengthening the health system for Uganda and other regional countries. The vision and purpose of the MMU programme mirrors that of the BSc in Public Health & Health Promotion which commenced in University College Cork (UCC) in 2004. Staff from the UCC Department of Epidemiology and Public Health and the MMU Department of Public Health, have been working in collaboration since late 2008 with the overall aim of developing a skilled and knowledgeable public health workforce in Ireland, Uganda and potentially other African countries.

#### Lessons learned:

- Significant capacity building potential for both parties but lack of sustainable funding limiting progress
- Requirement to develop administrative structures to facilitate the collaborative processes
- Restriction on joint activities also linked to the limited numbers of, and time, which interested staff can
  dedicate to the collaboration

#### **Next steps:**

Teaching and learning:

- Source assistance from appropriately experienced colleagues in UCC to work with MMU on distance learning methodology, technology, innovation
- Source funding for student exchange in 2012
- Investigate opportunities for lecturer exchange in the short to medium term research
- Implement first collaborative research project
- Source research funding options for immediate project proposal

#### **Health Promotion Capacity Mapping in Developing Countries**

Authors: Mahmood S.

Author Affiliations: HPRC WHO Collaborating Centre, NUI Galway, Ireland

**Option 1 -** Scientific / Empirical Research Findings **Presented as -** Poster

#### Aims:

This study aims to develop, test and refine a framework to map Health Promotion capacity in developing countries. The framework will lead to the development of a tool that can be used to map Health Promotion capacity at a national level.

#### Methods:

The study will employ a triangulation of methods to examine Health Promotion capacity mapping in developing countries. The Phase I of the study comprises of a national and international experts' consultation to reach consensus on a common framework for Health Promotion capacity building in developing countries. The Phase 2 will focus on data collection through in-depth case study analysis of Health Promotion capacity in three developing countries applying the new framework. The analysis will include key policies and document review, an on-line survey of up to 30 key stakeholders in each country augmented by interviews with 10 key informants in each country from policy, practice and academia. In Phase 3 the mapping framework will be further refined through analysis and qualitative synthesis of the case studies data coupled with a consensus building process with country level and international experts.

#### **Results:**

The Delphi consultation is in process for Phase 1 of the study. In round 1, about 700 experts have been invited to rate and comment on 4 core domains and 18 sub-domains for Health Promotion capacity mapping in developing countries through an online questionnaire.

#### Discussion/conclusions/ implications:

The findings of the study will produce recommendations for strengthening Health Promotion in developing countries through capacity building. The study will also develop a resource for assessing the infrastructure required for building Health Promotion capacity as a sustainable action in developing countries. The findings of the study will be disseminated through scholarly publications and brought to specific attention of international organisations such as WHO and IUHPE for their consideration and action.

## Addressing Surgical Manpower in Sub Saharan Africa: An Intercollegiate Partnership between RCSI and COSECSA

Authors: O'Flynn E.<sup>1,2</sup>, Duggan R.<sup>1,2</sup>, Tierney S.<sup>1</sup>, Thompson M.<sup>2</sup>, Mkandawire N.<sup>2</sup>, Kakande I.<sup>2</sup>

**Author Affiliations:** <sup>1</sup>Royal College of Surgeons in Ireland / College of Surgeons of East, Central and Southern Africa Collaboration Programme, <sup>2</sup>RCSI Dublin COSECSA Arusha, Tanzania

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation

#### Issues

A recent situational analysis indicates that the COSECSA region\* has as few as 1,390 trained surgeons for 273 million inhabitants in 9 of the lowest income countries in the world. Low medical school output, training capacity limited to university hospitals, international "brain drain", and low remuneration have limited capacity to address this deficit.

#### **Description:**

In 2007, RCSI entered into an agreement with COSECSA to support the development of their organisational capacity, training structures & curriculum, examinations, faculty development and direct budgetary support. This is under the governance of a joint steering committee in a programme funded by Irish Aid.

Organisational capacity is supported by 2 programme staff, a volunteer at senior manager level, administrative training and faculty exchange visits to RCSI. COSECSA & RCSI faculty have collaborated to greatly expand the number of clinical skills courses for trainees and local surgical faculty development courses have been developed and delivered. An e-learning platform (<a href="www.schoolforsurgeons.net">www.schoolforsurgeons.net</a>) has been developed and populated with both existing and newly developed, indigenous learning resources. ICT labs have been installed in 18 locations across 7 countries to date with another 9 planned in 2012. Since 2007 the number of trainees taking Membership (after 2 years) and Fellowship (at completion of training after 5 years) examinations has grown from 5 MCS and 13 FCS to 36 and 19 respectively.

#### **Lessons learned:**

Working within existing structures is effective in increasing the production of trained surgeons in a way that is further scalable. E-learning is a scalable and cost effective way of delivering standardised training across a wide geographic distance. Institutional relationships are more durable than those between individuals and provide infrastructure to ensure voluntary efforts are effectively utilised. Ensuring that such structures are financially self sustaining is a major challenge.

\*Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Tanzania, Uganda, Zambia, Zimbabwe.

## An Initiative for Training Collaboration between an Irish and Sudanese Multidisciplinary Diabetes Centre

Authors: Shadad A.<sup>1</sup>, Burke H.<sup>1</sup>, Hurley L.<sup>1</sup>, Ahmed ME.<sup>2</sup>, Dinneen S.<sup>1</sup>

**Author Affiliations:** <sup>1</sup>University Hospital Galway, National University of Ireland Galway, <sup>2</sup>Jabir AbuEliz Diabetes Centre, University of Khartoum, Sudan

**Option 2** - Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** – Oral Poster

#### Issues

This abstract highlights an initiative by an expatriate doctor to strengthen the role of Sudanese Specialist nurses through skills-focused training in Ireland.

#### **Description:**

This collaboration began in November 2010 between the Diabetes Day Centre (DDC), University Hospital Galway, Ireland and Jabir AbuEliz Diabetes Centre (JADC) Khartoum, Sudan, the leading multi-disciplinary diabetes centre in Sudan with over 40,000 diabetes patients registered. Two diabetes nurses from JADC joined the DDC for a four-week attachment. The training involved education on a wide range of services available to diabetes patients in Galway. A preset educational curriculum, accompanied by appropriate references, protocols and study material was supplied to both nurses. As well as general outpatient clinics, the visiting nurses had opportunities to attend specialist clinics such as antenatal/pre-pregnancy diabetes clinics and paediatric clinics. They had exposure to innovative services such as structured group education programmes, the retinal screening service, multidisciplinary foot service, cardiovascular prevention programmes, in-patient diabetes services and patient/parent support initiatives.

#### Lessons learned:

The feedback from both nurses has been very positive, both in terms of learning and the applicability of concepts such as multi-disciplinary case discussion, diabetes patient education programs and computer-based patient databases.

Following this attachment the two nurses have been able to advise on the implementation of best practice guidelines for patients with diabetes attending their centre in Sudan. They continue to examine ways to reduce the high incidence of diabetes-related foot amputation and other complications of diabetes.

#### Next steps:

To expand the initiative to include other areas of patient care such as stroke service, oncology and maternity and to organise visits for resource individuals to Sudan to provide a larger capacity built short-term skills-focused training courses. A systematic collaboration between specialized centres in North and South will facilitate sustainability and enhance the impact.

#### **Capacity Building Through TB Regimen Development**

Authors: Spigelman M.<sup>1</sup>, Mendel C.<sup>1</sup>, Everitt D.<sup>1</sup>, van Neikerk C.<sup>2</sup>, Uys A.<sup>2</sup>, Gardiner E.<sup>1</sup>, Wells W.<sup>1</sup>, Barve A.<sup>1</sup>

**Author Affiliations:** <sup>1</sup>Global Alliance for TB Drug Development, New York, USA, <sup>2</sup>Global Alliance for TB Drug Development, Pretoria, South Africa

**Option 2** - Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** – Oral Poster

#### Issues:

A number of TB drug candidates are entering the clinic; however, capacity to conduct registration-standard trials is weak or lacking in many low- and middle-income countries with high TB burdens where trials will take place.

#### **Description:**

In conjunction with several Phase II and III studies, the TB Alliance invested in human capacity building at clinical sites and their associated laboratories. Training was provided to clinic and trial management staff on patient management, quality assurance, product management and appropriate storage, administrative support and data management. Laboratory staff received training on specimen handling, safety and the operation of laboratory machinery. To strengthen community-researcher relations, instruction on technical aspects of TB drug trials and adult education methods was also provided to clinic staff with community-facing roles and Community Advisory Boards.

#### **Lessons learned:**

Capacity building for registration trials requires initial training as well as continual monitoring and targeted retraining throughout the duration of the trial to address specific challenges that arise. Building laboratory capacity proved to be challenging and required more intensive capacity building than clinical operations. Skills-building and education aimed at improving community engagement aids trial recruitment and retention, and creates trustful relationships between trial staff and the local population, which in turn facilitates the conduct of research.

#### Next steps:

With the abundance of TB candidates reaching late-stage trials, greater investments will be made to increase the number of sites with capacity for Phase II and III registration-standard clinical studies for TB drugs. Efforts to strengthen lab staff capacity will be intensified by producing and rolling out a standard lab procedures manual. Sustaining capacity is a concern and research sponsors and funders must coordinate in queuing clinical studies to retain staff. Activities to capacitate trial staff for successful engagement with the community will be expanded to future TB drug trials.

## The International Doctorate in Global Health: Building Capacity for Health System Research

Authors: Uduma O., MacLachlan M.

Author Affiliations: Centre for Global Health, Trinity College Dublin

**Option 2** - Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** – Oral Poster

#### Issues:

The Indigo programme emerged from ongoing debates around aid effectiveness, academic collaboration between universities and institutions in low and middle-income countries and, more specifically, the widely recognised need for health system research strengthening in Africa.

#### **Description:**

The Indigo programme is engaged in a collaborative effort that, over time, will build capacity for researcher training in Africa.

These are achieved in five main ways:

- 1. Maximising exposure of students to leading universities and academics outside of Africa, while retaining the bulk of study time in Africa;
- 2. Full involvement of African supervisors who are the lead supervisors for African-based students
- 3. Selection of research topics of direct relevance to home country needs
- 4. Specific activities aimed at the professional development of supervisors.
- 5. Students participation in Research Development Symposia for Strengthening Health Systems

#### **Lessons learned:**

Among the strengths that can be identified are the high level of 'buy-in' to the programme evident in all the participating institutions - and the desire to accelerate its development - and the high quality of students coming on to the programme. Key challenges that have emerged to date include:

- Identification of available supervisors in areas directly related to student selected topics.
- Establishment of good communication and effective working relationships
- Identification of appropriate doctoral level courses that address specific needs of individual students;
- Administrative challenges have characterised the relationship between Trinity and some of the partner.

#### **Next steps:**

The next stage of development of Indigo is to transfer the administrative leadership of it from Trinity to Makerere University in Uganda. Student intake will be through either of two parallel routes via either Trinity or African universities, with European and North American universities continuing to contribute taught modules as part of degrees awarded by the respective African universities

## Academic Research Partnerships Involving Zambia and the Global North – Experiences from Zambian Researchers

Authors: Walsh A. 1, Brugha R. 1, 2, Byrne E. 1

Author Affiliations: <sup>1</sup>Royal College of Surgeons in Ireland, <sup>2</sup>London School of Hygiene and Tropical Medicine

**Option 1 -** Scientific / Empirical Research Findings **Presented as -** Poster

#### Aims:

This study aimed to analyse researchers' experiences of health research collaborations involving academic institutions in lower and higher income countries, using Zambia as a case study. This phase of the study takes the perspectives of Zambian researchers.

#### Methods:

A mapping of international health research collaborations was followed by in-depth interviews in March 2011 of 20 Zambian researchers, with sampling reflecting different types of partnerships, research experience, disciplines, and a gender balance.

#### Results:

- Most Zambian researchers reported that research priority setting was done by northern research
  donors and researchers, and did not always coincide with Zambian priorities. However, proposal
  development was generally collaborative.
- All interviewees reported inequities in funding mechanisms, which channelled funds exclusively through northern institutions.
- Most collaborations received ethical approval in both Zambia and partner countries. Many interviewees
  reported that northern researchers' lacked understanding of research ethical issues at local level, for
  example around informed consent.
- Where northern researchers participated in data collection, they often visited Zambia for only short periods of time. Consequently, they had insufficient time to immerse themselves in the socio-cultural context of Zambia.
- Participants reported that analysis was undertaken jointly between northern and Zambian researchers, although some reported the only role Zambians performed was one of data collector.
- Zambian researchers report that that health research capacity in Zambia is lagging behind their northern partners. Many Zambian researchers undertake consultancies, which detract from producing research outputs.

#### Discussion/conclusions/ implications:

North-south power differences continue to dominate health research collaborations involving Zambia and the global north. To address this imbalance, Zambian researcher capacity must be augmented, not just to undertake research, but to manage and coordinate such collaborations. Additionally, northern researchers need a better understanding of Zambian research culture and context.

#### Program of Midwives Training for HIV and Syphilis Prevention in Pregnant Women Treated in Public Hospitals in Buenos Aires Province, Argentina

**Authors:** Insúa, Patricia<sup>1</sup>; Vazquez, Mariana<sup>2</sup>; Zalazar, Virginia<sup>2</sup>; Campos, Fernanda<sup>2</sup>; Vazquez, Angeles<sup>2</sup>; Leach, Melisa<sup>2</sup>

Author Affiliations: <sup>1</sup>Faculty of Psychology Universidad del Pais Vasco, Spain; <sup>2</sup>Fundacion Huesped, Argentina

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –**Poster (unable to attend)

#### Issues:

Over the past two years, a baseline study was carried out among pregnant women in order to identify risk factors and gaps related to MTCT prevention. Our study has shown that women are not practicing preventative STI methods and do not have access to STI preventative information. Most women only attend SRH appointments because of pregnancy, which leaves their midwives as one of the few links to the health system. Due to this, midwives should strengthen their communication skills to meet situations of vulnerability and to fill in STI information gaps.

#### **Description:**

UPV provided technical support, research and training in the development and execution of communication programs for health workers. Fundacion Huesped's professionals were trained by UPV to implement the research-based workshops to midwives. The 5 day workshop covered STI counseling, preventative strategies among couples, gender violence, and alcohol and drug abuse. The workshop was implemented with 4 themes in mind. These themes included communication styles, skills of communication, missed opportunities and gender perspective.

#### **Lessons Learned:**

Violence and the use of alcohol and drugs are two topics that are usually hidden, but greatly affect the relationship a woman will have with her partner and health professional. This being said, it is necessary that a woman feel accepted and comfortable in order to discuss confidential issues, such as STI prevention, with her health professional.

#### **Next Steps:**

The present intervention-research project was carried out among 30 midwives in two municipalities of the Buenos Aires province. The evaluation results show that midwives were better able to recognize the women's needs, include male partners and improve the quality of antenatal care after their communication training. In 2012 we expect to continue this program in other municipalities of the Buenos Aires Province.

COMMUNITY-BASED RESPONSES and STRENGTHENING COMMUNITY HEALTH SYSTEMS ABSTRACTS

## Why Some Women Die and Others Survive Maternal Complications: Findings from the Qualitative Assessment of Bangladesh Maternal Mortality Survey (BMMS), 2010

Authors: Blum LS., Sultana M., Bilkis S., Nahar Q., Akhtar R., Streatfield PK.

Author Affiliations: International Centre for Diarrheal Disease Research, Bangladesh (ICDDR,B)

Option 1 - Scientific / Empirical Research Findings
Presented as – Poster (unable to present)

#### Aims:

A nationwide survey shows an impressive reduction in maternal mortality in Bangladesh, declining from 322 to 194 in 9 years, with hemorrhage and eclampsia the leading causes of death. Little is known about the circumstances that prevent or encourage women with complications to use emergency obstetric care.

#### Methods:

Qualitative research was carried out alongside with the national survey between March 2010 and January 2011. Maternal deaths were sampled from the survey, near-misses were identified from health facilities located in areas where the deaths occurred. Methods included in-depth interviews with people most familiar with maternal death (15) or near-miss (16) that had occurred due to hemorrhage and eclampsia within past 18 months.

#### **Results:**

Informants from both groups demonstrated limited knowledge of delivery-related complications and where to seek treatment. Maternal deaths were more likely to obtain initial treatment with informal providers, delaying care seeking to facilities, while near-miss women generally first sought facility care. Additional household level delays to care seeking faced by women who died included older family members' opposition to facility care, odd night time, and money was not readily available. Once care was sought, maternal deaths were more likely to go to a facility that was unable to provide appropriate treatment, either because of the unavailability of doctors or required services, forcing women to visit multiple facilities before obtaining appropriate care. Data showed that eclampsia was easier to recognize, signaling the need for formal care, while hemorrhage was difficult to identify, with the majority of deaths never accessing facility services.

#### **Conclusions:**

Prior to childbirth, women and family members should be informed about pregnancy-related complications and where to seek appropriate care. Health officials must ensure that EmOC services are functioning and rapid referral systems are in place.

# An Examination of Women Experiencing Normal Deliveries and Obstetric Complications Requiring Emergency Care: Socio Cultural Consequences of Increasing Caesarean Sections in Bangladesh

Authors: Blum LS., Sultana M., Bilkis S., Koblinsky M.

Author Affiliations: International Centre for Diarrheal Disease Research, Bangladesh (ICDDR,B)

Option 1 - Scientific / Empirical Research Findings
Presented as – Poster (unable to present)

#### Aims:

Historically, there has been a strong cultural preference for home births in Bangladesh. Recent findings show socioeconomic disparities in use of emergency obstetric care, highlighting the need to examine deliveries, including caesarean sections. The objective of the study was to understand the community perceptions towards home and hospital deliveries and its consequences on women and families.

#### Methods:

Qualitative research involving in-depth interviews was carried out with 19 women who had experienced normal deliveries and 20 women who had severe complications during delivery in rural Bangladesh between March 2008 and August 2009.

#### Results:

Women were poorly informed about pregnancy-related complications and medical indications for emergency care prior to delivery. Findings highlighted the barriers women faced with severe complications in reaching emergency obstetric facilities. Women who had caesarean sections incurred huge costs that led to economic burdens on family members and blame attributed to the woman. Both women with normal and severe deliveries reported many health consequences postpartum, which were generally left untreated.

# **Conclusions:**

The data underline the importance of educating women and their families about pregnancy-related complications and preparing for the possibility of caesarean section. At the same time, health systems need to be strengthened to ensure that all women in clinical need of life-saving obstetric surgery can obtain a caesarean section. While greater access to surgical interventions is likely linked to recent reductions in maternal mortality in Bangladesh, policy makers need to institute mechanisms to discourage the over medicalisation of childbirth in a context where use of caesarean section is rapidly rising.

# Childbirth Planning and Preparation: Findings from the Qualitative Assessment of the Bangladesh Maternal Mortality Survey (BMMS), 2010

Authors: Blum L.S, Sultana M., Bilkis S., Nahar Q., Streatfield PK.

Author Affiliations: International Centre for Diarrheal Disease Research, Bangladesh (ICDDR, B)

**Option 1 -** Scientific / Empirical Research Findings **Presented as –** Poster (unable to present)

#### Aims:

Only 27% of Bangladeshi women deliver with skilled birth attendants. Antenatal care (ANC) serves as an opportunity for health workers to inform women about essential birth preparations, particularly related to childbirth complications. In order to increase use of skilled attendants and improve birth outcomes, it is important to understand how women view birth preparedness and plans they make prior to delivery.

#### Methods:

As a sub-component of a nationwide maternal mortality survey, in-depth interviews was carried out between March 2010 and February 2011 with 20 women in their third trimester of pregnancy to assess what preparations they had made for childbirth. When available the pregnant woman's husband, mother and mother-in-law were also questioned.

### **Results:**

Women attended on average two antenatal visits, with approximately one-third never receiving ANC. Health workers providing ANC consistently failed to give information on pregnancy-related complications or advice on place of delivery. The vast majority of respondents expected to deliver at home with a traditional birth attendant (TBA) because they assumed the delivery would be normal, had confidence in the TBA, and wanted to avoid a facility delivery. Despite the fact that women also know that delivery can be risky, most women failed to discuss childbirth with household decision-makers. Women expressed multiple reservations about giving birth in a health center, with most frequent concerns relating to costs and shame in exposing private body parts to male health workers. While all women indicated that they would go to a health facility if complications occurred, virtually no preparations had been made in regard to transport and savings to pay for emergency care.

# **Conclusions:**

Although childbirth is viewed as a dangerous time, minimal preparations are made prior to delivery. ANC health workers often fail to provide valuable information for birth planning. Efforts are needed to improve ANC so that women and their families are better prepared to respond to delivery complications.

# Increasing Country & Community Involvement in Global Health Policy Processes? The Case of the Global Fund to Fight AIDS, Tuberculosis and Malaria

Authors: Bruen C., Brugha R.

**Author Affiliations:** Dept. of Epidemiology and Public Health Medicine, Division of Population Health Sciences, Royal College of Surgeons in Ireland

Option 1 - Scientific / Empirical Research Findings

Presented as – Oral Presentation

# Aims:

In the context of the Global Fund to Fight AIDS, Tuberculosis and Malaria, to

- a) examine how non-governmental and other civil society organisations (CSOs) have engaged in global level policy and decision-making processes that affect country and community responses, including health systems and workforce challenges
- b) highlight the impact CSOs have had on the Global Fund, and the impact on them of engaging in the Global Fund

#### Methods:

In-depth telephone interviews (2009-10) of purposively selected individuals (n=36) from: Global Health Initiatives (GHIs); developing country governments; bilateral donors; multilateral agencies; academic/research institutions; NGOs/CSOs; philanthropic foundations; and the private sector. Interviews were recorded, transcribed and thematically analysed.

### **Results:**

Prior to establishment of the Fund, discussions on global HIV financing were shaped by donor priorities. Northern AIDS treatment CSOs became directly involved in 2001 through the Global Fund Transitional Working Group. Consultation was initially limited to Northern individuals and organisations connected to dominant Southern CSO networks. Over time, new technology enabled wider consultation with affected communities.

Early challenges included: perception of undemocratic and anti-participatory processes at global level; divisions and rivalries between CSOs; slow release of information; resource constraints. CSOs established mechanisms to enhance representativeness, communication and community engagement. Wider representation of CSOs ensued; however, tensions persisted around roles (advocacy versus service delivery); were divided along a Northern/Southern axis and shaped by competition for finances; and around fears of donor co-option.

# Discussion/conclusions/ implications:

The Global Fund enabled CSOs and representatives of communities participate in global health policy processes. Contesting stakeholder views emerged on: i) who CSOs are accountable to; ii) meanings of country ownership; iii) and relationships between global and local level. Lessons learned from CSO engagement in Global Fund processes provide valuable examples to stakeholders on how to incorporate community perspectives, interests and needs into global HIV and health policy making.

# People Living with HIV in Orissa State, India Supporting Others Living with HIV

**Authors:** Cartmell E., Gahan B.

Author Affiliations: Concern Worldwide (Dublin), Concern India

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation

#### Issues:

People living with HIV are best placed to tell stories of HIV as a challenge that goes beyond public health. As a part of the Alliance2015 EU funded HIV programme, thirteen people living with HIV (6 women and 7 men) were interviewed in order to understanding their realities and to give them the chance to have a say in the way HIV is tackled at a programme and policy level in Orissa State. Data was collected using qualitative interviews, observational techniques and relevant secondary data.

### Findings:

Respondents, aged between 22-37 years, came from a range of socioeconomic backgrounds. Men were typically diagnosed after a prolonged illness, whereas for women their diagnosis often followed their husband's positive test.

Analysis of the case histories revealed a number of commonalities: high level of fear of (and actual) discrimination by healthcare providers; perceived fear of discrimination on disclosure. In contrast, those whom disclosed HIV positive status, families and communities had been broadly supportive.

#### Lessons:

Educational advice given by people living with HIV consistently covered four areas: ART and adherence; livelihood options; nutrition; and HIV and AIDS knowledge. The financial burden of HIV was heavy, due primarily to the loss of livelihood owing to poor health and widowhood, and the cost of ART. The burden fell heaviest on those least able to cope: the extremely poor women living with HIV.

"[Before] there was no tension in my life. Now there is a fear of what will happen to us. So much money goes on medicine and travel ... Life is insecure."

# **Recommendations:**

- Included people living with HIV in policy development to ensure effective targeting and implementation of programmes;
- Empower people living with HIV to engage in dialogue with governments, NGOs and medical personnel; Address HIV stigma and discrimination in healthcare settings.

# Effectiveness and Sustainability of an Integrated Care Group Model in Delivering Community Health Services

Authors: Cotes G., Davis A., Weiss J., Tamming R.

Author Affiliations: Concern Worldwide Ireland, USA, Burundi and Ireland respectively

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation

#### Issues:

Community-based behaviour change communication (BCC) is key to improving household health practices. The Care Group model is an effective method of delivering BCC, resulting in improved health behaviours. The traditional Care Group model requires significant external support, traditionally provided by paid NGO staff.

# **Description:**

A Care Group is a group of 10-15 community health volunteers. Each volunteer goes out at least monthly to conduct health promotion with a small cohort of caregivers. Concern designed a two-pronged study in Burundi to compare a new integrated Care Group model with the traditional model in terms of 1) improving household knowledge and practices, and 2) functionality and sustainability. The integrated Care Group model adapts the traditional model by using Ministry of Health (MOH) staff to implement and manage Care Groups. The project targets caregivers of approximately 7,594 children aged 0-23 months through 305 Care Groups. A Community Health Information System (C-HIS) and reporting forms have been piloted to monitor service delivery.

### **Results:**

Initial household coverage is high, reaching 74% of households monthly with BCC messages. Coverage and functionality of integrated Care Groups is similar to that of the higher-input traditional model. C-HIS reporting requires supervision and quality assurance, but reporting is high, with 90% of Community Health Workers (CHW) submitting monthly reports.

# Lessons:

It is possible to integrate Care Groups into MoH human resource systems, particularly if CHW are in place. The model shows promise for scale-up within other contexts.

C-HIS systems are important for monitoring community service delivery and may potentially be integrated into HMIS and performance-based financing systems.

Integrated Care Groups may provide a more cost-effective model for supervision, peer support, and health service delivery in communities. The Integrated Care Group Model has been identified in Burundi MOH discussions as a promising model for implementing a realistic community health strategy.

# University Community Partnership Project: Community Selection Criteria and Readiness Assessment

Authors: Finlay, D

Author Affiliations: VSO Ireland

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation (unable to present)

#### Issues:

In Zimbabwe, the collapse of the health sector from 2007-2009, staff shortages and lack of essential supplies severely impacted the HIV and AIDS pandemic in the country, the poor being the most affected by poor access to health services

# **Description:**

VSO uses the expertise of local volunteers in Zimbabwe, as opposed to international volunteers. Success at community level in reaching rural people living with HIV and OVC has been achieved by a 'doctors outreach programme' whereby experienced, local medical doctors and nurses volunteer on a weekly basis in disadvantaged communities.

This initiative was implemented by VSO partners the Child Protection Society (CPS) in Harare, and the Midlands AIDS Caring Organisation (MACO), in Zvishavane District. In 2010, MACO scaled up access to ART and psychosocial support by women and OVC. By year end, 488 and 945 women respectively were able to access ART. This success is attributed to the 12,316 home visits made by community volunteers in the year, and their referral of patients to the 'doctors outreach programme' undertaken in 4 rural clinics by 2 medical doctors working with MACO.

For the Child Protection Society (Harare) the 'Doctors Outreach Programme' targets OVC who are identified and referred by CPS health promoters and caregiver volunteers. The activity is supported by three medical doctors and three nurses, who volunteer free medical services on two Saturdays of every month.

VSO has procured medicines and materials that are used by the mobile outreach teams at both partner organisations. Doctors use their own vehicle but fuel is provided. They spend at least two hours attending to clients on a volunteer basis weekly. On average, 20 clients are attended to by each medical team during these CPS outreach visits.

### **Lessons learned:**

An independent evaluation of the Irish Aid 'block grant' to VSO Ireland in 2011 highlighted this initiative as an example of 'good practice' to be replicated in other countries. The professionals are in full support of the programme and believe that more can be recruited, if they are sensitised in the right way and are involved with credible organizations in a structured programme.

Professional volunteers working alongside community based carers have had an unintended outcome of shifting the burden from the community caregiver. Community based carers are now able to mobilise patients, who cannot afford hospital fees, to get treatment through the outreach programme. Professional volunteers can train community based carers to conduct basic health screenings and to keep proper medical records.

## **Next steps:**

At the VSO-RAISA Conference in November 2011 the Zimbabwe 'Doctors Outreach' programme was hailed as a strong initiative that will be replicated in other Southern African countries where VSO is working.

# Innovative Participatory Health Education 'IPHE': an Approach to Capacity Strengthening for Researchers and Policy Makers

Authors: Elmusharaf E.1'2, O'Donovan D.2

**Author Affiliations:** <sup>1</sup>Reproductive & Child Health Research Unit 'RCRU', University of Medical Sciences & Technology, <sup>2</sup>National University of Ireland Galway

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Poster

# Background:

Researchers and policy makers rarely demonstrate evidence of addressing the social and cultural contexts in the planning for accessible maternal health care services that can reduce maternal and neonatal mortality.

# Approach:

We designed and conducted an Innovative Participatory Health Education Project 'IPHE'. In which 12 Masters Student researchers worked together with 2 employees of local NGOs, 10 local women, and 10 local theatrical band members in Renk County — South Sudan to identify the important maternal health issues in their community. They developed context-friendly materials and delivered it to a local community in the form of pictograms, songs, and drama.

A parallel training workshop was conducted on Reproductive Health Project Management that targeted 10 senior officers in Renk County to strengthen their capacity to develop, implement, monitor and evaluate reproductive health projects. They used the list of maternal health issues generated by the IPHE participants to develop two reproductive health project proposals. In the last day of the workshop the local people and senior officers were brought together to discuss maternal health issues in the area. The senior officers presented the two proposals to the IPHE participants who gave them feedback and comments.

# Outcome:

A qualitative assessment at the end of this project demonstrated that the capacity strengthening for researchers happened during the process of developing, delivering and evaluating the educational materials. The senior officers said that this approach helped them to identify the maternal health issues through the lenses of the local population which will influence their future decision making.

# **Conclusion:**

This approach effectively advocated for maternal health, strengthened the capacity for researchers and policy makers, and engaged the community. The approach enhanced the contribution of marginalized communities to identifying needs, planning and designing future health services in a post conflict setting.

# Participatory Ethnographic Evaluation Research (PEER) Empowers Marginalized Women to Engage in Community Directed Reproductive Health Interventions

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**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation

#### Issues

This abstract demonstrates how Participatory Ethnographic Evaluation Research (PPER) can build the capacity, empower and engage local women in conflict affected hard-to-reach communities to participate in Community Directed Reproductive Health Interventions (CDRHI).

# **Description:**

Fourteen marginalized women with no formal education were trained in PEER which included developing skills to design research instruments, conduct interviews, collect narratives and stories, and analyse the data. Twelve months later, 10 out of the 14 women were able to lead work on health communication with employees of local NGOs and local theatrical band members. They shared their information and data about the important issues related to women health in their community, developed action messages, created culturally appropriate health education materials, and delivered it to their community in form of pictograms, songs, and drama.

### **Lessons learned:**

The women believe that PEER enhanced their credibility - when they returned to their social circles people were more accepting to what they said because they were perceived to know more than others. They are more confident about their ability to influence change. Participation in research design, data collection and data analysis was a particularly powerful tool to enhance their empowerment in post conflict settings. The approach adopted illustrates the developing of the capacity, mobilizing the community and increasing the level of readiness to participate in CDRHI.

# **Next steps:**

By using PEER we not only gain an in depth understanding of the social, economic, and cultural contexts in which people live, but we also empower and engage marginalized women in hard to reach communities. Moreover, it gives a sense of ownership, ensures sustainability, and assists in planning, implementation, monitoring and evaluation of Community Directed Reproductive Health Interventions.

# University Community Partnership Project: Community Selection Criteria and Readiness Assessment

**Authors:** Elmusharaf K.<sup>12</sup>, Abu-Sinn D.<sup>1</sup>, Khalid A.<sup>1</sup>, Victor F.<sup>1</sup>, Abel-Hamid A.<sup>1</sup>, Abuagla A.<sup>1</sup>, Khalil A.<sup>1</sup>, Mohammed A.<sup>3</sup>

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**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation

#### Issue:

Many factors account for the success of University - Community partnerships for heath in post conflict settings. Many of these partnerships neither consider criteria to select the community to partner with nor assess the readiness to implement the appropriate interventions.

# **Description:**

Community Selection Criteria and Scoring System (CSCSS) was created and then applied to select a post conflict village to partner with in Kassel State in East Sudan through desk review, key informant interviews and observation. Readiness, Ability and Willingness Assessment (RAWA) of shortlisted communities to partner with our Universities were assessed as part of the second phase of community selection.

The criteria included key factors such as population size, socioeconomic status, population movement, previous exposure to community programs and external funding, and auxiliary factors such as literacy level, health status, health facilities, transport facilities, education facilities, utilities- tap-water and electricity. Some of the factors considered for RAWA assessment were health awareness, existing community efforts and recognition of these efforts, available resources, community climate and attitude, community leadership, community mobilization for health, and training of community workers.

# Outcome:

As a result of this exercise Makali village was selected and a partnership was created in July 2011 as a University Community Partnership Project (UCPP) between the village, University of Medical Sciences & Technology and University of Kassala to work in equal partnership to promote the health status, work on determinants of health, enhance the level of readiness and empowerment aiming eventually to create an independent community.

### Conclusion:

To choose a single village from several communities for partnership or community based initiative can be challenging. The CSCSS and RAWA provided a systematic approach to select an appropriate community for UCPP, acted as an advocacy approach and facilitated the identification of relevant stakeholders.

# Public Health Advocacy in Low Income Settings: Views and Experiences on Effective Strategies and Evaluation of Health Advocates in Malawi

Authors: Friel E.

Author Affiliations: Oxfam Ireland

Option 1 - Scientific / Empirical Research Findings

Presented as - Poster

# Aims:

Gain an understanding of effective strategies and ways to evaluate public health (PH) advocacy in low income settings (LIS) by exploring the views and experiences of health advocates in Malawi

### Methods:

Semi-structured phone interviews were conducted with a purposeful sample of health advocates representing 12 organizations (including NGOs, UN agencies and research institutions) involved in PH advocacy in Malawi. Questions were open-ended, adapted from an on-line survey conducted with US-based advocacy organizations. Interviews were recorded and responses were analyzed according to emerging themes.

### **Results:**

66% of the organizations interviewed were Malawian and 33% international. Their programmatic area of work included: health, HIV and AIDS, media for populations groups such as people living with HIV, women living with HIV, orphans and vulnerable children, health care workers.

Research, community organizing and mobilizing, media, policy and legislative advocacy, capacity building and networking were cited as effective strategies for successful PH advocacy in Malawi. The influence of the political context was also highlighted.

All participating organizations had evaluated their PH advocacy work. Some of the benefits from the evaluations included: improvement of programme effectiveness, capacity building of staff and partners, getting people's views on the programme and the organization. Some of the challenges experienced were: lack of resources, tools, frameworks and capacity to evaluate advocacy, preference from donors and decision makers for quantitative indicators, issues with attribution, etc.

# Discussion/conclusions/ implications:

The themes emerging from the Malawi research on advocacy strategies and experiences with evaluation are similar to those of US organizations participating in a similar study, even if prioritization differs. This is an indication that despite the level of income, experiences and views are shared across health advocates and therefore lessons, tools and frameworks could be shared among different settings. A framework for evaluating PH advocacy in LIS is proposed.

# Minding the Gap in Alexandria: Communication between School Service Providers and Female Youth about Reproductive Health

**Authors:** Hanafy S.

Author Affiliations: Alexandria Regional Centre for Women's Health and Development

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Poster (unable to present)

#### Issues:

While schools can serve as secure venues to inform young people about reproductive health (RH), less than 15% of boys and only 5% of girls received information on puberty in schools as revealed in the 2009 Survey of Young People in Egypt. With the support of the Ford Foundation, Alexandria Regional Center for Women's Health and Development is implementing the "Reproductive Health Awareness Program among Female Youth in Secondary Schools in Alexandria." The project aim is to develop a model intervention program on important age-appropriate RH information among adolescent girls.

# **Description:**

The two-year project (2011-2012) has three components:

- Research that includes both qualitative and quantitative data collection
- Training and development of a culturally sensitive model for integrating RH into school curricula.
- Testing that applies the model in different schools and assesses its impact.

## **Lessons learned:**

A qualitative study initially conducted to assess gaps between female adolescents' needs for appropriate RH information. The study also revealed that school teachers, doctors, and social workers are unprepared to take on the task of accurately informing young girls about RH. Both the girls and the school officials expressed a desire to gain the information and skills to address these gaps. Based on the research findings, training programs on RH issues conducted to relevant school personnel. A model RH curriculum was developed to be implemented by the trained personnel in the intervention component in twelve secondary schools in Alexandria.

# **Next steps:**

Build support for the program and its outcomes in the different schools of Alexandria and with other local and national stakeholders to generate support for reproductive health education for adolescent girls in general and specifically for this curriculum as a tested and ready-to-use tool.

# Screening Program in Children for Prevention of Chronic Renal Disease and Hypertension in the Peruvian Andes

Authors: Hurtado A. 1,2, Pando J. 4, Padilla E. 2,3, Figueroa J. 2,3

Author Affiliations: <sup>1</sup> Head of the Department of Nephrology, Arzobispo Loayza Hospital, Lima-Peru

# Option 1 - Scientific / Empirical Research Findings Presented as – Poster

#### Aims:

- To identify children and adolescents at risk for Renal Disease based on an early detection of proteinuria.
- To slow the progression of chronic kidney disease (CKD) by early intervention after diagnosis.

## Methods:

In September 2010, the Screening was started in the rural town of Llamellin (Peruvian Andes at 3200 meters above sea level) among school children.

Screening:

- 1) Weights and heights
- 2) Proteinuria: A clean-catch, midstream morning urine specimen was collected from the children

The urine was screened for:

- a) proteinuria and hematuria using standard urinary dipstick
- b) microalbuminuria using micraltest
- 3)Arterial Blood Pressure

# **Results:**

Between September and November 2010, 754 children from 5 schools in Llamellin were evaluated. In the first screening 0,5% had proteinuria, 4,9% had hematuria, 11, 3% had microalbuminuria. In the second screening none had hematuria or proteinuria, but 1,45% had microalbuminuria. Positive microalbuminuria in both screening was found in 11 children.

In 2011, 149 children were screened. 13 children (8.7%) had positive microalbuminuria in 3 screenings.

All children with persistent microalbuminuria had normal creatinine and renal ultrasounds

In total, 14 children were started treatment with Enalapril. 9 children received treatment for at least 6 months. From these, 3/9 had negative microalbuminuria at the end of 6 months, in 3/9 microalbuminuria had diminished and in the 3 remaining, microalbuminuria persisted the same.

# Discussion/conclusions/ implications:

Populations living at high altitude such as in Llamellin (Peru), are exposed to many of the factors responsible for the development of CKD: low birth weight, malnutrition, and chronic hypoxia which recently has been recognized as responsible for renal injury.

Our results show a higher frequency of urinary abnormalities compared to those reported previously in children. Short term follow up of these children, show good response to treatment.

Community-based mass screening, targeting populations at high risk for CKD, should prove to be cost-effective in the long term.

<sup>&</sup>lt;sup>2</sup> Cavetano Heredia Peruvian University, Lima-Peru

<sup>&</sup>lt;sup>3</sup> Family Medicine Resident

<sup>&</sup>lt;sup>4</sup> Clinical Lecturer, Department of Paediatrics and Child Health, University College Cork (UCC), Ireland

# "Create CBOs or no Funding for HIV Work": The Case of External Funding on Community HIV Response in Malawi

Authors: Kadzandira JM.

**Author Affiliations:** University of Malawi, Dept. of Epidemiology & Public Health Medicine, Royal College of Surgeons in Ireland

Option 1 - Scientific / Empirical Research Findings

Presented as – Oral Poster

#### Aims:

The study is being conducted to assess the impact of task shifting on the quality and coverage of HIV and primary health care services in Malawi.

# Methods:

Trend data was collected for immunisation, PHC, HIV and AIDS and health workers for the period 2006-2010 from seven health facilities in two districts in Malawi. One-on-one in-depth interviews were also held with health service managers at the district and facility levels to discuss the trends and to get their views on task shifting.

### **Results:**

With the exception of Health Surveillance Assistants (HSAs) whose numbers doubled, nurse and clinician numbers remained fairly stable. HTC services more than trebled between 2006 and 2009 but there have been either declines or level for immunisation and family planning (FP) services. Findings from interviews with district and facility staff suggest that the declining HIV and immunisation trends are due to stock-outs of drugs.

There are mixed views on the use of HSAs to scale up HIV services in addition to surveillance and provision of other PHC services in the communities. Proponents are arguing that task shifting is reducing workload for nurses and clinicians while at the same time bringing services to the remote areas. Opponents doubt quality of care and biased time allocation against non-office community surveillance work amid low supervision and absence of incentives for the HSAs to do more community-based work.

# Discussion/conclusions/ implications:

Task shifting has increased HIV service coverage but this may be leading to declining PHC services as HSAs take-on more facility based HIV work. There is therefore need to strengthen the training and mentorship of the HSAs to ensure service quality and for HSAs to balance time allocation against competing demands so as to improve the image of their contribution to health service delivery. Causes of drug stock-outs should be properly analysed and addressed.

# Health Conceptions among Adolescents: A Qualitative Study at Sylhet, Bangladesh

Authors: Khan AKMD.

Author Affiliations: Shahjalal University of Science and Technology, Sylhet, Bangladesh

**Option 1 -** Scientific / Empirical Research Findings **Presented as –** Poster (unable to present)

#### Aims:

World Health Organization defines 'Health' as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. According to WHO age between 10 and 19 years is considered as adolescence period.; a bridge between childhood and adulthood. A large portion of adolescents do not get the opportunity of access to health care due to insufficient knowledge on health. Adolescent health is a new sphere of thinking and a strong agenda in the Health and Population Sector Strategy of Bangladesh. For better understanding about adolescents' conception on health, we carried out a qualitative study to investigate how the adolescents conceptualized health.

# Methods:

We selected a smallest administrative area under Sylhet district of Bangladesh. We collected data from 50 adolescents. We performed in-depth interview among 20 adolescents. We conducted four FDGs in male and female group separately. We obtained verbal consent from adolescents' guardians before data collection. Interviews were conducted in a place within their households chosen by the participants. Tape recorded interviews were transcribed. Data analysis was manually performed using content, contextual and thematic analysis.

# **Results:**

Most of the adolescents did not have clear conception about the meaning of the term "Health" in term of WHO's definition. They emphasized that the appearance of body structure is the indicator of health. They divided human body into two parts; inner and outer. The flesh and intestine are covered by skin. Soul is considered as the internal part of body. Respondents explained that female body as less strong than male and female become easily infected. Few adolescents believed that health as state of diseases free condition.

# Discussion/conclusions/ implications:

Our study revealed that adolescents have diversified thinking on health which demands to provide special attention for improving their understanding on health.

# Barriers Faced by Community Skilled Birth Attendants to Conduct Deliveries at Home

Authors: Khan R., Bilkis S., Blum LS., Nahar Q., Streatfield PK.

Author Affiliations: International Centre for Diarrheal Disease Research, Bangladesh (ICDDR, B)

Option 1 - Scientific / Empirical Research Findings
Presented as – Poster (unable to present)

#### Aims:

Historically, there has been a strong preference for home births with traditional attendants in Bangladesh. Different initiatives have been undertaken by the government of Bangladesh to increase delivery with skilled birth attendance, which is presently at 27% as shown by a recent nationwide survey. A community skilled birth attendant (CSBA) program was launched in 2004 to create a cadre of trained birth attendants to be stationed throughout the country to perform home deliveries and refer women with complications to emergency care facilities. Efforts have focused on training of existing paramedics on birthing techniques.

#### Methods:

Nationwide survey (BMMS, 2011), a qualitative assessment was done to understand the role of the CSBAs. Semi-structured interviews were also carried out.

# **Results:**

Hardly any differences were noticed in terms of assisting deliveries between the CSBAs who are performing for long time or short time. CSBAs who are relatively new mostly do not live in their service areas. In general, community members still prefer TBAs over the CSBs to conduct deliveries, who are often known and have extensive experience. However, often when the TBA is unable to perform delivery, either TBA or families seek CSBAs' assistance. Much claimed that nobody supervises the CSBA activities and they are not accountable either to anybody regarding the number of deliveries they are supposed to conduct. Instead, CSBAs who perform a high number of deliveries are often criticized by their management for being more involved in deliveries.

# **Conclusions:**

To achieve the goal of CSBA program and too see the impact of it in maternal health, programmers and policy makers should rethink regarding the program. It is important to redefine the responsibilities of CSBA which may require a different cadre and ensure proper monitoring and supervision.

# Uterine Prolapse: An Examination of the Physical and Social Consequences of a Chronic Morbidity on Women's Lives

Authors: Khan R., Bilkis S., Blum LS.

Author Affiliations: International Centre for Diarrheal Disease Research, Bangladesh (ICDDR, B)

**Option 1 -** Scientific / Empirical Research Findings **Presented as –** Poster (unable to present)

### Aims:

WHO estimates that maternal disabilities resulting from severe obstetric complications affect 15-20 million women worldwide each year. These disabilities include severe anemia, fistula, incontinence, nerve damage, pituitary failure, depression, infertility and uterine prolapse. This study explored the consequences of uterine prolapse on women's daily activities, social life, relationship with their husband, hygiene, and careseeking practices

# Methods:

Qualitative research was carried out in Matlab, Bangladesh between January 2007 and June 2008 with using of indepth interviews.

## **Results:**

We identified 3 women with first degree, 7 women with second degree, and 2 women with third degree prolapse. Uterine prolapse was described as a "peeling onion" red in color or an egg falling from the vagina. Respondents believed that women developed prolapse due to the fact that they carried out heavy chores or had sexual intercourse shortly after childbirth. Women with second and third degree prolapse experienced many physical consequences resulting from their condition, including extreme discomfort while sitting, white and bloody secretions coming from and infections on the body of the prolapsed uterus, and pain during intercourse. These physical consequences often interfered with their ability to carry out household chores, care for other children, and satisfy their husband's sexual demands, leading to marital violence and desolation over time. Treatment seeking was often inappropriate due to lack of information about the condition, family's poor economic status, and the fact that that it was associated with female sexual organs, which made women ashamed to share the condition.

### **Conclusions:**

The data suggests that uterine prolapse is a relatively common condition among rural women in Bangladesh that causes extreme hardship. Health planners should develop ways to raise awareness about this issue for appropriate care for the affected women.

# The Socio-Cultural Consequences of Child Disabilities on Women's Lives in Rural Bangladesh: Findings from a Qualitative Study

Authors: Khan R., Sultana M., Blum LS.

Author Affiliations: International Centre for Diarrheal Disease Research, Bangladesh (ICDDR, B)

**Option 1** - Scientific / Empirical Research Findings **Presented as** – Oral Presentation (unable to present)

#### Aims:

While child morbidity and mortality has gained much attention from public health professionals and policy makers, child disabilities have remained unexplored. Children who survive births involving severe obstetric complications can suffer from long-term physical and mental disabilities, which can have socio cultural consequences on their mothers and families. The present study explored social and psychological consequences on mothers of children who suffered from a disability associated with a complicated childbirth.

# Methods:

The research was conducted in Matlab, Bangladesh between January 2007 and June 2008 as a part of a larger maternal morbidity study. Methods included open-ended interviews with women (9) experienced severe complications during childbirth, which subsequently affected their children's normal physical and mental growth, their husbands (4), and other family members (5).

# **Results:**

Most family members were initially unwilling to acknowledge that the child had a disability. Once the problem was recognized, care seeking was with traditional healers, with subsequent treatment obtained from medical specialists and physiotherapists .Over time, treatment was terminated due to insufficient funds and the distance to facilities. Few mothers and family members attributed the child's condition to childbirth, rather linking the disability to supernatural beings and childhood disease. Mothers provided the primary care for these children, which was extremely time consuming, limiting their ability to carry out household chores and care for other children, restricting mobility in the community, and reducing their ability to maintain personal hygiene.

Misunderstandings about the cause of child disabilities and lack of information regarding appropriate care lead to confusion regarding treatment.

### **Conclusions:**

Rural areas in Bangladesh people often do not pay attention on safe delivery. Planners and programmers should develop ways to raise awareness in this regard. To avoid pregnancy-related complications proper referral mechanisms with functional emergency obstetric and gynecological care need to be made available within the community.

# Perceptions and Care seeking for Obstructed Labor: Findings from the Qualitative Assessment of the Bangladesh Maternal Mortality Survey, 2010

Authors: Khan R., Sultana M., Blum LS., Nahar Q., Streatfield PK.

Author Affiliations: International Centre for Diarrheal Disease Research, Bangladesh (ICDDR, B)

**Option 1 -** Scientific / Empirical Research Findings **Presented as –** Poster (unable to present)

### Aims:

As part of a nationwide maternal mortality study, qualitative research was conducted between March 2010 and February 2011 with maternal deaths and near-miss who experienced obstructed labor. Deaths were sampled from the survey, while near-miss were identified in health facilities located in the same area. In-depth interviews included family members of women who died (2) or survived (4) obstructed labor, and in the case of near-miss, the women themselves.

### Methods:

Qualitative research was carried out alongside with the national survey between March 2010 and January 2011. Maternal deaths were sampled from the survey; near-misses were identified from health facilities located in areas where the deaths occurred. Methods included in-depth interviews with people most familiar with maternal death (15) or near-miss (16) that had occurred due to hemorrhage and eclampsia within past 18 months.

# **Results:**

Women who died experienced labor pain for 2-3 days before they sought care outside the home, while near-miss cases typically sought treatment within a few hours after the onset of contractions. Maternal deaths suffered from severe delivery pain which was not recognized as life-threatening by family members and formal and informal health care providers. In contrast, near-miss women experienced breech position, the baby's head was stuck in the birth canal, or a hand came out first, which both family members and TBAs identified as danger signs. TBAs referred these women promptly to health facilities. However, once reaching the facility, near-miss women faced many delays obtaining appropriate care. Overall, five women eventually had c-sections, which family members initially objected to due to the costs involved. With the exception of one maternal near-miss, all women had stillbirths.

### **Conclusions:**

Prolonged labor is more difficult for family members and health providers to identify than other signs of obstructed labor. Mothers can be saved from obstructed labor if timely care is sought. Raising awareness about the definition of obstructed labor and appropriate treatment and establishing proper referral mechanisms is important in reducing maternal mortality and preventing stillbirths.

# Health Care Delivery, Access and Utilisation in Emerging Communities and Slums of Urban South West, Nigeria

Authors: Lawal SA.

Author Affiliations: Centre for Global Health, Trinity College Dublin

Option 1 - Scientific / Empirical Research Findings

Presented as – Poster

#### Aims:

The study aims to examine the nature of health care in emerging communities and slums of urban south west, Nigeria. The specific objectives will include; to explore the social processes by which health care services emerge and evolve in emerging communities and urban slums of south west Nigeria; to examine access to health care services and effective utilisation of health care services in emerging communities and urban slums of south west Nigeria.

#### Methods:

The study will adopt a triangulation of qualitative and quantitative research methods to capture existing social realities and health conditions in the study area. Data will be collected using a household surveys; in-depth-interviews; key informant interviews and focus group discussions.

# **Results:**

The study will provide information on the varied nature of health care delivery in emerging communities and urban slums; help in the conceptualisation of health care delivery and utilisation in urban slums and emerging communities.

# **Discussion/conclusions/implications:**

The study will contribute to strengthening health care systems in emerging communities and slums of urban south west, Nigeria

# **Community-Driven Scale-Up of Community Case Management**

**Authors:** Luz R., Weiss J., Tamming R.

Author Affiliations: Concern Worldwide Rwanda, US and Ireland respectively

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Poster

#### Issues:

Concern Worldwide was the lead partner in the Kabeho Mwana Expanded Impact Child Survival Project (2006-2011) dedicated to the scale-up of integrated community case management (CCM) for diarrhea, malaria, and pneumonia in Rwanda in accordance with the priorities and policies of the Ministry of Health (MOH). CCM involves using community health workers (CHWs) to bring basic treatment services to the community to reduce barriers associated with attending a health facility. The goal of the five year project was to reduce child mortality among 318,090 children under five in an area representing approximately 19% of the country.

# **Description:**

A preceding small scale project was scaled up to build the capacity of 6,168 CHWs to provide CCM; and establishing and strengthening CCM service delivery systems in 88 health facilities. The approach to CCM scale-up emphasized on-the-ground capacity building, mainly of CHWs and supervisors, both through formal trainings and continuous presence at the facility and community level to provide on-going support to put the knowledge received into practice.

# **Results:**

The project resulted in high levels of CHW utilization for community treatment in the target districts. The percent of children with respiratory symptoms who were taken to an appropriate health provider increased from 13% to 63%, and the percent of children with a febrile episode who were treated with an effective anti-malarial drug within 24 hours increased from 20% to 43%.

# Lessons learned:

Over the five years of the project, the project played a pivotal role in the scale-up of CCM in Rwanda building on the network of CHWs. The successes of the EIP demonstrates the vital importance of synergistic technical assistance and guidance from both the central and field levels, and that building from the ground-up is essential and complementary in scaling up key sustainable interventions such as CCM.

# Using Community Health Workers to Manage Hypertension in Urban India: A Cost-Effectiveness Analysis

Authors: Murphy A.<sup>1,2</sup>, Schulman-Marcus J.<sup>3</sup>, Prabhakaran D.<sup>4</sup>, Gaziano T.<sup>2,5</sup>

# **Author Affiliations:**

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Option 1 - Scientific / Empirical Research Findings
Presented as – Oral Presentation

#### Aims:

Our objective was to estimate the net costs and cost per Disability-adjusted Life Year (DALY) averted associated with a hypothetical intervention using Community Health Workers (CHWs) to manage hypertension in India.

# Methods:

Using a Global Markov Cardiovascular Disease (CVD) model, we assessed the cost-effectiveness of a hypothetical CHW intervention in urban India. Demographic information and prevalence of risk factors were taken from the UN Population Division and the Global Burden of Disease study. Ten-year risk of CVD events was calculated using the Framingham Risk Score. The annual probability of non-CVD death is based on WHO life tables.

The necessary inputs of a CHW intervention and the associated blood pressure reduction (3 mm/Hg) were estimated based on literature from other settings. Cost estimates were obtained from WHO CHOICE.

# **Results:**

The estimated cost of an intervention where 30 CHWs are trained and each paid roughly \$3900/year (USD) to make 2 visits to 22050 patient homes over one year is \$ 141 904.10 (USD), or \$6.44/patient, \$3.22/visit.

Over 10 years the annual \$141 000 cost of the program would be offset by \$110 000 saved each year in health care expenditures through reduced strokes and ischemic heart disease events, resulting in a net cost of \$31 000 per year. Sixty-five DALYs would be averted annually leading to a cost-effectiveness ratio of approximately \$475/DALY averted over the course of the 10 years.

If the annual salary of a CHW drops below \$1400, or the number of visits per patient is reduced to one per year, or the blood pressure reduction is above 5.3 mm Hg, the intervention becomes cost saving.

### Conclusion:

We demonstrated that the use of CHWs for improving adherence to medications and changes in lifestyle among hypertensive patients is a cost-effective strategy for addressing increased incidence of CVD in India.

# An Evaluation of the Relevance, Effectiveness, Efficiency, Impact and Sustainability of the Community-led Total Sanitation (CLTS) Approach in Liberia

Authors: Phillips F.

Author Affiliations: Liberia CSO WASH Working Group

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Poster

#### Issues:

Sanitation is a basic human need, a Human Right and the greatest medical achievement in nearly two centuries; however, sanitation continues to be relatively unappreciated in the plethora of issues facing low-income countries and continues to be under-resourced by donors and governments. Liberia, one of the poorest countries in the world, has recently endorsed Community-Led Total Sanitation as an approach to increasing sanitation coverage and reducing health burdens in rural areas. Through the use of this innovative low-cost approach facilitators ignite communities to take action; to overcome sanitation issues; and ultimately take development into their own hands. Liberia, however, is a unique context – recently out of war with a heavily donor dependent population.

### Methods:

This evaluation, using a descriptive, qualitative, cross-sectional study design, sought to establish the overall effectiveness, impact and sustainability of CLTS within the Liberian context, through OECD/DAC criteria for evaluating development assistance.

### **Results:**

The evaluation identified numerous issues that are affecting the ability to achieve sustained open defecation free communities, none more so than the facilitators involved and the monitoring of communities, but also the lack of harmonisation among initiating organisations, defragmented approach, commitment and resources available to the government. Further, a focus on attaining open defecation free communities has detracted from the overall aim of facilitating sustained behaviour change and has resulted in low utilisation of latrines.

# **Lessons learned:**

CLTS, in Liberia, can be an effective tool, not only to increase sanitation demand and use of facilities but also to overcome the dependency of the population on external actors, enabling communities to identify their own needs and collectively take action to better their lives. However, without ensuring technically skilled facilitators and continuous monitoring and support to communities, this process is unlikely to achieve established goals, let alone enable communities to move up the sanitation ladder.

# Sustainability of Community Based Organisations for HIV/AIDS Care and Support Services in Zambia

Authors: Walsh A.<sup>1</sup>, Mulambia C.<sup>2</sup>, Hanefeld J.<sup>3</sup>, Brugha R.<sup>1, 3</sup>

**Author Affiliations:** <sup>1</sup>Royal College of Surgeons in Ireland; <sup>2</sup>Institute of Economic and Social Research, University of Zambia, <sup>3</sup>London School of Hygiene and Tropical Medicine

Option 1 - Scientific / Empirical Research Findings
Presented as – Oral Presentation

# Aims:

Community Based Organisations (CBOs) provide important advocacy, care and support services for people living with HIV and AIDS (PLWHA) in Zambia. This study assessed whether Zambia's World Bank-funded Community Response to HIV/AIDS (CRAIDS) project, 2003-2008, contributed to CBO sustainability.

Methods: In-depth interviews with representatives of all CBOs that received CRAIDS funding (n = 18) and district stakeholders (n = 10) in Mumbwa rural district in Zambia, in 2010; and national stakeholders (n = 11) in 2011.

# **Results:**

- Health services: While all CBOs were functioning in 2010, most reported reductions in AIDS service
  provision since CRAIDS funding ceased. Home visits had reduced due to a lack of food to bring to PLWHA
  and lack of funding for transport, which reduced ARV adherence support and transport of patients to
  clinics.
- Organisational capacity and viability: All 18 CBOs had existed prior to CRAIDS, contrary to national level
  perceptions that CBOs were established to access CRAIDS funds rather than from the needs of
  communities. CRAIDS promoted CBO sustainability through funding Income Generating Activities.
  However, there was a lack of infrastructure and training to make these sustainable. Links between health
  facilities and communities improved over time, with volunteers working on teams with clinic staff. After
  CRAIDS ceased, CBOs were not aware of new funding opportunities.
- **Volunteerism:** Volunteers' skills' levels had reduced over time, as some who had received training had left the district, and medical guidelines had become outdated.

# Discussion/conclusions/ implications:

CBOs in Mumbwa district, which had existed prior to new HIV funding, remained in existence after the funding stopped, though with reduced levels of service provision. This highlights the importance of enabling, working with, building the capacity of and putting in place sustainability plans of existing CBOs and community structures, rather than creating new mechanisms for delivering HIV care and support services.

# Health Systems Barriers to Adherence to Antiretroviral Treatment Programme in Rural South Africa

Authors: van Wyk B.<sup>1</sup>, Larkan F.<sup>2</sup>, Saris AJ.<sup>3</sup>

**Author Affiliations:** <sup>1</sup>School of Public Health, University of the Western Cape, SOUTH AFRICA, <sup>2</sup>Centre for Global Health, Trinity College Dublin, IRELAND, <sup>3</sup>Department of Anthropology, National University of Ireland, Maynooth

Option 1 - Scientific / Empirical Research Findings
Presented as – Oral Presentation

#### Aims

Barriers to access and adherence remain issues of major concern in the Western Cape province of South Africa, in spite of considerable successes in the roll-out of the public antiretroviral treatment (ART) programme. These barriers are fairly complex intertwining political, economic, social-cultural, gender, and biological factors, with health systems policies and organisation of care.

# Methods:

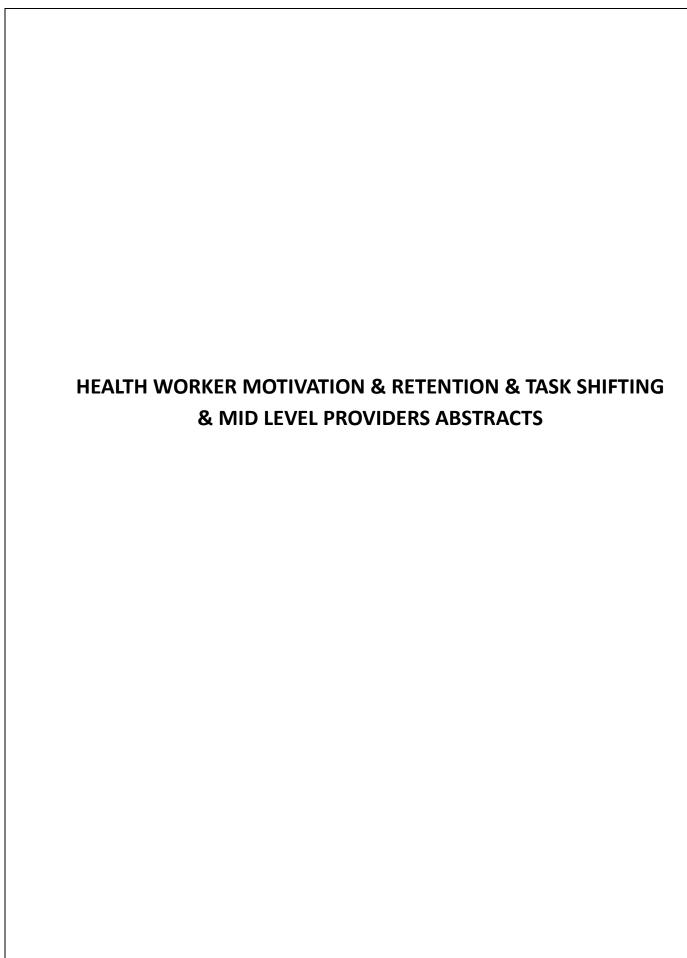
An in-depth ethnographic study was conducted in three settings in the West Coast/Winelands and Cape Metro districts in the Western Cape. Sixty index patients were followed over a two-year period, through individual interviews and participant observations of interactions with health care workers, lay health workers and community-based carers, as well as selected family members. Key informant interviews were conducted with health care workers. Initial analysis was narrative to derive patterns of adherence, and sequential analysis interrogated health systems responses to adherence challenges.

# Results:

Emerging patterns of adherence indicate pervasive poor adherence, which we classified as: chaotic, weekend-off, unplanned treatment holidays and erratic. These patterns of non-adherence implicate poor communication for treatment literacy and management of anticipated adverse effects, insufficient attention paid to nutrition, ambiguous 'education' about use of alcohol and its effect on medication, and non-collaborative partnerships between health worker and patient toward treatment adherence. Our analysis also reveals the notion of "sick clinics", where ART patients were turned away because of no presenting doctors, and dis-integration between HIV care and general primary care in some health facilities.

### **Implications:**

Health workers need to be re-oriented and empowered towards a patient-centred and patient-driven system of care, where external barriers related to language and culture, unequal power relations, and internal barriers related to staffing, competency and ethical sensitivity could be more skillfully negotiated.



# Measuring Health Workforce Distribution in Uganda

Authors: Awor A.1, Brugha R.1, Byrne E.1

Author Affiliations: Dept of Epidemiology and Public Health Medicine, Royal College of Surgeons in Ireland, RCSI

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation

# Aims:

Assess regional distribution and skill mix of health workers in Uganda so as to illustrate the imbalances in skills mix and geographical area in regional referral hospitals.

# Methods:

Data from the Ministry of Health HRH audit report 2010 was analysed to assess the distribution of health workers in the 12 regional referral hospitals in Uganda. We compared proportions of vacant position and ratios of the distribution of the total health workforce and the cadre-specific (skill mix) distributions of health workers focusing on the specialised services in the 12 Regional Referral Hospitals (RRH).

#### **Results:**

Overall vacancy rates varied from 29% to 72%. The ratio of specialised staff to the total staff varied from 9% to 19%

Specific vacancy rates for specialised staff are:

- 70% for theatre staff (the highest vacancy rate)
- 56% for medical officers (ranging from 20% to 98%).
- 51% for orthopedic officers
- 50% for occupational and physiotherapists, psychiatry clinical officer and psychiatry social workers
- 24% for nursing staff
- 19% for clinical officers

# Discussion/conclusions/implications:

The degree of inequality in the distribution of the health workforce was strongly dependant on geographical location of the referral hospital which favoured the urban areas.

Government requires innovative solutions to overcome the mal-distribution of HRH in Uganda. The low vacancy rate of Clinical Officers in most of the hospitals may mean that a solution to address shortages of staff is to train similar cadres of staff to the Clinical Officers in the specialised areas which have the most critical shortage.

# The Implementation Challenges of Improving Motivation Through Better Financial Incentives in South Africa, Malawi and Tanzania

Authors: Bidwell P.1\*, Thomas S.1, Ditlopo P.2, Chirwa M.3, Revill P.1

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**Option 2** - Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** – Oral Presentation

#### Issues:

Boosting financial incentives are one of the most popular strategies to increase motivation and retention and address the human resource for health crisis. Nevertheless, it important to review the way in which such initiatives are implemented and this may affect both the development of the policy and its reception. The Motivation Project evaluated incentive initiatives that are currently being implemented in South Africa, Malawi and Tanzania to improve health worker motivation and retention. Both financial and non-financial initiatives were identified within each project country. The Project results found that despite increased financial incentives health workers are still not satisfied with their remuneration

# **Description:**

Hogwood and Gunn's ten step policy implementation model was used to explore issues and identify areas which may have constrained the success of the salary increase policies. The model outlines conditions for ideal implementation and this framework was utilized in order to reflect on the experiences of the three countries and draw lessons for implementing policies to increase motivation through financial incentives in similar settings.

### Lessons learned:

There are some common weaknesses of policy implementation across all the countries. First, there were problems around communication and coordination. In addition, initiatives to boost financial incentives were conducted in an atmosphere of poor relations between government and health workers. Such resentment may be a strong external constraint to impede the success of policies.

# **Next steps:**

In particular it is important to manage expectations with financial incentive policies, through clear rationale, very clear communication and careful timing. It appears that none of the countries forecast how the situation would develop and no country was prepared for the conflict which arose as a consequence of the policies.

# National Level Human Resource Constraints in Implementing Donor-Funded HIV/AIDS Programme in Lesotho

Authors: Biesma R.<sup>2</sup> Makoa E.<sup>1</sup>, Odonkor P.<sup>1</sup>, Tsekoa L.<sup>1</sup>, Mmpemi R.<sup>1</sup>, Brugha R.<sup>2</sup>

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Option 1 - Scientific / Empirical Research Findings

Presented as – Poster

# Background:

Resource-poor countries in Sub-Saharan Africa with high HIV/AIDS prevalence have multiple donors to assist them in their national responses. Over the last years, development aid for HIV/AIDS had increased dramatically. There is limited evidence on how health authorities in developing countries cope with rapid changes in administrative, policy and socioeconomic contexts in which they work.

### Aims:

To assess the performance of the main government stakeholders responsible for managing and implementing a donor-funded HIV/AIDS programme in Lesotho using a framework on knowledge absorptive capacity.

#### Methods:

In-depth key informant interviews with 22 representatives of the government, bilateral and multilateral development agencies and a review of key documents. Data were analysed using Atlas Ti software.

### **Results:**

Capacities for implementing innovative and parallel financial management and reporting mechanisms in ministries were often weak. Even if staff capacity was strengthened to fulfill Global Fund requirements, they were easily lost because of migration of staff to non-governmental organisations and out of the country, where they would receive more attractive salaries and incentives. Decentralisation processes, which aimed to shift the locus of much decision-making to lower levels of government and to facilities, were not being fully implemented, despite this being a component of the Round 5 Global Fund grant. The Ministry of Health was not ready to delegate power, there was poor capacity of district health management teams; and centrally made Global Fund supported programmatic plans were not easily integrated into local administrative structures.

# Discussion/conclusions/ implications:

Poor program management skills and an over-reliance on administrative norms and bureaucratic regulations at central level are dysfunctional to implementing multiple large-scale donor-funded health programmes. Application of the framework revealed how vulnerable African governments are to loss of staff capacity.

# The Relative Importance of Different Motivational Determinants for Different Categories of Health Workers in South Africa, Tanzania and Malawi

Authors: Blaauw D.<sup>1</sup>, Ditlopo P.<sup>1</sup>, Maseko F.<sup>2</sup>, Chirwa M.<sup>2</sup>, Mwisonga A.<sup>3</sup>, Bidwell P.<sup>4</sup>, Thomas S.<sup>4</sup>, Normand C.<sup>4</sup>

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<sup>1</sup>Centre for Health Policy, University of the Witwatersrand, Johannesburg, South Africa, <sup>2</sup>College of Medicine, University of Malawi, Blantyre, Malawi, <sup>3</sup>National Institute for Medical Research, Dar es Salaam, Tanzania, <sup>4</sup>Centre for Global Health, Trinity College, University of Dublin, Dublin, Ireland

Option 1 - Scientific / Empirical Research Findings
Presented as – Oral Presentation

#### Aims:

Improving health worker motivation is critical to improving the performance of health systems in low- and middle-income countries. The list of factors that influence health worker motivation has been well researched but little is known about the relative importance of these factors. There are also few formal comparisons of the preferences of different cadres in different countries. As part of the Motivation Project this study used a Discrete Choice Experiment (DCE) to measure the relative importance of motivational determinants for different health worker categories in South Africa, Tanzania and Malawi.

## Methods:

Multi-level stratified sampling strategies, customized for each country, were used to select a representative sample of health workers. A DCE was designed to quantify the relative importance of different motivational factors, namely: salary, staffing levels, availability of drugs and equipment, training opportunities, promotion opportunities, recognition from management, and community respect. Mixed logit models were used for analysis. Differences between sub-groups were formally tested by including interaction terms in the models.

## **Results:**

A total of 2,221 questionnaires were analyzed (717 from South Africa, 937 from Malawi, 567 from Tanzania). Training opportunities, job location and salary were key motivational determinants. However, the relative importance of determinants varied between countries, cadres and individuals. For example, a 75% salary rise increased the odds of being motivated 2.4 [95%CI: 2.2-2.6] times in South Africa and 2.7 [95%CI: 2.3-3.1] times in Malawi, while training increased the odds of being motivated 5.1 [95%CI: 3.0-6.4] times in Malawi and 1.5 [95%CI: 1.4-1.6] times in Tanzania. There was significant individual heterogeneity for many motivational determinants, and significant differences between different cadres and socio-demographic groups.

# Discussion/conclusions/ implications:

DCEs can provide interval data on the relative importance of different motivational determinants. Such data is essential for the development of more targeted human resource policy interventions to improve health worker motivation and performance.

# Key Challenges in Ethiopia's Health Extension Programme: Lessons from the Field

Authors: Boostrom C.

Author Affiliations: Centre for Global Health, Trinity College Dublin

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation

# Background:

In order to address severe shortages of health workers in rural areas, Ethiopia launched The Health Extension Programme (HEP) in 2003. Thus far, 33,000 female Health Extension Workers (HEWs) have been deployed, with a ratio of 1 HEW per 2500 population. HEWs focus on four key areas: hygiene and environmental sanitation, family health services, disease prevention and control, and health education and communication.

# MajorChallenges:

Based on experience in the field, the three major challenges in the HEP are as follows. 1) HEWs are increasingly overburdened with work. This is particularly the case with the recent roll out of community case management by HEWs for treatment of the major causes of under five mortality. 2) There are major discrepancies in the implementation of the HEP throughout Ethiopia's nine regions. The four major regions have received strong financial and logistical support from the federal government, whereas the five emerging regions are still far behind. 3) Supportive supervision has been difficult to implement and maintain, due to inadequate training for supervisors, an almost entirely checklist-based system, and low motivation among supervisors.

# **Next Steps:**

Very little is being done to address HEWs' workload, therefore research ought to be carried out on the skills, workload, and population that it is feasible for each HEW to attain and maintain so that future policies and standards within the HEP can reflect this. Greater financial and logistical support is needed in Ethiopia's five emerging regions in order to increase equity in access to the HEP throughout the country. A new model of supervision is being piloted in two of the country's major regions which aims to streamline the process and improve the performance of both HEWs and their supervisors. Results from operations research on this supervision model will be available next year.

# An In-Depth Exploration of Health Worker Supervision in Malawi and Tanzania

Authors: Bradley S.<sup>1</sup>, Kamwendo F.<sup>2</sup>, Masanja H.<sup>3</sup>, de Pinho H.<sup>4</sup>, Waxman R.<sup>4</sup>, Boostrom C.<sup>1</sup>, McAuliffe E.<sup>1</sup>

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**Option 1** - Scientific / Empirical Research Findings **Presented as** – Oral Presentation

#### Aims:

To explore the perceptions of district health management teams (DHMT) in Tanzania and Malawi on their role as supervisors and the challenges to effective supervision at the district level

# Methods:

This qualitative study took place from Oct-Dec 2008 as part of a broader project, "Health System Strengthening for Equity: The Power and Potential of Mid- Level Providers". Semi-structured interviews with DHMT personnel in Malawi (n=20) and Tanzania (n=39) covered a range of human resource management (HRM) issues. These included supervision and performance assessment, staff job descriptions and roles, motivation and working conditions.

# **Results:**

Participants reported considerable autonomy in supervision of facilities in their districts but displayed varying attitudes to the nature and purpose of the supervision process. Much of the discourse in Malawi centred on inspection and control; interviewees in Tanzania were more likely to articulate a paradigm represented by support and improvement. In both countries facility level performance metrics dominated. The lack of competency based indicators or clear standards to assess individual health worker performance was considered problematic. Shortages of staff were a major impediment to carrying out regular supervisory visits. Other challenges included conflicting and multiple responsibilities of DHMT staff, and financial constraints.

# Discussion/conclusions/ implications:

Supervision is a central component of HRM, not just a quality assurance mechanism. It plays a key role in performance and motivation, and is particularly important in a challenging work environment or in the context of task shifting. Policy level attention is crucial to ensure a systematic, structured process that is based on common understandings of the role and purpose of supervision. It needs to be adequately resourced and supported in order to improve health worker performance and retention at the district level.

# **Economically Sustainable High Quality Career Paths for African Eye Care Workers**

Authors: Coleman K.

Author Affiliations: Right to Sight, Royal College of Surgeons in Ireland

**Option 2** - Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Poster

#### Issues:

Cataract surgery is both the most common and the most cost effective health intervention known, yet over 7 million Africans are blind because there is less that one eye surgeon per million population to perform this ten minute operation. Right to Sight was founded in 2006 to stimulate recruitment, training and retention of African ophthalmologists through development of sustainable quality careers, with good salaries, excellent working conditions (equipment, patient facilities), quality support staff, and research and continuous medical education opportunities, in Africa.

# **Description:**

From 2006 to 2010 we established successful high quality, high volume, low cost, eye surgery systems in eight African countries, through capacity building, private-private public, NGO and government partnerships, and through collaboration with the Indian eye NGO, Aravind. Our capacity building has produced an extra 250,000 cataract operations and 2.5 million clinic visits in hospitals where private fees cross subsidise surgery for the poor and support surgeons' salaries. Where possible, surgeons supervise operating non-physician clinicians, developing a new cadre and increasing cost effectiveness of cataract surgery. In 2010 we changed our focus to surgeon training, retention and research.

### **Lessons learned:**

It is possible to provide good salaries, excellent working conditions with good support staff, high patient volumes, and continuous medical education and research opportunities in Africa, to attract, retain and develop a permanent indigenous supply of ophthalmic surgeons to eliminate needless blindness in Africa. Furthermore, it is possible to provide free surgery for the poor, cross-subsidised by fee-paying patients.

# Next steps:

Right to Sight is developing rapid cataract surgery training systems (the first opened in Nairobi in 2010), research opportunities (including the African Glaucoma Initiative, vernal eye disease initiative, Squamous cell carcinoma initiative), online medical education programmes and international collaboration, in order to develop academic excellence and stimulate surgeon retention in African ophthalmology programmes.

# Changing Incentives for Health Workers Through a Voucher Scheme for Maternal Health Services

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Option 1 - Scientific / Empirical Research Findings
Presented as – Oral Presentation

# Aims:

A voucher scheme in Eastern Uganda was implemented to facilitate access to maternal health services. The scheme also aimed at altering incentives for providers so as to improve their motivation, performance and hence the quality of maternal health services delivered. The intention of this study was to explore changes in the incentives for providers and their influence on the behaviour of providers.

# Methods:

The study was conducted using a case study design. The study population included health workers and women of reproductive age. Data was collected using key informant interviews (health workers) and focus group discussions (women of reproductive age). Thematic analysis was employed.

# **Results:**

The health workers reported that they felt more motivated to perform their duties. This increased interest in their work was attributed to allowances provided by the scheme, the increased availability of the resources required at work, increased job enrichment and acquisition of skills as a result of the increased diversity and number of clients. The focus group discussions revealed that the health workers were perceived to be more available and responsive towards client needs. Their attitudes towards clients had also improved remarkably. One of the challenges reported was a high workload especially in understaffed facilities.

# Conclusions/discussions/implications:

One of the reasons for absenteeism of health workers in Uganda has been the need to supplement their meagre salary. Financial incentives from the program provided additional income, so the health workers dedicated more time to their work. Positive changes in the work environment provided a more conducive environment for health workers hence they enjoyed their work. The increased numbers and diversity of clients led to the acquisition of new skills and job enrichment. These changes together with their internal drive to serve patients had a positive influence on the behaviour of the health workers.

# Constructing and Narrating Career, Career Stories of UK-based African Nurses

Authors: Fitzgerald J.

Author Affiliations: London School of Hygiene & Tropical Medicine

**Option 1 -** Scientific / Empirical Research Findings **Presented as –** Oral Presentation

#### Aims:

This study was an analysis of individual global careers. It explored the careers of UK-based African nurses including the pre and post migration context of career and career narratives

#### Methods:

This qualitative study analysed data from two interviews given by 17 UK-based migrant African nurses.

Drawing on Bordieu's notion of research being composed of "two minutes", a life history approach first identified the social space and structures creating the 'field' of the observed/ objective career.

A second analysis of 'habitus' involving a narrative study incorporated participants' subjective experience and evaluation.

# Results:

Analysis of life histories identified:

Pre and post migration context Participants' career stage Resources, enablers and barriers at each stage of career

Organisations' human resource architecture and the employment relationship were also determined indicating the types of careers experienced.

Four narratives provide an overarching story about nursing and being a migrant nurse in the context of a global labour market. Participants drew on canonical narratives to reveal what nursing means in relation to the wider concept of career and its role in migration. This included choosing the UK as the destination for migration and its subsequent contribution to career.

# Discussion/conclusions/ implications:

The analysis identifies cohort differences in career prior to migration, specifically careers are increasingly self-managed entities that involved working in multi-agency services, involving private and third sector international organisations.

The narratives identified the cultural capital individuals drew upon to articulate their past, present and future careers incorporating migration decisions, recent experiences and future plans

Complimenting macro-analytic approaches this study offers new insights by utilising a micro-analytic approach demonstrating individual migration decisions occur not in the context of a wider enabling context but also within a range of socio-historic influences and personal factors. The narration of career integrates a range of motivations that sustain identity and self esteem

# PLHIV as Peer Counsellors in First Level Health Care Facilities in Haiti

Authors: Gahan B.

Author Affiliations: Concern Worldwide, Rouen University France

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Poster

## Issues:

Lack of human resources in the Haitian health sector and a lack of health personnel trained on HIV and AIDS has affected the roll-out of HIV counselling. Recruitment of people living with HIV as peer counsellors was seen as an appropriate option to tackle the overburden on the health system in Port au Prince.

# **Description:**

Within this project, implemented pre-2010 earthquake, Concern Haiti partnered with a local association of people living with HIV (ASON) to recruit 15 peer counsellors (10 women and 5 men) in targeted slum areas of Port au Prince. Peer counsellors were trained by certified trainers to provide pre- & post-testing counselling and on-going support; and were supervised and received ongoing support from a Haitian psychologist.

Peer counsellor impacts:

- Only 60% of counsellors were willing/ able to use personal health history with presenting new cases, due to self and community HIV-related stigma
- Positive impact on the health status of counsellors and their quality of life (less isolation, increased self-efficacy)
- Counsellors wish to reintegrate into the workforce and/or seek adult education training

Benefits to the health centre are included:

- Able to offer an community accessible ART programme
- Availability of high quality counselling
- Reduced HIV related stigma within their Health Centre

# **Lessons learned:**

Involvement of people living with HIV as patient/caregivers can be a valuable strategy both to fill the need for increased healthcare providers in countries seeking to implement rapid ART scale up and to reintegrate people living with HIV into mainstream society.

# **Recommendations:**

- Advocate for the work of PLHIV Counsellors be legalised and training and management integrated into the health system
- Provide ongoing training and offer psychological help to support counsellors in managing work
- Establish management procedures and workplace policies that take into account the circumstances of counsellors

# Networks of People Living with HIV: Strengthening Community Responses to HIV in Uganda

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**Option 1** - Scientific / Empirical Research Findings **Presented as** – Oral Poster

#### Aims:

In recent years, Uganda has experienced rapid growth in networked groups of people living with HIV (PLHIV) that provide support, advocacy, treatment and care and raise the profile of HIV in the public domain. The potential for a positive impact on individuals, communities and health systems is a key driver of these initiatives.

The aims of this qualitative study were to explore the benefits of joining a networked group, relationships between groups, impact of networked groups on the community, and shaping private and public experience of living with HIV.

#### Methods:

Data were collected during 2010 from two Ugandan districts, using semi-structured interviews, focus groups, observation, and reviews of group records. Respondents (n=46) were adults living with HIV, and members of PLHIV groups. Narratives from PLHIV (n=27) were gathered, and records from PLHIV group service-registers (n=20) reviewed. Key Informants (n=15) were purposively selected for interview, based on participation in PLHIV groups, and utilisation of network services. Focus group discussions were held with network support agents and PLHIV group members.

### **Results:**

Findings suggest that for respondents, PLHIV networks enhance the impact and effectiveness of individual groups, as well as diversifying available services. For groups, being part of a wider network allows for diversity of service delivery, and well-defined roles for individuals to participate in community mobilisation, support and sensitisation, with a reduction in the experience of stigma.

We also revealed indications of tension between groups, especially with those outside the HIV sector, and potential challenges in aligning group aims and competing for limited resources.

# **Conclusions:**

We conclude that networking PLHIV groups is an effective strategy for improving the quality and reach of community-based HIV services. Governments should support networks, and include them in national policy making. Local and regional groups should explore further ways to collaborate and expand PLHIV support in Uganda.

# The Quagmire of Task Shifting for Service Quality and Coverage: Preliminary Findings from 2 Districts of Malawi

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Option 1 - Scientific / Empirical Research Findings
Presented as – Oral Presentation

#### Aims:

The study is being conducted to assess the impact of task shifting on the quality and coverage of HIV and primary health care services in Malawi.

#### Methods:

Trend data was collected for immunisation, PHC, HIV and AIDS and health workers for the period 2006-2010 from seven health facilities in two districts in Malawi. One-on-one in-depth interviews were also held with health service managers at the district and facility levels to discuss the trends and to get their views on task shifting.

#### **Results:**

With the exception of Health Surveillance Assistants (HSAs) whose numbers doubled, nurse and clinician numbers remained fairly stable. HTC services more than trebled between 2006 and 2009 but there have been either declines or level for immunisation and family planning (FP) services. Findings from interviews with district and facility staff suggest that the declining HIV and immunisation trends are due to stock-outs of drugs.

There are mixed views on the use of HSAs to scale up HIV services in addition to surveillance and provision of other PHC services in the communities. Proponents are arguing that task shifting is reducing workload for nurses and clinicians while at the same time bringing services to the remote areas. Opponents doubt quality of care and biased time allocation against non-office community surveillance work amid low supervision and absence of incentives for the HSAs to do more community-based work.

#### Discussion/conclusions/ implications:

Task shifting has increased HIV service coverage but this may be leading to declining PHC services as HSAs take-on more facility based HIV work. There is therefore need to strengthen the training and mentorship of the HSAs to ensure service quality and for HSAs to balance time allocation against competing demands so as to improve the image of their contribution to health service delivery. Causes of drug stock-outs should be properly analysed and addressed.

# Beyond a Human Resources Crisis: The Quality of Health Services in South Sudan

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**Option 2** - Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** – Oral Presentation

#### Aims:

South Sudan is an independent country since June 2011 and very little data is available on health services and their quality. With increasing demand for effective and high quality health care an assessment of the existing quality of health services was needed.

#### Methods:

A health facility survey was conducted in 10 states of South Sudan from February to May, 2011 by a team of health researchers from the Ministry of Health. Lots Quality Assurance Sampling methods were used to sample 156 facilities.

#### **Results:**

In general, the quality of health services available in the health facilities is low. Some of this can be attributed to the shortage of health workers in general (15% of facilities met the minimum standard for the number of qualified health workers), but other main contributors are:

- Infrastructural (e.g. 4% of facilities have adequate requirements for infection control and 33% had a working refrigerator).
- Inadequate information systems (e.g. 18% of facilities had complete registers for IMCI information).
- Poor utilization of available services (e.g. 16% of facilities see the number of ANC consultations appropriate for their catchment area).
- Skills and knowledge of the available health workers (23% of facilities had appropriate prescribing practices).

Efforts to improve the situation are ongoing. 72% of health workers receiving some training in the previous year in maternal or child health, and 83% being supervised in the previous 6 months.

#### **Conclusions:**

Despite regular drug deliveries, and high levels of training and supervision overall quality of health services in South Sudan remains poor. Short term solutions include supplying some low-cost equipment, guidelines, and improving record-keeping for registers and stock control. In-service IMCI training could also improve the existing health worker performance. However, the lack of human resources requires a longer term solution alongside more general health systems strengthening.

# Expected to Deliver: Alignment of Regulation, Training, and Actual Performance of Emergency Obstetric Care Providers in Malawi and Tanzania

**Authors:** Lobis S.<sup>1</sup>, Mbaruku G.<sup>2</sup>, Kamwendo F.<sup>3</sup>, McAuliffe E.<sup>4</sup>, Austin J.<sup>1</sup>, de Pinho H.<sup>1</sup>

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**Option 1** - Scientific / Empirical Research Findings **Presented as** – Oral Presentation

#### Aims:

A fundamental impediment to the delivery of Emergency Obstetric Care (EmOC) is the acute shortage of health professionals in low-resource settings. Many countries have introduced a variety of innovative strategies to expand access to such personnel, including the shifting and sharing of tasks among and between different professionals, the expansion of scopes of practice of existing health providers, and the introduction of new cadres of clinicians particularly in rural areas where doctors are scarce. Policy, regulation, training, and support for cadres adopting tasks and roles outside their historical domain have lagged behind the practical shift in service-delivery on the ground. The Health Systems Strengthening for Equity (HSSE) project sought to assess the alignment between national policy and regulation, pre-service training, district level expectations, and clinical practice of cadres providing some or all components of EmOC in Malawi and Tanzania.

#### Methods:

A mixed methods approach was used, including key informant interviews, a survey of District Health Management Teams, and a survey of health providers employed at a representative sample of health facilities.

#### **Results:**

This study found 3 areas requiring further consideration: 1) the lack of alignment between national policy and regulation, training and practice of EmOC, particularly among the lower-skilled cadres e.g. nurse technicians and medical assistants performing tasks that they are not trained or regulated to perform; 2) general alignment between district level expectations and actual practice e.g. in Malawi the district health management teams generally believed that registered nurse/midwives should provide 6 of the 7 basic signal functions but only 9% of this cadre reported providing all basic EmOC signal functions; and 3) a confusing picture of actual provision of the EmOC signal functions, with noted absence of assisted vaginal delivery as a signal function that is rarely taught, regulated or practiced by many of the cadres, particularly in Tanzania.

### Discussion/conclusions/ implications:

Better alignment between policy and practice, and support and training, and more efficient utilization of clinical staff are needed to achieve the quality health care for which the Malawian and Tanzanian health ministries and governments are accountable

# Addressing Malawi's Human Resources Capacity to Address Obstetrics and Neonatal Care

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Option 1 - Scientific / Empirical Research Findings
Presented as - Oral Presentation

#### Aims:

The objective of this study was to assess Malawi's progress and the nature of the health workforce constraints towards reaching the maternal health Millennium Development Goal (MDG5)

#### Methods:

In 2010, The Malawi Ministry of Health (MoH) conducted an assessment survey of Emergency Obstetric and Newborn Care (EmONC) in all 205 government, 89 Christian Health Association of Malawi (CHAM) and 15 private health facilities that provided deliveries in the twelve months preceding the survey. The MoH provided the authors with the database. The lead author cleaned the data, recoded variables and analysed the dataset in STATA 12.

#### **Results:**

Malawi has only 40% of the recommended EmONC facilities per 500,000 population. The 27 district hospitals were staffed by only 48 doctors and 317 Clinical Officers (COs). There were no Obstetrician/Gynaecologists or General surgeons in the 27 government hospitals, whilst there were 6 in CHAM hospitals. In most government hospitals, caesarean section (CS) were performed by both COs (82%) and doctors (60%), but 50% more COs than doctors carried out CS's. At district hospital level, there was a severe shortfall of COs (21%) and doctors (27%). 12% of COs had left government facilities in the previous 12 months, which suggests a problem of chronic attrition of a cadre of health worker that is the cornerstone of health care in Malawi.

#### **Conclusions and next steps:**

These recent national data illustrate the scale of the health workforce shortage in Malawi; and also its reliance on COs – a form of non-physician clinician – for delivery of much of the life-saving emergency obstetrical care. The Clinical Officer Surgical Training in Africa (COST-Africa) research project, 2011-15, will augment COs surgical skills, expanding from emergency obstetrics to general surgery and trauma care. A health impact (DALY) and cost-effectiveness analysis will be conducted in a cluster randomised controlled trial.

#### **Acknowledgements:**

The EmONC assessment was conducted in collaboration and with financial support, from UNFPA, UNICEF, WHO and AMDD. COST-Africa is funded by the EU FP7 Programme.

# A Humanitarian Work Psychology Contribution to Human Resources for Health?

Authors: MacLachlan M.1, McAuliffe E.1, Mannan H.1, Carr S.2

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**Option 1** - Scientific / Empirical Research Findings **Presented as** – Oral Presentation

#### Aims:

This paper outlines how the new area of Humanitarian Work Psychology can contribute to addressing challenges in Human Resources for Health in low and middle-income countries.

It describes and summarises the results from 3 recent studies.

#### Methods:

- 1300 participants across 6 low and middle income countries responded to a survey of the effects of salary differentials on the work attitudes of expatriate and local workers.
- A systematic review of 28,000 documents on the relationship between pay and performance among civil servants (including doctors, nurses, mid-level occupations) in low and middle-income countries.
- A systematic review of 235 documents on evaluation of alternative cadre in Community Based Rehabilitation.

#### **Results:**

The dual salary system in international aid has negative effects on the work behaviour of people in low and middle-income countries.

There is insufficient evidence to establish the efficacy of performance-for-pay systems for civil servants in low and middle-income countries.

There is very little evaluative work on alternative cadres in Community Based Rehabilitation and that which exists is not comparable.

#### Discussion/conclusions/ implications:

Many interventions in HRH in low and middle-income countries have been well motivated by the urgent need to 'gap-fill' areas of staff or skill scarcity in order to support fragile health systems, and this has resulted in many innovative initiatives. If these initiatives are to deliver on their potential, a more scientific and systematic approach needs to be taken to issues such as the effects of salary differentials, the relationship between performance and pay, task shifting, skill mix, motivation and supervision. Humanitarian Work Psychology can make a useful contribution to these challenges.

# An Investigation of the Job Preferences of Mid-Level Healthcare Providers in Sub-Saharan Africa: Results from Large Sample Discrete Choice Experiments in Malawi, Mozambique and Tanzania

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Option 1 - Scientific / Empirical Research Findings
Presented as – Oral Presentation

#### Aims:

The use of mid-level providers (MLPs) (trained and deployed in 25 African countries) is one key strategy to providing quality EmOC, thereby reducing maternal and neonatal deaths. The range of factors influencing the motivation and retention of MLPs and other health workers now appears to be relatively well understood. Less well known however is the relative importance of the different factors in determining motivation and retention. Although previous work has examined the job preferences of health workers in sub-Saharan Africa this has often excluded attributes (e.g. human resources management (HRM)) which exploratory work has shown to be crucial. This study addresses the gaps in the extant literature by focusing on MLPS (cadres that are providing the majority of healthcare) and by including potentially important motivators such as HRM and professional development (CPD). In addition the study comprises a large sample across three countries, where the majority of previous studies are single country studies.

#### Methods:

This paper presents findings from DCEs with 2,072 health workers working in the public health systems in Malawi, Mozambique and Tanzania. The primary target for the DCE was health workers involved in the delivery of emergency obstetric care. Each respondent was asked to evaluate 15 choice sets and choose one job description; each choice set containing two job.

#### **Results:**

The results are consistent across the countries, the strongest predictors of job choice being access to CPD and HRM. We found pay to be important and significantly positively related to utility, but financial rewards are not as fundamental a factor in employment preferences as many may have previously believed. There is evidence to indicate diminishing marginal utility in relation to pay in all three countries.

### Discussion/conclusions/ implications:

Recruitment and retention of health workers can be strongly influenced by improving human resources management and access to professional development.

# Health Systems Strengthening for Equity (HSSE): The Power and Potential of Mid-level Providers

**Authors:** McAuliffe E.<sup>1</sup> and HSSE teams in organisations

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Option 1 - Scientific / Empirical Research Findings

Presented as – Oral Presentation

#### Aims:

The HSSE project aimed to support health system strengthening for equity in Africa by building an evidence base on the role of mid-level providers in maternal and neonatal health and promoting greater political leadership and critical policy action on this issue utilising the extensive experience and complementary strengths of the consortium partners, HSSE sought to expand the evidence base in support of effective use of mid-level health workers and increase recognition and effective use of mid-level health workers among national, regional, and global policymakers to address the human resource crisis in district health systems based on project evidence.

#### Methods:

HSSE sought to change a dynamic where northern research projects engage with in-country partners to collect data, but then analyse that data in their home institutions. The consortium partners avoided an approach where skills-building is simply a means to meet project objectives. Instead, the project deliberately adopted a philosophy where capacity-building efforts explicitly added to the bank of research expertise in partner countries.

#### **Results:**

Feedback from the data collectors demonstrated that teams felt part of a bigger process, where they gained skills and confidence, shared expertise and made new connections. A number of important lessons for future projects emerged including the need to:

- Undertake a full skills assessment of the existing platform of each partner's research resources and gaps prior to study commencement
- Engage in capacity building to enhance accountability and responsibility of in-country partners thus contributing to in-country partners' ability to lead research teams
- Improve data management processes

#### Discussion/conclusions/ implications:

The project demonstrated the need to engage in capacity building that is a lasting and sustainable investment in the work of all partners. The commitment to research capacity building exposed a number of issues that could be considered for future work, both at institutional level and more broadly within health systems research.

# Support, Train and Empower Managers (STEM)

**Authors:** Melo S.<sup>1</sup>, McAuliffe E.<sup>1</sup>, Bradley S.<sup>1</sup>, Honorati M.<sup>2</sup>, Mollel H.<sup>2</sup>, Lwilla F.<sup>2</sup>, Moshin S.<sup>3</sup>, Madede T.<sup>3</sup>, Cambe I.<sup>4</sup>, Mbofana F.<sup>4</sup>

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**Option 1 -** Scientific / Empirical Research Findings **Presented as -** Poster

STEM will take place in selected districts in Tanzania and Mozambique and has a total duration of 36 months (April 2011 - March 2014). The overall objective of STEM is to strengthen the Human Resource Management (HRM) function at district and health facility level, by increasing the capacity of managers to support and supervise their staff. The specific objectives of the project are a) to improve the working environment by targeting managers and their approach to HRM and b) to provide a structure and skill set to put HRM policies into practice. The target groups of STEM are the District Health Management Teams (DHMT) and facility managers in selected districts in each country. The final beneficiaries will be the DHMT and facility managers; health care workers in facilities within target districts; rural populations within target districts; policy makers at national level; and researchers at country and regional level. It is estimated that STEM will allow the development of a model of effective district health management by putting in place an evaluated HRM education programme and evidence of good practice that can be scaled up and inform policy and strengthening HRH. Finally, it is expected that STEM will facilitate a coalition between civil society organizations (CSO) and research institutions to improve knowledge of HRH issues and provide an evidence-based platform to influence policy. The main activities of STEM will include: the development of action learning HRM programme for DHMT; pilot work with a small sample of managers; baseline data collection of primary and secondary outcome measures; implementation of a finalised programme; and an evaluation including analysis of post intervention data collection, an ongoing process evaluation and an economic cost-benefit analysis.

### Branding- A Marketing Strategy Sets the Stage for Health Worker Retention at ICDDR, B

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**Option 2** - Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Poster

#### Issues:

Workforce retention is one of the important challenges for the organization. In a country like Bangladesh where there is an acute shortage of qualified health work force, the retention becomes the biggest challenge for the public and non-profit organization. How the marketing brand model has been replicated as employer brand management model, that helped ICDDR, B in setting the stage for workforce retention, will be presented.

#### **Description:**

Organizations are developing their retention strategy using various models and tools. Amongst the other tools, branding has been considered as one of the retention strategy. At ICDDR, B, taking the lesson from consumer brand, we build the employer brand to motivate our internal customers, i.e. employees, in order to binds them with the organization. The marketing principles are used to develop branded employment product which induces affinities and loyalty of health workforce to bind with the organization and assure retention.

#### Lessons learned:

Borrowing the marketing tools of branding and applying the principals in the field of people management, how an organization has been successful in reducing the workforce turnover; the lesson learned at ICDDR, B can be a model for other organization. By analyzing different data on staff turnover and exit interview responses, it was found very low turnover rate considering the industry average.

#### Next steps:

The findings will show how an organization has been successful in reducing the staff turnover; can be a model for other organization.

# Leadership and Organisational Justice: Propositions for Strengthening Human Resources for Health in Sub-Sahara Africa

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Option 1 - Scientific / Empirical Research Findings
Presented as - Poster

#### Aims:

Using Uganda as a case study of Sub-Sahara Africa the purpose of this study will be to investigate the comparative and aggregate effect of transactional, transformational and servant leadership on organisational justice perceptions, public service motivation, turnover intention, and OCB; finally the study will assess the appropriateness of these models of leadership in the context of Public, Faith-Based, and Private-For-Profit health sectors.

#### Methods:

A cross-sectional survey design will be used for collect data from a sample of 720 nurses and doctors selected from Public, Faith-Based and Private-For-Profit sector hospitals using disproportionate stratified sampling. Pearson's product moment correlation coefficients will be generated to analyze how each variable is associated with all the other variables. Linear regression will be performed with transformational leadership, transactional leadership, and servant leadership as predictors of organisational justice, public service motivation, turnover intention and OCB. Finally the t-test for independent samples will be used to examine variation along the various constructs of the study across Public, Faith-Based, and Private-For-Profit health sectors.

#### Results & Discussion/conclusions/implications:

- The study will contribute to the verification of construct validity in Sub-Sahara Africa of measures of transactional, transformational, and servant leadership developed in the West.
- Methodologically, the study will test the synergistic potential of the three models which has hardly been tested.
- The study will provide an opportunity to develop a research protocol for replication studies in the health sectors of other SSA countries.
- The study will contribute to an examination of what could be the most appropriate theory of leadership from an African perspective within and across Public, Faith-Based, and Private-For-Profit health sectors.
- Insight into organisational justice impact as a moderator variable of leadership on HRs in the health sectors of resource constrained economies will be generated.

# **Disaster Bioethics: Preparing Health Workers for Ethical Dilemmas**

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**Option 2** - Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** - Oral Poster

#### Issues:

The incidence of disasters is increasing. Their devastating impact is visible in the 2011 earthquake and tsunami in Japan, 2011 flooding in Australia, 2010 earthquake in Haiti, and elsewhere. Disasters generate massive healthcare needs, and health workers are prominent amongst those responding to disasters. Many disasters occur in lower income countries, with responders from wealthier countries, leading to cultural and ethical conflicts. Health workers often return from disasters experiencing moral distress, linked to ethical decisions made in those settings.

#### **Description:**

As part of a larger project, case studies have been collected and developed to incorporate into training materials for health workers responding to disasters. For example, triage decisions must be made about who to treat or not; limited resources must be distributed fairly; disaster responders are sometimes provided additional protections or resources compared to local populations.

#### **Lessons learned:**

Without experience or proper preparation ethical decision-making is difficult and may cause severe stress. Ethics training is often lacking, or focused on resolving ethical dilemmas assuming ideal conditions. However, 'Not all wrongs can be rectified, not all losses can be compensated, not everything can be repaired or replaced, and ... not everyone can recover.' Such non-ideal circumstances exist in disaster settings, and have implications for disaster bioethics training. Approaches need to address emotional issues like guilt, grief and anger, in additional to traditional moral reasoning.

### **Next steps:**

We are working with the European Master in Disaster Medicine to incorporate ethics into their training materials. Together we aim to make policy proposals that ensure disaster health workers are better prepared to tackle ethical issues and thereby protect the dignity of disaster victims.

# The Challenges of Developing a Tool to Monitor Changes in Health Worker Motivation at Primary Care Level in Ghana

**Authors:** Prytherch H.<sup>1</sup>, Aninanya G.A.<sup>2</sup>, Williams J.<sup>2</sup> Wiskow C.<sup>3</sup>, Leshabari M.T.<sup>4</sup>, Burghardt J.<sup>5</sup>, Marx M.<sup>1</sup>, Sauerborn R<sup>1</sup>.

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Option 1 - Scientific / Empirical Research Findings

Presented as - Poster

#### Aims:

The QUALMAT project seeks to improve the quality of maternal and neonatal health (MNH) care in rural sub-Saharan Africa. Provider skills and motivation levels are considered to hold the key to their performance. An incentive scheme and a Clinical Decision Support System will be piloted at selected primary level facilities. Here the development of an instrument to monitor the effects of these interventions on MNH provider motivation in Ghana is described.

#### Methods:

The process was informed by a literature review, the QUALMAT conceptual framework and qualitative research conducted in Ghana. A panel approach was used to identify constructs where changes were expected. These pertained to the working context (performance and management aspects), as well as to the providers attitudes and behaviour (individual aspects). Items were elaborated for each construct, referring, wherever possible, to tools that had already been used in the context of developing countries. The items pertaining to provider behaviour (timeliness, attendance etc) were also included in a further, short instrument for completion by a peer. For both instruments a 4-point likert scale was used.

#### **Results:**

The self-administered and peer administered instruments were pre-tested with 75 health workers in Ghana in July 2011. Subsequently, 23 items with poor psychometric performance were eliminated. Factor analysis of the remaining 42 items confirmed the use of the three aspects which accounted for 56% of the variance. Cronbach's alpha was 0.871.

#### Discussion/conclusions/ implications:

The items that performed poorly came from the constructs 'self-efficacy', 'work meaningfulness' and 'motivation' itself, indicating the need for further research into these concepts in the context of Ghana. This is partly endorsed by findings from the qualitative research. Negatively phrased questions worked less well, indicating that they were not so readily understood. The responses made by peers were overwhelmingly positive, implying possible cultural limitations to this approach.

# Influences on the Motivation, Performance and Job Satisfaction of Primary Health Care Providers in Rural Tanzania

Authors: Prytherch H.<sup>1</sup>, Kakoko DCV.<sup>2</sup>, Leshabari MT.<sup>2</sup>, Marx M.<sup>1</sup>, Sauerborn R.<sup>1</sup>

**Author Affiliations:** <sup>1</sup>Institute of Public Health, University of Heidelberg, Germany, <sup>2</sup> School of Public Health and Social Sciences, Muhimbili University of Health and Allied Sciences, Tanzania

Option 1 - Scientific / Empirical Research Findings
Presented as – Oral Presentation

#### Aims:

This study was conducted in the frame of the QUALMAT research project which seeks to improve the quality of Maternal and Neonatal health (MNH) care in rural sub-Saharan Africa. It was undertaken in Tanzania to gain a detailed insight into the influences on MNH provider motivation, performance and job satisfaction.

#### Methods:

35 in-depth interviews were conducted with primary level MNH providers and their managers. The interview guideline development was led by Tanzanian psychologists, sociologists and health professionals.

#### **Results:**

Key sources of encouragement include community appreciation, perceived government and development partner support for MNH, and on-the-job learning. Discouragements are overwhelmingly financial in nature, but also include facility understaffing and the resulting workload, malfunction of the promotion system as well as health and safety and security issues. Low level cadres are found to be particularly discouraged. Difficulties and weaknesses in the management of rural facilities are found. Basic steps that could improve performance appear to be overlooked. Motivation is generally referred to as being fair or low. The providers derive quite a strong degree of satisfaction, of an intrinsic nature, from their work.

### Discussion/conclusions/ implications:

The influences on MNH provider motivation, performance and satisfaction are shown to be complex and to span different levels. Variations in the use of terms and concepts pertaining to motivation are revealed, and further clarification is needed. Intrinsic rewards play a role in continued provider willingness to exert an effort at work. The critical nature of MNH and the rural setting readily expose a health workers performance. The causes of discouragement can be broadly divided into those requiring renewed policy attention and those which could be addressed by strengthening the skills of rural facility managers, enhancing the status of their role and increasing the support they receive from higher levels of the health system.

# **Motivating and Retaining Mid-level Cadres in Obstetric Services**

**Authors:** Sidat, M and the HSSE teams in the following organisations:

Centre for Global Health, University of Dublin, Trinity College; Averting Maternal Death and Disability Program (AMDD), Heilbrunn Department of Population and Family Health, Mailman School of Public Health, Columbia University, USA; Realizing Rights: the Ethical Globalization Initiative, USA; Regional Prevention of Maternal Mortality network, Accra, Ghana; Ifakara Health Institute, Mikocheni, Dar Es Salaam, Tanzania; University of Malawi, College of Medicine, Centre for Reproductive Health, Malawi; Department of Community Health, Faculty of Medicine, Eduardo Mondlane University, Mozambique

Option 1 - Scientific / Empirical Research Findings
Presented as - Oral Poster

#### Aims:

The HSSE project aimed to support health system strengthening for equity in Africa by building an evidence base on the role of mid-level providers (MLP) in maternal and neonatal health and promoting greater political leaderships and critical policy action on this issue. One of the key research questions was 'What are the factors that will optimise and support mid-level provider performance?'

#### Methods:

The HSSE project drew on the WHO framework for monitoring health systems to address the six building blocks necessary for a functioning health system. The evidence generated was used to explore gaps and constraints in service delivery, health workforce, information, medical supplies and infrastructure, financing, leadership and governance. Quantitative and qualitative data were collected at multiple levels of the health system in each country. Hospitals and health facilities providing EmOC were included.

#### **Results:**

Between one-quarter and one-third of staff surveyed had seriously thought about leaving their current positions (Malawi 33%, Mozambique 29%, and Tanzania 27%). A substantial portion of job satisfaction levels could be explained by providers' perceptions of adequate supervision, support from management, adequate pay for work done, and opportunities for career advancement. Supervision was a strong predictor of job satisfaction, and its absence directly affected stated intention to leave. Management and supervisory support appear to outweigh concerns relating to pay threefold in their contribution to job satisfaction levels.

#### Discussion/conclusions/ implications:

- 1. Support initiatives to strengthen human resource management practices, including supportive supervision
- 2. Develop clear career pathways for NPCs, particularly in Malawi
- 3. Develop professional representation mechanisms to ensure a voice for MLPs

# Towards the Improvement of the Loss of Pharmacy Technicians from the Public Health System in Thailand

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**Author Affiliations:** <sup>1</sup>Department of Pharmaceutical Technology, Sirindhorn College of Public Health Suphanburi, Thailand, <sup>2</sup>: Faculty of Public Health, Naresuan University, Phitsanuloke, Thailand, <sup>3</sup>Department of Pharmaceutical Technology, Sirindhorn College of Public Health Phitsaniloke, Thailand, <sup>4</sup>Department of Pharmaceutical Technology, Sirindhorn College of Public Health Chonburi, Thailand

**Option 2** - Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Poster

#### Introduction:

The study aimed at exploring the background of the advanced vocational curriculum management for pharmacy technicians (PTs) among nine institutions under the Ministry of Public Health (MOPH)'s supervision. In addition, this study also focused on situations of PTs' loss and gain in public hospitals and measured the level of routine job satisfaction among PTs.

#### Method:

A semi-structured interview was applied to 20 stakeholders for the background of the curriculum. PTs' loss and gain data were retrospectively collected from public hospitals between 2008 and 2010, while job satisfaction was measured using a self-administered questionnaire with PTs.

#### **Results:**

Numbers of PTs remaining in the MOPH's health system in 2008, 2009 and 2010 were +203, +124 and +230, respectively. The plus numbers denoted that the gain of PTs to the MOPH's health system was more than the loss. The gain was principally caused by the acceptance of newly graduated PTs to work as novice civil servants (57.3%), while the loss mainly included resignation (40.6%) and transferring to other jobs (10.4%). For the preference of routine jobs, PTs described that medicines preparation (45.5%) and stock management (32.6%) were their most preferred jobs in a pharmacy department, while consumer protection (1.6%) and clinical pharmacy (0.2%) were amongst the least favourable jobs. PTs were also satisfied with stock management, Thai traditional medicines and medicines production, with satisfaction mean scores at 3.7, 3.2 and 3.0 from 5, respectively.

#### **Conclusion:**

Findings suggested that almost all PTs graduated from SCPHs remained in the MOPH's health system. Qualitative data also reported that PT's curriculum management below a bachelor degree, the limitation of growth in career paths and the overlapped job description with a pharmacist could affect PTs' motivations to work and thus influenced the loss of PTs from the Thai health system in the future.

# Who is doing what? Performance of the Emergency Obstetric Signal Functions by Non-Physician Clinicians and Nurse-Midwives in Malawi, Mozambique, and Tanzania

Authors: The following 5 HSSE Team

Averting Maternal Death and Disability Program (AMDD), Heilbrunn Department of Population and Family Health, Mailman School of Public Health, Columbia University, USA; Ifakara Health Institute, Mikocheni, Dar Es Salaam, Tanzania; University of Malawi, College of Medicine, Centre for Reproductive Health, Malawi; Centre for Global Health, University of Dublin, Trinity College; Department of Community Health, Faculty of Medicine, Eduardo Mondlane University, Mozambique

**Option 1 -** Scientific / Empirical Research Findings **Presented as –** Oral Presentation

#### Aims:

The Health System Strengthening for Equity: The Power and Potential of Mid- Level Providers (HSSE) project sought to document the current use of nurses, nurse-midwives and NPCs in delivering EmOC in Malawi, Mozambique, and Tanzania.

One of the main aims of the project was to explore actual performance of EmOC and other related maternal and newborn health services by health workers who provided at least one of the EmOC signal functions in the previous three months preceding data collection in hospitals and health centres throughout Malawi, Mozambique, and Tanzania.

#### Methods:

A total of 2,065 health care providers from 286 facilities were surveyed in the three countries. Nurses, nurse-midwives, and NPCs comprised 75% of respondents (N=1,552).

#### **Results:**

EmOC signal functions are being performed by a wide range of skilled health care providers in the three study countries

Over 75% of the nurses and nurse-midwives in the three study countries are providing four of the basic EmOC signal functions: administering parenteral antibiotics, uterotonics and anticonvulsants, as well as neonatal resuscitation.

Performance of all the comprehensive EmOC signal functions by NPCs was mixed.

#### Discussion/conclusions/ implications:

This study found that a range of skilled MLPs are providing life-saving EmOC signal functions in Malawi, Mozambique, and Tanzania, with nurses and nurse-midwives providing most of the basic EmOC signal functions and NPCs (and high level nurses in Mozambique) providing comprehensive EmOC. These MLPs and NPCs are providing care at different levels of the health care system, which often influences what EmOC services can and are provided to women in need. Given the paucity of doctors in these countries, our data reinforce the crucial role and use of MLPs as an innovative solution to addressing the human resource crisis in these countries.

# A Model for Motivation of Community Health Workers

Authors: Weiss J.<sup>1</sup>, Morrow M.<sup>2</sup>, Luz R.<sup>1</sup>, Tamming R.<sup>1</sup>

Author Affiliations: <sup>1</sup>Concern Worldwide US, Rwanda, and Ireland, <sup>2</sup>World Relief, Baltimore MD

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation

#### Issues:

The Rwanda Ministry of Health (MOH) has established a robust Community Health Structure, which includes four community health workers (CHWs) per village; These CHWs belong to a larger cooperative of 150-300 CHWs that meet on a quarterly basis at the cell (health facility) level and are managed and supervised from the health facility. Due to the large numbers of CHWs per cell, there are many limitations around CHW supervision that affects their motivation. This project sought to address this limitation.

#### **Description:**

We formed CHWs into 15-20 member peer support groups based on the Care Group model, and trained the groups to conduct community mobilization and behaviour change communication at the household level. Each CHW peer support group met on at least a monthly basis, and was led by the CHW Cell Coordinator. A total of 660 CHW peer support groups were formed in the six target districts, consisting of 13,166 CHWs. Through these efforts an average of 163,000 households were visited on a quarterly basis with key prevention messages, which dramatically increased household healthy practices.

#### **Lessons learned:**

CHW peer support groups were an effective mechanism to integrate health care delivery and health promotion activities at the village level. Rwanda MOH stakeholders viewed the model as a viable CHW peer supervision and support model aligned with MOH existing structures and policies. CHWs found the model to be a motivating factor in their work. Compared to CHWs working independently, CHWs working as a group provided greater peer support, developed a stronger commitment to implementing health activities, and found more creative solutions to problems.

#### Next steps:

The August 2011 end of project evaluation raised some questions about the sustainability of this peer support model and recommended testing and institutionalizing systematic peer support and supervision as a means of increasing motivation.

# Task Sharing: The Human Resource Cost of HIV Scale-up in Zambia

Authors: Walsh A.<sup>1</sup>, Simbaya J.<sup>3</sup>, Dicker P.<sup>1</sup>, Brugha R.<sup>1, 2</sup>

**Author Affiliations:** <sup>1</sup>Royal College of Surgeons in Ireland, <sup>2</sup>London School of Hygiene and Tropical Medicine, <sup>3</sup>Institute of Economic and Social Research, University of Zambia

Option 1 – Scientific / Empirical Research Findings

Presented as – Poster

#### Aims:

The benefits of task shifting as a strategy to compensate for health worker shortages, has been widely promoted. This study uses trends in HIV and non-HIV service workloads in Zambia to illustrate 'task sharing', where staff take on additional clinical responsibilities.

#### Methods:

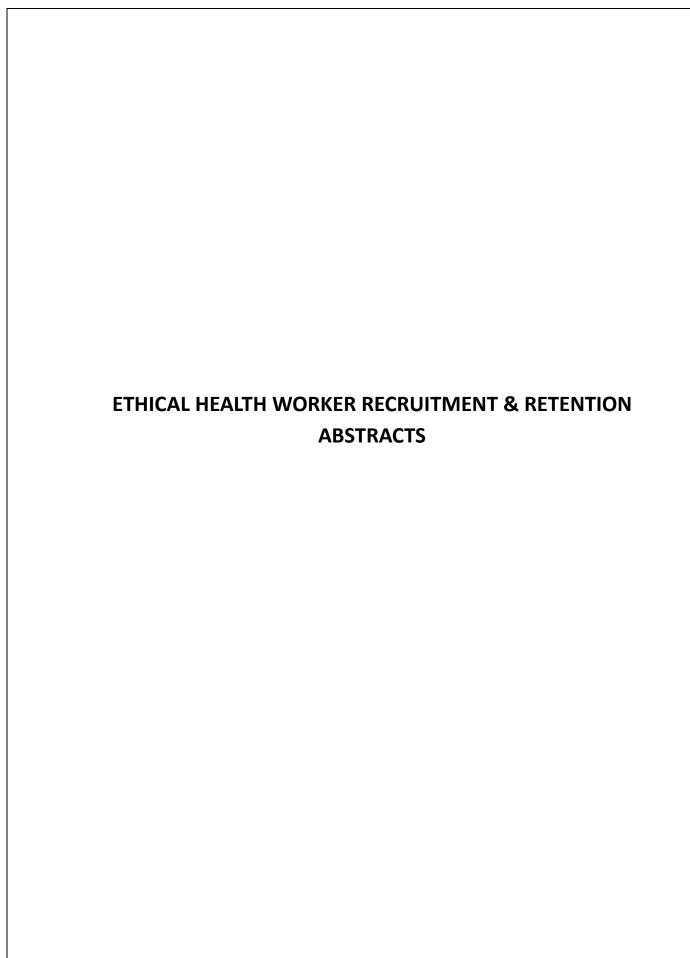
All health clinics and hospitals in two urban and one rural district were surveyed (n=41). Facility records were reviewed and analysed in 2009, quantifying HIV and non-HIV service episodes and patient attendances between 2005 and 2007.

#### **Results:**

- Staff densities were much lower than the recommended WHO minimum workforce density needed to provide essential health services.
- The ratios of antenatal care and family planning registrants to nurses/midwives were highest at baseline and increased in rural facilities.
- HIV workload, as measured by numbers of clients receiving antiretroviral treatment (ART) and prevention of mother to child transmission (PMTCT) per facility staff member, was highest in the capital city, but increased rapidly in all three districts.
- By 2007, staff designated as ART and PMTCT workers made up a higher proportion of frontline service providers than they had in 2005, while numbers of staff at the health facilities were unchanged.

### Discussion/conclusions/ implications:

Over time, as standardised protocols and guidelines were introduced, increasing ratios of total clinical staff numbers to those delivering ART and PMTCT can be attributed to HIV and AIDS services being increasingly mainstreamed into normal facility staff workloads. This was a positive development from the perspective of availability of services and the institutionalisation of HIV and AIDS control at facility level. However, achievements in scaling-up HIV/AIDS services were on the back of sustained non-HIV workload levels, increasing HIV workload and stagnant health worker numbers. Task sharing rather than task shifting is occurring in Zambia, where staff take on additional tasks without losing their existing responsibilities.



# The Dynamics of Temporary Doctor Migration: The Experience of South African Doctors Working in Ireland

**Authors:** Bidwell P., Thomas S.

Author affiliations: Health Policy & Management, Trinity College Dublin

Option 1 - Scientific / Empirical Research Findings
Presented as - Oral Poster

#### Aims:

The consequences of doctor migration on health systems has become of increasing concern worldwide. Policy makers have largely tended to perceive doctor migration as a problem and therefore have tried to control it. Yet the more important issues are of managing migration to mitigate the negative impact to the source country, while also boosting supply in the recipient country. The aim of this study is to explore the different phenomena and circumstances under which temporary and permanent doctor migration to Ireland occurs.

#### Methods:

South African doctors working in Ireland form a natural case study whereby it is possible to explore the dynamics of temporary movement and contrast this with permanent migration. Quantitative and qualitative methods were used including survey and interviews.

#### **Results:**

129 temporary migrants completed a postal questionnaire (RR 29.9%). 55 permanent migrants completed the postal questionnaire (RR 29.6%) and a total of 28 in-depth interviews were done. Preliminary analysis shows that of the temporary migrants 27.2% had visited Ireland 1-2 times and 29.6% had visited 3 or more times. The main incentive for temporary migrants choosing Ireland was salary. The in-depth interviews further revealed that temporary migrants enjoy the 'overseas experience' and they all cited ease of registration in Ireland. Length of time spent in the destination country is also important, with temporary migrants preferring to spend short periods (approximately 3 weeks away).

#### Discussion/conclusions/ implications:

The primary motivation for moving differs for temporary and permanent migrants. Temporary migrants are more motivated by economic gain and are less affected by push factors from within their own country. Permanent migrants are more motivated by personal safety and are more affected by push factors from within their own country. The outputs of this research will strengthen the knowledge base of medical migration and will allow for evidence based policies to be developed on ethical recruitment and workforce planning.

# WHO Global Code of Practice on the International Recruitment of Health Personnel – Implications for Ireland

Authors: Brugha R.

Author affiliations: Royal College of Surgeons in Ireland

**Option 2** - lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** - Oral Presentation

#### **Background:**

Over half of the doctors from 11 of the poorest Caribbean and African countries are practicing in OECD (high income) countries. 75% of doctors and 79% of nurses practicing in the Gulf Cooperation Council countries of the Middle East are expatriates. In 2008, Ireland – at 47% - had twice the proportion of registered foreign trained nurses to the OECD country ranked second, and by 2011 may also rank first for foreign-trained doctors.

#### **Global Code development:**

The Global Code was drafted and negotiated by WHO, 2007-10, supported by the Global Policy Advisory Council (on which the author served). The World Health Assembly adopted the Code in 2010. It is a voluntary instrument that articulates global ethical norms — principles and practices — around the international recruitment and migration of health workers. While non-binding, it includes strong reporting and compliance mechanisms

#### **Issues facing Ireland:**

Its requirements on WHO member countries, which have short and medium term implications for Ireland, include: ethical international recruitment; health workforce development and health systems sustainability; fair treatment of migrant health personnel; international cooperation and support to developing countries; and data gathering and Information exchange.

Ireland, because of its disproportionate reliance on passively and actively recruited non-EU trained nurses and doctors, has ethical responsibilities both to its foreign health workers and their countries. In the long-run, it will be Ireland's success or not in developing and retaining its domestic health workforce that will determine its compliance.

#### Next steps:

Ireland's imminent Global Code compliance responsibilities are manageable, with the support of Irish Global Health researchers working in partnership with the Department of Health, Irish Medical Council, Irish Nursing Board and the HSE. These are to monitor and report – to the WHO Secretariat in 2012 and World Health Assembly in 2013 – trends in registered doctors and nurses by country of qualification.

# Trends, 2000-2010, in Country of Qualification of Doctors Registered in Ireland\*

\* Acknowledgement: Irish Medical Council

Authors: Brugha R.<sup>1</sup>, Bidwell P.<sup>2</sup>, Dicker P.<sup>1</sup>, Humphries N.<sup>1</sup>, Thomas S.<sup>2</sup>, Normand C.<sup>2</sup>

**Author Affiliations:** <sup>1</sup>Royal College of Surgeons in Ireland, <sup>2</sup>Trinity College Dublin

**Option 1 -** Scientific / Empirical Research Findings **Presented as -** Oral Presentation

#### Aims:

The Doctor Migration Project aims to provide a better understanding of the scale of Ireland's reliance on non-EU doctors. It will report on their experiences of working in Ireland and future plans.

#### Methods:

The Irish Medical Council (IMC) supplied the research team with a spread-sheet containing the numbers and non-personal information on doctors on its Register, 2000-2010. Data included medical school where qualified, but not nationality. A Biostatistician (PD) created a database, searchable by a unique identifier, and calculated entrants and exits from the register.

#### **Results:**

The proportion of non-Irish medical graduates rose from 13.4% of all registered doctors in 2000 to 33.4% by 2010. The largest increase was in non-EU graduates, rising from 972 (7.4%) in 2000 to 4,740 (25.3%) of registered doctors in 2010. The biggest source country in 2000 was Pakistan, followed by India, Egypt and Sudan. By 2010, South African trained doctors had overtaken Pakistan, followed by India, Nigeria and Sudan. The number of doctors trained in the EU but outside Ireland doubled from 780 (2000) to 1,521 (2010), mainly due to an increase from Eastern European countries.

#### Discussion/conclusions/ implications:

Following the 2011 overseas doctor recruitment drive, Ireland may have moved from second to first among OECD countries in the proportion of its doctors trained overseas. In 2008, its proportion of foreign trained nurses was double the country ranked second. Registration data may over-estimate the numbers actively working as health workers in Ireland. However, they (i) illustrate Ireland's rapidly increasing and potentially unsustainable reliance on foreign-trained health workers to staff its health services; and (ii) are the only currently available measure for reporting on Ireland's commitment to implementing the Global Code on the International Recruitment of Health Personnel, which Ireland must do at the World Health Assembly, May 2012.

# Nurse Migration and Health Workforce Planning in the Irish Context

Authors: Humphries N., Brugha R., McGee H.

Author Affiliations: Royal College of Surgeons in Ireland

Option 1 - Scientific / Empirical Research Findings
Presented as - Oral Presentation

#### Aims:

Ireland began actively recruiting nurses internationally in 2000 and is now the OECD country most heavily reliant upon international nurse recruitment. This paper reflects on a decade of international nurse recruitment in the Irish context.

#### Methods:

The paper analyses secondary data from An Board Altranais and the Department of Jobs, Enterprise & Innovation. It also draws on a 2009 survey of non-EU migrant nurses (N=337) working in Ireland and interviews with key stakeholders (N=12) in 2009/2010.

#### **Results:**

- Non-EU migrant nurses accounted for 35% (N=14,546) of newly registered nurses 2000-2010 with 11,481 non-EU migrant nurses obtaining visas 2000-2009.
- The numbers recruited internationally almost matched the numbers trained locally 2000 -2010 14,546 non-EU and EU nurses joined the Irish nursing workforce alongside 17,264 Irish-trained nurses.
- A fresh challenge for nurse workforce planning is the slowing of immigration and a possible increase in emigration by non-EU nurses. Between 2008 and 2010, verification requests were processed on behalf of 4202 non-EU migrant nurses, equating to 29% of those recruited since 2000.
- Our 2009 survey of non-EU migrant nurses asked about future plans; 19% (65) of respondents intended to stay in Ireland, 49% (166) intended to return home and 23% (79) planned to migrate another country.

#### Discussion/conclusions/ implications:

International nurse recruitment became a major contributor to the nursing workforce by default - 'I believe the State doesn't really know . . . before they hire us they don't have a plan or policy in place' (Migrant Nurse Survey 260). Successful international nurse recruitment campaigns obviated the need for health workforce planning in the short-term, but did not solve the nursing shortage. The current assumption that nurse migration (emigration and immigration) will always work for Ireland over-plays the reliability of international recruitment as a health workforce planning tool.

# Migration of Sudanese Doctors to Ireland: Push and Pull Factors

Authors: Ibrahim N., Bidwell P.

Author Affiliations: Centre for Global Health, Trinity College Dublin

Option 1 - Scientific / Empirical Research Findings

Presented as - Poster

#### Aims:

The aim of this research was to investigate about the migration of the Sudanese doctors to work in Ireland: what are the factors that contribute to their decisions to leave Sudan and come to work in Ireland, their perception about working in Ireland and What is their future plan; whether if they are returning back to Sudan to work as doctors.

#### Methods:

Cross-sectional quantitative research using on-line survey: *SurveyMonkey.com*. A sample of 120 Sudanese doctors completed the survey. Emails had been collected from doctors using Sudanese Society in Ireland and snowballing approach to recruit more doctors by sending more emails from colleagues wishing to participate in the study, which create a pool of about 345 emails.

#### **Results:**

- Response rate 43.7 %
- The main challenge which faces Sudanese doctors in Sudan is lack of training
- Most of the participants in this research were from specific regions in Sudan and acquired their medical degree mainly from two out of 30 medical colleges in Sudan
- Career development and training opportunities appeared to be the main incentives for working in Ireland.
   However their feeling of discrimination from their colleagues and patients, and having unequal training opportunities was significant
- Most of them are planning to go and work mainly in Khartoum

#### Discussion/conclusions/implications:

- Ireland: More understanding of the work environment of the Irish hospitals and the reasons behind Sudanese doctors as an example of foreign doctors feeling of discrimination is needed as the overseas doctors are an essential part in Irish health services.
- Sudan: Addressing the issues of doctors training is very important to retain Sudanese doctors in Sudan. More research is needed about the migration of doctors from all the medical colleges what the differences in their migration pattern if any.
- More research and collaboration between Sudan and Ireland is needed for finding different ways to change Sudanese negative brain drain to positive brain exchange. The government of Sudan need to reduce the pushing factors for Sudanese doctors to retain their human resources to meet Sudan's health care needs.

# An Exploration of the Hospital and Ward Factors Associated with High Levels of Overseas-Trained Nurses in General Hospitals in Ireland: Using Irish RN4CAST Study Results

**Authors:** Matthews A., Scott PA., Lehwaldt D., Kirwan M., Morris R., Staines A.

Author Affiliations: School of Nursing & Human Sciences, Dublin City University

**Option 1 -** Scientific / Empirical Research Findings **Presented as -** Oral Presentation

#### Aims:

To explore hospital factors that account for the variation in rates of non-EU qualified nurses in general hospitals in Ireland. Working hypotheses were that: large, teaching, urban hospitals would have higher levels of non-EU qualified nurses, given their higher turnover rates; hospitals with more negative work environments would have higher levels of non-EU qualified nurses as they would have relied more heavily on active overseas recruitment.

#### Methods:

Secondary analysis of data gathered during the FP7 RN4CAST project, was carried out. Data were collected in 30 acute general hospitals in Ireland in 2009/10, focusing on 112 medical and surgical wards. Nurses (n=1,406) completed a survey about their working environment and their own characteristics. An organisational profile was completed for all hospitals.

#### **Results:**

Organisational data on nurses with non-EU qualifications were only provided for 12 of the 30 hospitals and showed that up to half of the nurses employed in some large teaching hospitals have non-EU qualifications. However no characteristics such as size, voluntary/HSE status, geographical region were clearly associated with higher levels of non-EU qualified nurses. Also, hospital level nurse-reported factors such as high burnout level and a negative practice environment were not associated with higher hospital levels of non-EU qualified nurses.

### **Discussion/conclusions/implications:**

The data gathered in 2009/10 do not tell the story of the trends across time of overseas trained nurses who were actively recruited and subsequently left the hospital before data collection. Therefore it is plausible to suggest that hospitals with better work environments have retained non-EU qualified nurses to a greater extent. Retaining nurses who were actively recruited to Ireland is even more important in the current health service context. There was limited organisational-level data available for many hospitals, though this was supplemented by nurse-reported survey data on place of qualification for this analysis.

# Reflexive Governance – Putting the 'Public' Back into Public Health and Health Rights for Health Professionals and Patients

Authors: Su-ming Khoo

Author Affiliations: School of Political Science and Sociology, National University of Ireland, Galway

**Option 2** - lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** – Poster

#### Issues:

What theories of governance inform our understanding of the public roles of health professionals and patients in the 'liquid' global context of complex, mixed health systems undergoing reforms?

#### **Description:**

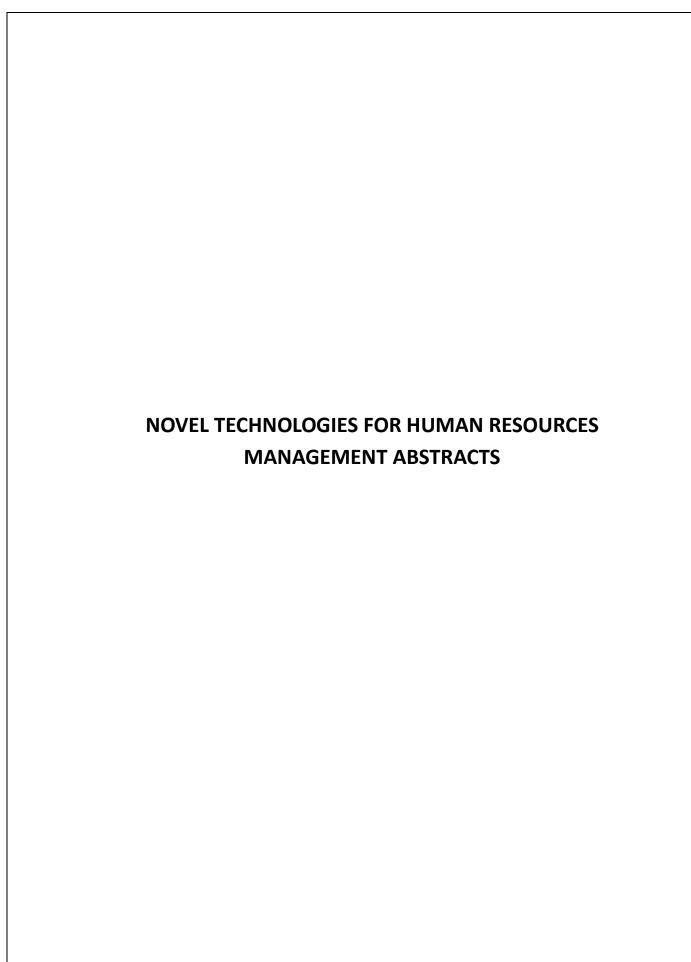
Theories of nodal and reflexive governance can help to explain the formation of global public health goods and claims for health rights. Nodal governance explains consumer claims for public health through networked activism (Khoo 2011). However, health consumerism is ambivalent about individual consumer privileges versus basic and collective health needs, especially when the context transforms from lower income to higher income conditions. Reflexive governance (Kaul 2009) is a theory that aligns with rights-based approaches to ground the governance of public health in 'liquid times' (Bauman 2007). This combination may provide more coherent and conceptually robust grounds for integrating governance strategies based upon substantive rights and democratic procedures.

#### Lessons learned/ Main arguments advanced:

The paper argues that the current debates on global health governance rely on thin conceptions of the patient, the health professional, and public policymaking. The rights approach provides alternative normative and procedural criteria for assessing governance. It suggests that the prevailing technocratic version of health governance should be supplemented by principle of participation in relation to accountability, transparency, fairness and justice. This requires the practice of critical reflexivity as well as normative identification on the parts of both health workers and users of health services. Active and reflexive agency implies a shift in perspective to view health as a sphere where democracy and public health intertwine as public goods.

#### **Next steps:**

The paper makes the case for a thicker and more concrete approach to public health and health rights, that has at its centre information and education geared towards the substantive development of health professionals' and patients' subjectivity and agency as rights-holders and duty-bearers



# 'From Dream to Reality' the National HRH observatory- Sudan Success story

Authors: Ayat Abuagla, Amel Abdalla, Nour Yousif, Abeer Yahia, Fayrouz Abdalla Elsheikh Badr

Author Affiliations: The National Human Resources for Health Observatory-Sudan, HRD, FMOH, Sudan

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation

#### Issues:

Human resources for health (HRH) are critical for health systems and health care. However, lack of evidence is hampering HRH development in several countries. Health workforce observatories have been introduced to address evidence and multi-stakeholder coordination for HRH. The Sudan National HRH Observatory (NHRHO) was established in 2006 as part of a regional initiative.

### **Description:**

NHRHO establishment was based on ownership and participation of over 15 HRH stakeholders in the country. The observatory's underpinning philosophy is that health workforce is the most valuable asset for the health system; hence it should be highly prioritized. The observatory visions to figure out as a comprehensive, sustainable and dynamic human resource information system (HRIS) and policy forum serving the development of health system and improvement of population health in Sudan and beyond. NHRHO missions to continuously generate and provide evidence and convene stakeholders to inform and support policy and decision-making in HRH. The goal of the observatory is to monitor trends in patterns of the health workforce to generate reliable and instant data, information and evidence needed for human resource development.

#### **Lessons learned:**

During its short existence, NHRHO has demonstrated a model in initiating, leading and facilitating HRH reforms for health system strengthening. NHRHO established a vivid stakeholder forum meeting regularly to discuss HRH issues. It also developed a comprehensive data-base on national health workforce based on two national surveys. The observatory created a web-based data system for easy access to health workforce data and information for policy and decision-makers, various stakeholders and researchers. Through conducting a nationwide exercise HRH research priorities and agenda for Sudan were identified, explored and now being researched. Recently, NHRHO spearheaded the production of a comprehensive HRH strategic plan for Sudan, the first of its kind.

#### **Next steps:**

Prospects for NHRHO work involve consolidating and sustaining stakeholder forum, extending electronic databases to decentralised levels, scaling up advocacy and addressing capacity gaps for HRH development and fostering invocative solutions to health workforce issues.

# Mobile Phones as an Effective Way of Delivering Health Messages and Promoting Health Education in the Communities and Workplace: Experiences from Uganda

Authors: Hoefman B., Loggers JW.

#### **Author Affiliations:**

**Option 2** - Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as** – Oral Presentation (unable to attend)

#### Introduction:

Available data from the Sub-Saharan Africa indicates an average of one doctor for every 20,000 people. The same region is also known to have high prevalence of tropical diseases, limited accessibility to healthcare and limited knowledge of disease-preventative mechanisms. In this case study, we present avenues where the use of mobile phone technologies may present an opportunity to deliver preventative and treatment healthcare information among communities and at workplaces within resource-low economies.

#### Methods:

This was designed as a series of SMS-based quizzes conducted by Text to Change among 12,494 Ugandan mobile phone users. The first quiz was conducted between 28 January and 6 April 2009 among an intended 10,000 community-based participants in Northwest Uganda, whereas the second quiz was conducted between 13 August and 30 September 2009 among 2,494 factory workers at the Southeast Ugandan district. Participants were enrolled into both quizzes through public media and initial contact SMS. Eighteen incentive-based SMS health message questions were sent to the participants' mobile phones with directions on how to respond.

#### Results:

Participation rates were defined as the number of participants who responded to any of the quizzes questions after the initial SMS-contact. Overall participation rate to the two quizzes was 52%, and this was higher among the workplace-based factory workers compared to the community-based participants. Participants showed a general awareness of HIV prevention – the accuracy level to all eighteen questions sent out was 89%, which was above what we would expect if all correct responses were answered by sheer guessing. In these surveys, literacy was not deemed as a major hindrance to health message dissemination, since all sent and received SMS were in English.

#### Conclusions:

Mobile telephone SMS may provide an effective complementary platform to the existing informative and preventative healthcare activities among community-based and workplace-based populations residing in resource-low settings.

# Toll Free Mobile Communication: Overcoming Barriers in Maternal and Neonatal Emergencies in Rural Bangladesh

Authors: Huq NL., Azmi AJ., Quaiyum MA., Hossain S.

Author Affiliations: International Centre for Diarrheal Disease Research, Bangladesh (ICDDR, B)

**Option 1** - Scientific / Empirical Research Findings **Presented as** – Oral Presentation (unable to present)

#### Aims:

Integration of innovative technology in health infrastructure would overcome the lack of universal access to maternal health services. A toll free mobile telephone intervention tested in one sub district of Bangladesh and prior to initiation and at project end qualitative assessments were conducted to understand the utility of mobile phone in increasing communication for maternal and neonatal complications.

#### Methods:

In-depth interviews were conducted among twelve CSBAs and fourteen mothers along with their husbands prior to intervention. At project end, six CSBAs were purposively selected for in-depth interview and a semi structured interview was conducted among all 27 CSBAs. One FGD was conducted with 10 recently delivered mothers. Thematic analysis and triangulation of responses from different respondents were conducted.

#### **Results:**

Prior to intervention, CSBAs reported that mobile communication was not a norm, also there was poor accessibility to mobile services mostly among poor women. Additionally, who communicated through mobile with providers noted irritability from provider's side and sometimes found switched off of phone. At project end, 85% mothers who attended the orientation sessions communicated CSBAs through mobile phone for maternal health problems. Once a complication is reported or anticipated over phone communication, CSBA either made a prompt visit to mothers or direct referrals were advised. More than 80% CSBAs communicated with Solution Linked Group (SLG, SLG included specialized doctors), while in past SLG was not used to receive phone call from CSBA. At project end, CSBAs are making decisions on pregnancy-related matters in consultation with SLG over phone. CSBAs are valued, as mothers thought that CSBAs are becoming confident in managing complication due to communication with SLG.

### Discussion/conclusions/ implications:

Active participation of service providers along with mothers' accessibility is making mobile communication initiative successful. Direct and prompt referral reduced delay in management and enhance in receiving proper treatment rapidly.

# Geography, Dependency and Hidden Labour in National Health Management Information Systems (HMIS)

Authors: Jolliffe B., Staring K.

**Author Affiliations:** University of Oslo

Option 2 - lessons from the field; project and programme evaluations; and syntheses or analyses

Presented as – Oral Presentation

#### Issues:

When realizing HMIS as computer hardware, software, communication infrastructure and operational personnel, it is hard to avoid falling into vendor entrapments and other, often-hidden, dependencies. Implementations of complex ICT architectures have a politics, a sociology and a geography which changes in response to new trends, innovations, opportunities and challenges. For example, "Cloud computing" has (like open source, open standards before it) been offered as holding keys to mitigating some of the risks of strengthening national HMIS in developing countries.

#### **Description:**

We consider implementation of a national HMIS in four different African national settings, two in a "production" stage and the other two at advanced stages of rollout. Each has taken different approaches to the geographic architecture of the system. The first is implemented in a distributed manner, with semi-autonomous systems operating at the district level and interoperating with a system at national level. The other three have taken advantage of mobile internet connectivity to offer a single centralized system at the national level, accessible to facilities and districts via the web. But they have each chosen different geo-locations of the servers (and hence data): (i) Internally in the ministry of health, (ii) within a local national internet service provider data centre and (iii) using a "cloud computing" provider. Each is receiving technical support from the University of Oslo. All are struggling with a skills deficit for operating the system.

#### **Lessons learned:**

Choices about geo-location and centralization of HMIS bring particular risks and requirements regarding the location and the nature of skills required to sustain the system. Further, location of data outside of MOH exposes an urgent (and existing) need to develop policy regarding access to data. Resolution of these two can be understood in terms of the dependencies created.

# Human Resource for Health (HRH) Database Linkage and Harmonisation in Uganda

Authors: Maniple BE., Biesma R., Byrne E., Brugha R.

Author Affiliations: Dept. of Epidemiology and Public Health Medicine, Royal College of Surgeons in Ireland

**Option 1** - Scientific / Empirical Research Findings **Presented as** – Oral Presentation

#### Background:

Planning for human resources for health (HRH) requires good knowledge of their distribution and skill mix. Lack of a comprehensive national and reliable HRH database in Uganda limits the knowledge on HRH gaps.

#### Aims:

To determine the geographical and skill mix distribution of qualified health workers in Uganda; identify the current efforts to improve the quality of available information on staff distribution; determine the level of integration of existing data on staff distribution; and identify the successes and challenges of producing high quality information on staff distribution.

#### Methods:

Interviews of database managers and review of documents and HRH databases

#### **Results:**

Health system sub-components are not obliged to report HRH data to a common database. There are four parallel HRH databases, with no common format, linkage or sharing of data. Data are rarely audited and of poor quality. Only 56% of approved government posts have qualified staff compared to 35% in faith-based units. Median staffing with qualified staff is 55% in the central, urbanised region and 42% in the rural western region, and 36% in the lowest level facilities compared to 88% in national hospitals.

Key achievements include the establishment of a Human Resource Information System (HRIS) at the MOH, and web-based and centralised HMIS in faith-based bureaus. Challenges include lack of a policy on comprehensive national HRH databases, high staff turnover and lack of IT infrastructure and technical capacity at lower levels.

#### Discussion:

Lack of a policy on national electronic databases limits the willingness to invest in the development of a comprehensive high quality national HRH database. However, the existence of centralised electronic HRH databases in the four main sub-systems is an opportunity that can be exploited to establish a comprehensive national database. We recommend joint investment, harmonisation of formats and linkage of databases in the four sub-systems.

# **D-tree Decision Support to Community Health Workers**

Authors: Mitchell, M

Author Affiliations: D-tree International, Lecturer, Harvard School of Public Health, USA

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation

#### Issues:

Task shifting implies that health workers with limited training are able to assume responsibility for more complex care. In order for this to be successful, the training must be linked to an integrated support system that includes detailed specification of tasks required, real time monitoring and supervision, job aids to support point-of service (POS) care, and functioning referral networks. This talk presents both a conceptual model of this end to end support system and specific examples of how it works in practice.

#### Description:

D-tree International has developed mobile phone based decision support tools for use by Community Health Workers (CHW) that provide support for the diagnosis, treatment, and referral of patients in a wide variety of clinical areas including antenatal care, labour and delivery, neonatal care, child health (IMCI), nutrition, family planning and HIV supportive care. At the core of these systems are clinical algorithms that take the CHW step-by-step from client assessment (what is wrong) to a presumptive diagnosis based on the assessment to a specific treatment (with drug and dosage specified) and counselling or referral. Integral to the system is the patient record that provides real time data to supervisors and program managers about what is being done by the CHW when he or she is seeing a client.

#### **Lessons learned:**

We have learned that this end to end system is both feasible and leads to improved quality of care by clinic based and CHWs in low income environments.

### Next steps:

Development of a classroom and remote training program that is tightly coupled to decision support, information and supervisory systems. This will require detailed task analysis for CHW in a variety of programs and innovative approaches to training.

# Novel Approach for North-South Partnerships for Training & Capacity-Building Utilizing an Electronic Health Library (E-HL)

Authors: Shadad A.1, Elmusharaf K.1,2

**Author Affiliations:** <sup>1</sup>Department of Medicine, National University of Ireland Galway, <sup>2</sup>Reproductive & Child Health Research Unit at University of Medical Sciences & Technology (Sudan)

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Presentation

#### Issues

This abstract presents a novel approach for North-South partnerships in human resources for health capacity building through development of an E-HL. The northern partner in this model is Sudanese expatriate health professionals in UK and Ireland.

#### **Description:**

The partnership was initiated by the Sudan Medical Association UK and Ireland (SMA UK&I) and involves the Federal Ministry of Health, Sudan Medical Specialization Board, Academy of Health Sciences, the Public Health Institute, two Teaching Hospitals and Three Public Universities in Sudan.

The product of this partnership is an E-HL which provides free access to educational, training resources in different healthcare disciplines, acts as an interface for knowledge and experience exchange and a platform for distant learning and continuous health education. SMA UK&I pays subscriptions. This project was started in October 2011 and now in the phase of initiation and implementation.

#### **Lessons learned:**

The development of this partnership relied solely on personal communications of SMA UK&I members with their previous workmates and classmates in different institutions in Sudan. This helped to identify the potential stakeholders, funders and prioritise the educational resources and the target user groups.

#### **Challenges:**

The main technical challenge that faced the project and limited its expansion to most universities in Sudan was the lack of intranet infrastructure to securely access the E-HL.

The project was unable to purchase many educational and training resources of American origin due to the United States government sanctions on the Sudanese government.

#### **Recommendation:**

A customised leaning management system could be an effective tool for human resource capacity building in low resource countries.

Experience and knowledge transfer between North and South can be enhanced by improving IT literacy and infrastructure in Southern educational institutions.

Expatriates professionals in the North have great potential to establish partnerships between North and South.

# **Supporting & Strengthening MNCH Services Using Mobile Phones: a Research Protocol**

Authors: Vallières F.<sup>1</sup>, McAuliffe E.<sup>2</sup>, Conteh M.<sup>3</sup>, Walker P.<sup>4</sup>

Author Affiliations: INDIGO<sup>1</sup>, Centre for Global Health TCD<sup>1, 2</sup>, World Vision Ireland<sup>3</sup>, World Vision UK<sup>4</sup>

**Option 2 -** Lessons from the field; project and programme evaluations; and syntheses or analyses **Presented as –** Oral Poster

#### Issues:

The availability of mobile phones in low-income countries has the potential to increase health service delivery; strengthen health information systems; improve data collection and monitoring; and provide support for health workers. There is a dearth of evidence demonstrating the impact of mobile phone applications on CHW motivation, supervision, attrition rates, as well as maternal and child health referral rates.

#### **Description:**

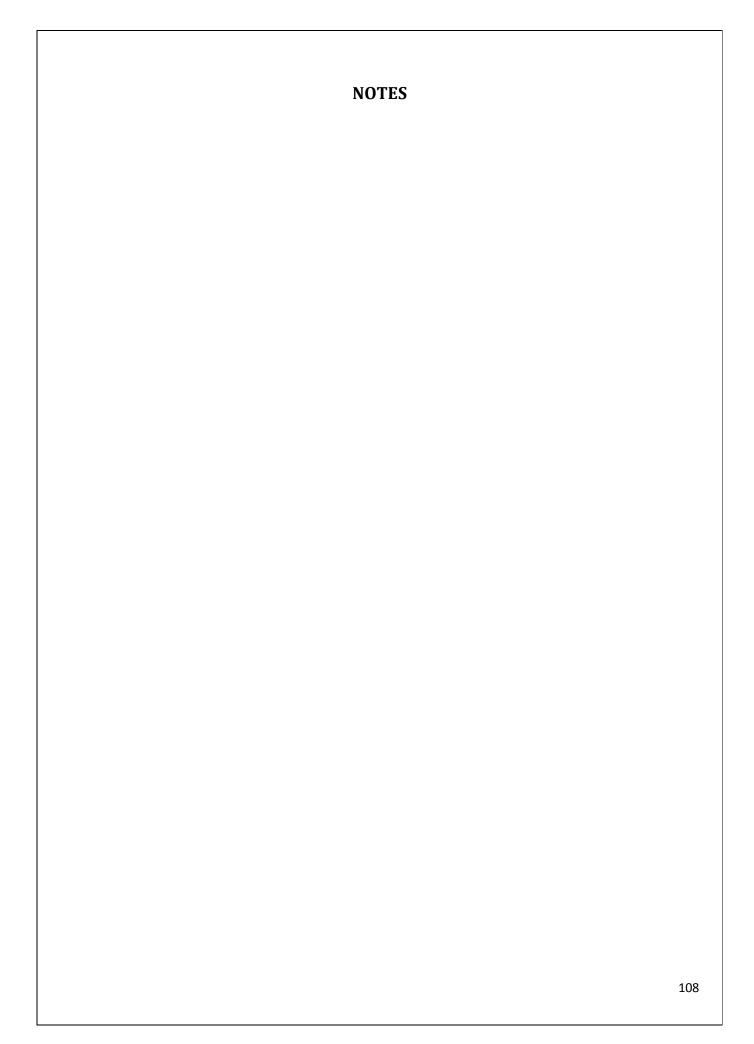
The Centre for Global Health is partnering with World Vision Ireland and UK to improve maternal, newborn and child health (MNCH) in Sierra Leone. 246 community health workers (CHWs) will be trained in the delivery of the 7-11 timed and targeted counselling strategy. 7-11 is an evidence-based framework that focuses on 7 key health interventions for pregnant women and 11 key health interventions for children under 2. These core interventions are promoted through a minimum of 10 timely visits by a CHW.

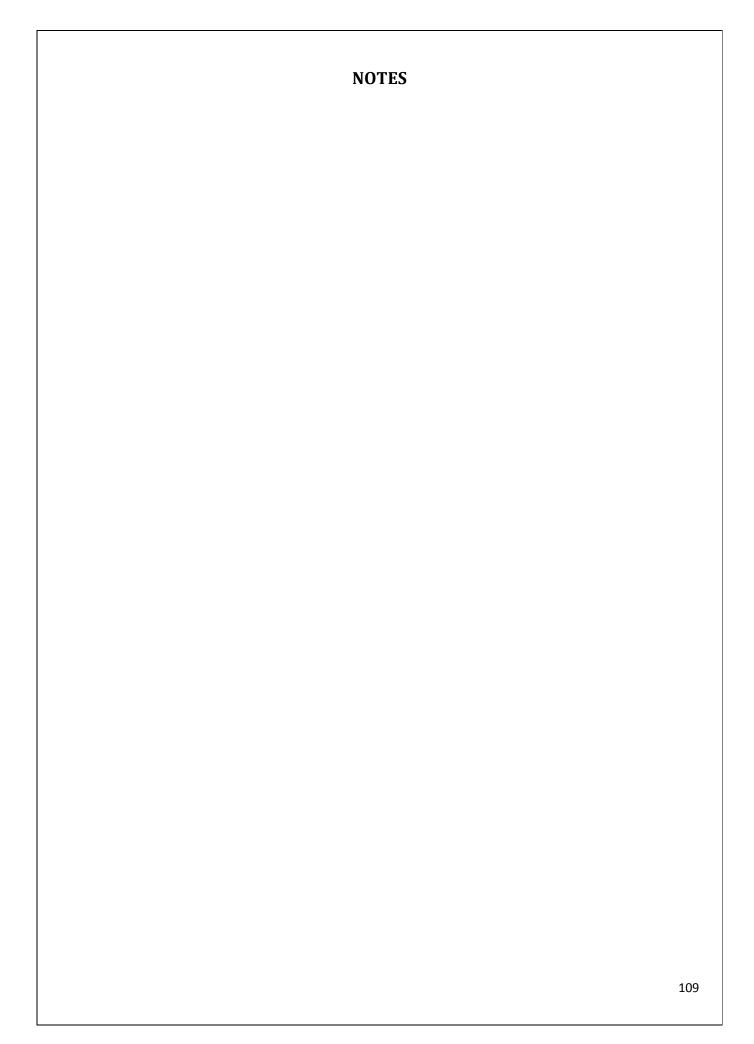
#### Methodology:

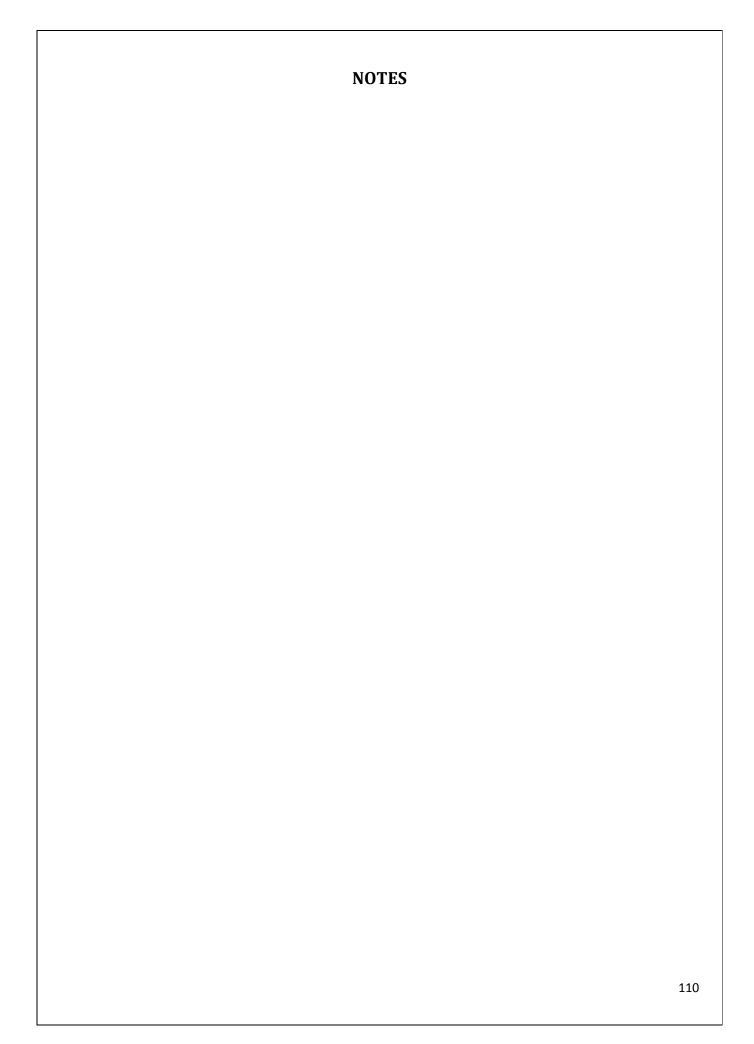
Each CHW will be associated to one of 26 health centre's, whose health committee will be responsible for their direct supervision. Health centres will be matched according to their designation and catchment area to yield approximately 6 clusters, with 4 health centre's included within each cluster. Health centre's will subsequently be randomly assigned to one of three intervention groups: 7-11 training alone, 7-11 training combined with only a mobile phone, 7-11 training with a mobile phone equipped with an existing open-source application, which will be further developed as part of the study.

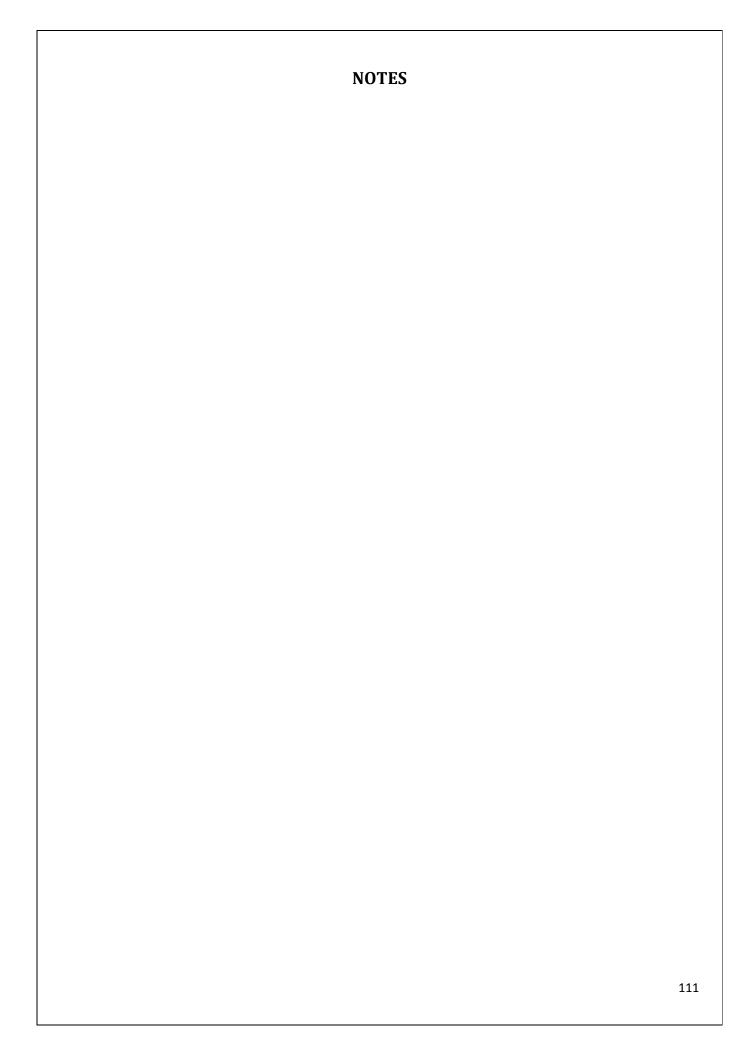
#### Next steps:

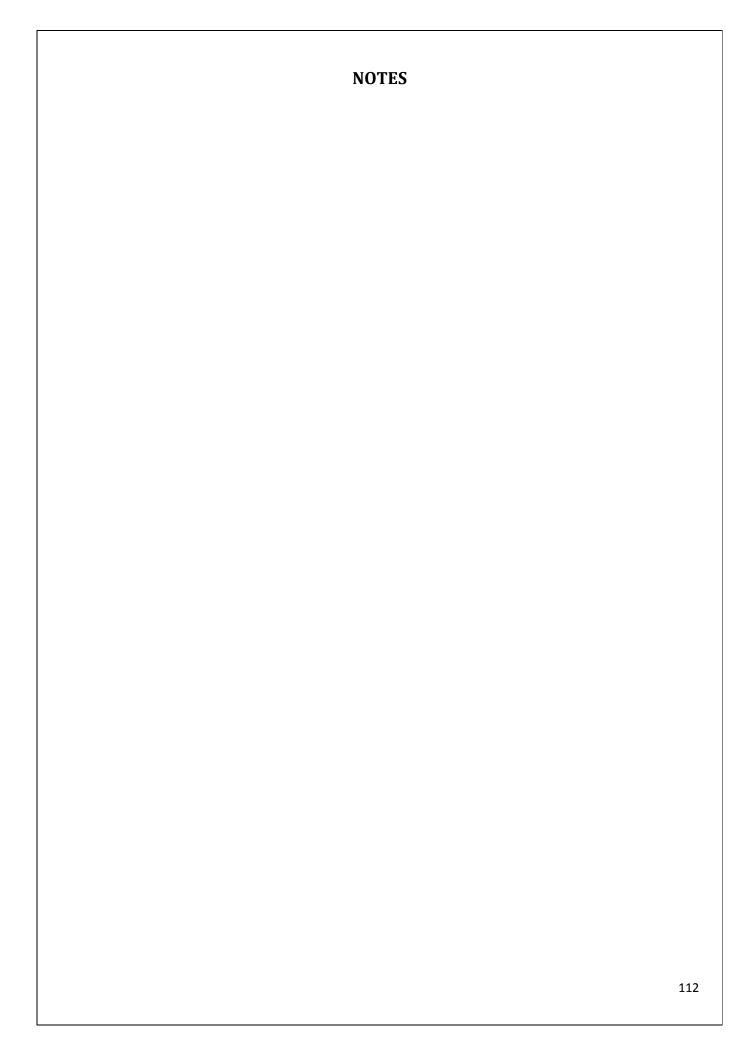
The impact of the mHealth application on CHW attrition rates will be assessed comparing levels of motivation, supervision, and activity across all three CHW intervention groups. The impact of the mHealth application on referral rates and follow up rates will be assessed by comparing the accuracy, completeness and timing of the monitoring information across the intervention groups.

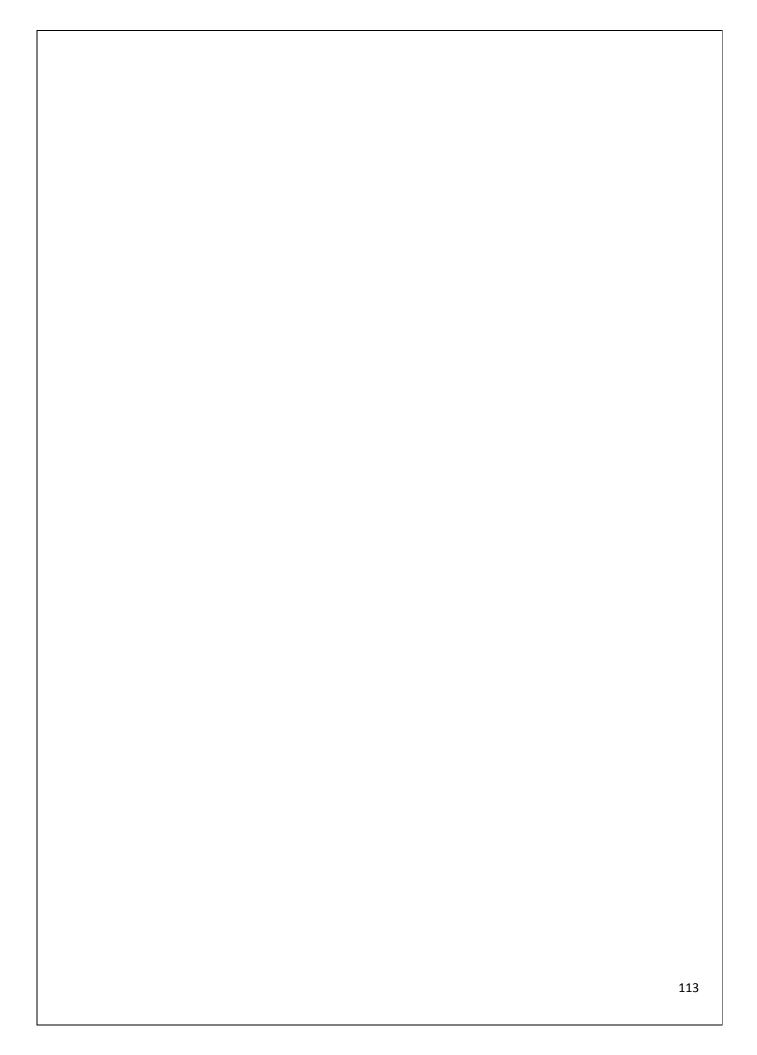














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