



ANNUAL REPORT 2018

DEPARTMENT OF EPIDEMIOLOGY AND GLOBAL HEALTH



UMEÅ UNIVERSITY

Annual Report 2018

DEPARTMENT OF EPIDEMIOLOGY AND GLOBAL HEALTH

Umeå International School of Public Health (UISPH)
Umeå Centre for Global Health Research (UCGHR)

Prologue

To all staff, students, collaborators and other colleagues,

The year 2018 will be remembered as one of change and ongoing commitment!

After more than three decades in our “old” house we moved to a new location. This was a big step to take and much of the hard work was done by our “Moving Group” to ensure as smooth a process as possible. In April we closed the doors of the old house and have since settled and started to feel at home in our new building.

During the year we also paved the way to become a department in our own right, after previously being a unit and part of the larger department of Public Health and Clinical Medicine. In December the decision was taken by the University Board to form the Department of Epidemiology and Global Health from 1st of January 2019: “This change aims to create an interdisciplinary research and educational environment that contributes to a global and sustainable improvement regarding health and welfare.”

We will continue to strengthen our activities involving collaboration in both teaching and research. We are located in the Region of Västerbotten and the wealth of experience and creative collaboration within the Region connects us to international collaborations around the world. Public health is based on the principles of equity, social justice, participation, and evidence-informed practice. These principles and values remain the same although context and opportunities differ. We are in a privileged position because we act as a catalyst for the exchange of ideas and provide a meeting place for diverse groups of students, researchers and practitioners.

In October we hosted Dr Tedros, the current Director-General of the World Health Organization on the occasion of his being awarded an honorary doctorate of medicine at Umeå University. During his visit he met with students and staff and inspired us with his clear message: “Health is not a luxury for those who can afford it. It is a human right...” and urged us to “continue to shape young researchers who will become a force for a healthier, safer, fairer world.” This resonates with our vision and should guide us in our daily work.

In this report you will be able to read more about us and get a taste of the work we do together with students and collaborators from near and afar. Special thanks to Lena Mustonen who as usual has had a core role, this year with the creative support of Jennifer Stewart Williams.

Thank you all for your contributions over the year. We very much look forward to working together in the years to come!

ANNA-KARIN HURTIG
Head of Department

KLAS-GÖRAN SAHLÉN
Deputy Head of Department

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Events & Columns



Klas-Göran Sahlén presents Abdul Ghaffar, Executive Director, Alliance for Health Policy and Systems Research, WHO, Geneva. Abdul Ghaffar had an open seminar in January 2018, titled “Why is health policy and systems research important for low and middle income countries? The significance of academic research for health care in a fragile state”



A Japanese delegation led by Professor Hajime Takeuchi (previously Guest Professor at EpiGH) visited Umeå University and EpiGH in February 2018.



U-CHEC Inauguration, February 2018

U-CHEC is a multidisciplinary cooperation within Umeå University Medical Faculty (Departments of Nursing, Epidemiology and Global Health and Community Medicine and Rehabilitation) that wish to contribute to the equal and sustainable development of health and welfare in Sweden and internationally.



The present and also retired staff was invited to the last party in building 9B in March 2018.



Lots of laughs and interesting discussions during the party.

We finally got to move to our new house!

It is often said that moving house is one of the most stressful things that you can do in life – so it's no surprise that moving office can be a challenging process. However it's also said that taking time to plan for change can save time and resources in the long run. Fortunately, we had time on our side. In fact the move from the old to the new house was in planning for three to four years. A Moving Group was formed and during the lead up to the move, members consulted with staff, attended meetings with the County Council, reviewed architectural drawings and generally kept abreast of week-to-week developments. Their goal was to ensure that the move was going to be as efficient, well-organized and free of disruption as possible. Thanks to the dedicated and energetic members of the

Moving Group - Karin Johansson, Ulrika Harju, Kristina Lindvall, Ida Linander, Jonas Hansson and Klas-Göran Sahlén - we finally got to move to our new house in April 2018.



“In retrospect” said Karin Johansson, “the delays gave us more time to consider the issues and options put before us, communicate to our colleagues and give our collective feedback to the County Council. But it was somewhat of a moving feast. There were always new and unexpected aspects and angles to consider. Our biggest single time consuming task was

the sorting and culling of - what seemed like - endless archives. Now that was a sizeable challenge which we did not expect!”

As moving day approached the to-do lists grew. The big picture planning was unfolding into actions for which everyone was responsible. After years of talking, anticipating and planning, the move was looming and we were down to the details of packing boxes and assigning locations in the new building.

“One of the things that I am very happy to report” said Karin, “is that we managed to move from old to new offices with minimal new purchasing. In true Swedish style most of the old furniture and equipment was shifted to the new house and we were actually surprised at how well things fitted the spaces. However one item that did go was the fax machine. We don’t even have a connection for a fax in the new house. And nobody has asked to send or receive a fax since we moved. The technology has become obsolete”.

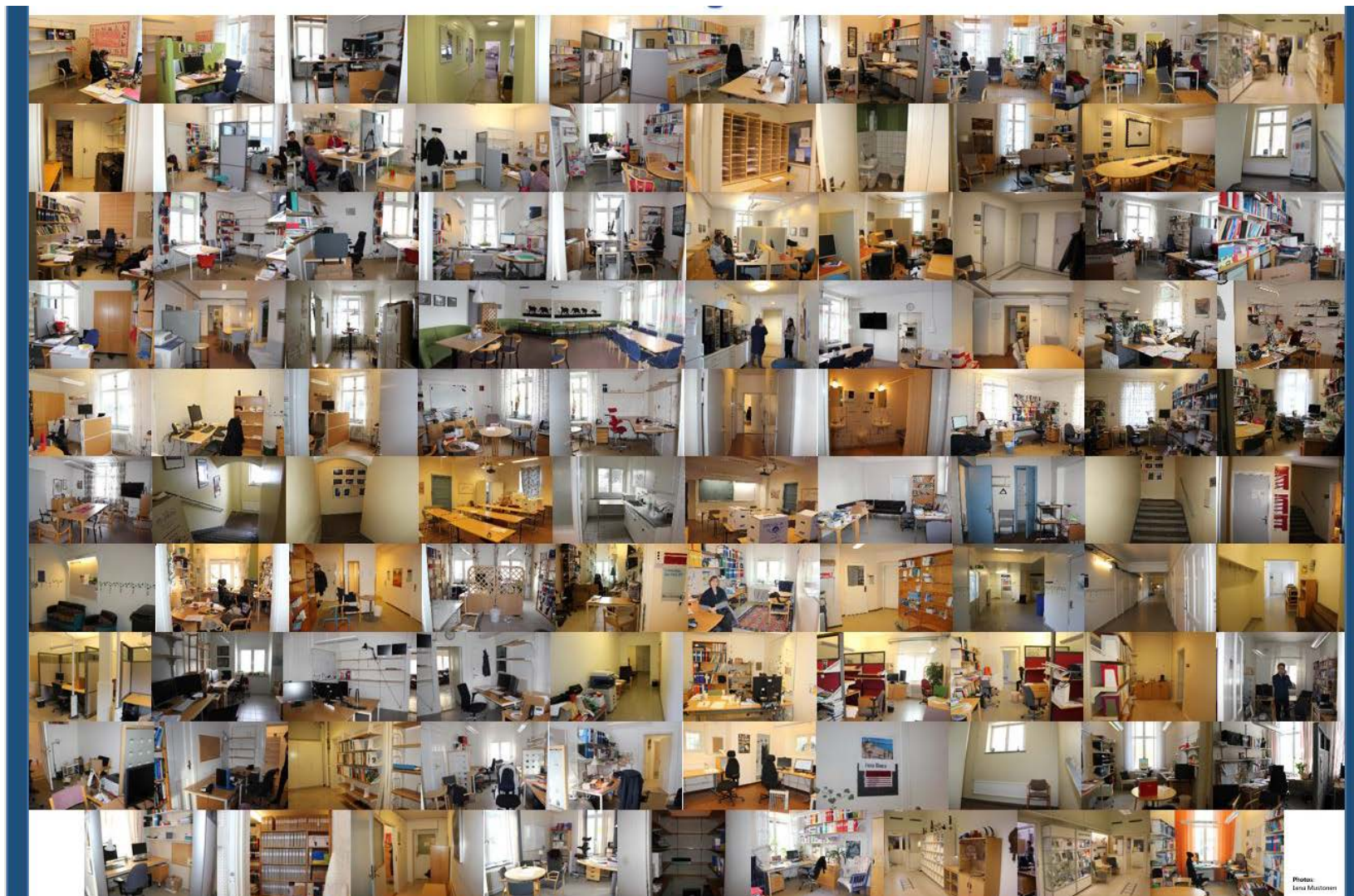
“Of course there were teething problems when we first re-located. Everyone expected some. But to be honest” said Karin, “they were minimal. The IT move went amazingly well thanks to Göran Lönnberg. And the moving company was absolutely top class. Nothing was ever too much trouble. The men were always obliging and good humored. Within a week of moving people were happily unpacking and decorating their new offices.”

Karin accepts that some staff were sad about leaving the old house behind. “Sure it did have character and it held many memories which provoke emotions. It is good to recognise those feelings but we also need to keep in mind that it wasn’t a healthy house any longer. The air was not as clean as it should have been and some people had allergies and sensitivities when they worked there. The old house had served us well but there were many reasons why we needed to move.”

Our new house is clean, light and modern. The insulation is excellent. “We don’t even hear the helicopter noise any more, despite it being closer than it was before”, said Karin. “The fika room and kitchen is further away for most of us and we were not so sure how we felt about that at first, but I think that most people are enjoying their breaks up on the 7th floor. And the view is stunning.”

When reflecting on the move Karin commented: “I am very pleased to have been part of the Moving Group for the new house. It has been a most satisfying experience. And I am very proud of the way in which our staff pulled together and co-operated to ensure that the move went as smoothly as possible.”

Jennifer Stewart Williams



Photos:
Jana Mänttinen

Our old offices in Building 9B



Lunch and coffee room on the 7th floor



Creative area



Artwork



Meeting room Cooperstown



Elevators



Corridor on 4th floor



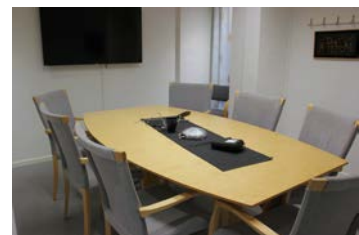
Meeting room Butajira



Lecture room Alicante



Student lunch and coffee room



Meeting room Yogyakarta

Our new offices in Building 5B



Anneli Ivarsson and Madoud Waesghazemi participated in the South African and Sweden Research and Innovation Week May 2018, in Pretoria, South Africa



The administration staff met together with the leadership group at Källan Spa, Norsjö in June 2018, discussing administration, communication, and finance issues



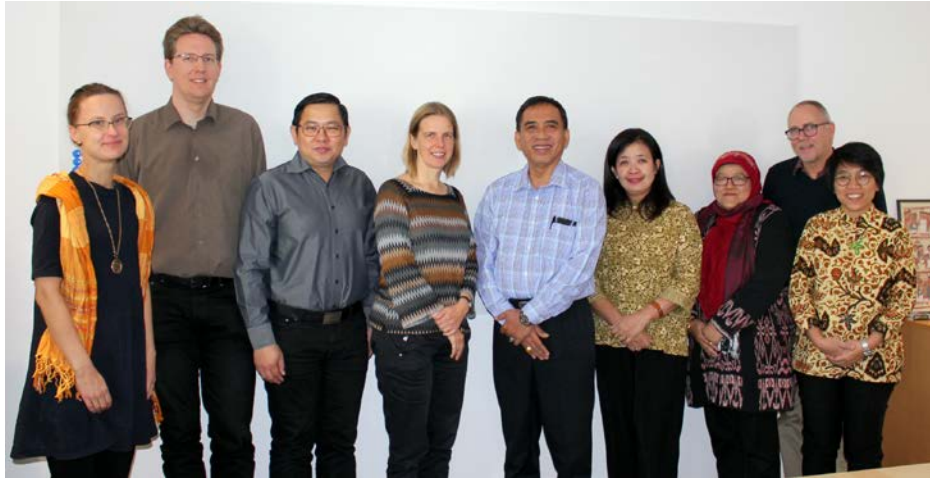
Staff in the coffee and lunchroom on the 7th floor



Celebrating the Forte grants. Nawi Ng presented one of the five projects receiving grants, October 2018.



Fantastic weather promoting fantastic ideas for the future! During the Unit day in Järnäsclubb, September 2018, we discussed pro's and con's becoming a department of our own.



**Visit of delegations from the Sebelas Maret University, Solo, Indonesia
September 2018**

The Faculty of Medicine of UNS signed a MoU with the Department of Public Health and Clinical Medicine and the Unit of Epidemiology and Global Health (EpiGH), Umeå University in May 2017. As the follow-up of this MoU, four researchers from the University led by Ari Probandari (former PhD student) visited the EpiGH in September 2018.



**Workshop on Realist Evaluation with colleagues from four different projects
in Cambodia, India, Zambia, and Sweden, October 2018**



**A network with seven Nordic universities met in Umeå October 2018.
We discussed potential teacher and student exchanges within public health programs.**



**A delegation from Ningxia, China visited in November 2018 for discussing
potential future collaboration in research and education.**

WHO Director General Dr. Tedros receives honorary degree from Umeå University

Every year, Umeå University confers honorary degrees on exceptional individuals, often people who also have a connection with the University. In 2018, the Director General of the World Health Organization, Dr. Tedros Adhanom Ghebreyesus, was selected for this honour.



Tedros first came to Umeå for our Summer Course in Field Epidemiology Methods in 1997 (seen in the class photo to the left).



Dr. Tedros is the first WHO DG from Africa (he is Ethiopian); the first non-physician to be WHO DG; and the first former Minister of Health to hold the post.

Before the degree ceremony, honorary degree recipients are invited to give a public lecture. Tedros took the subject of “Ebola in times of conflict”, sharing some of his experiences of leading current efforts to control ebola outbreaks in the Democratic Republic of the Congo.

For the degree ceremony itself, the honorary doctors and newly installed professors took the stage in Aula Nordica.



The degrees were conferred with due ceremony by the Deans of each Faculty.

For the Faculty of Medicine, this included Dean Patrik Danielson placing the traditional black pleated hat on the recipients' heads.

More details about Dr. Tedros' award are available at

<https://www.umu.se/en/feature/who-director-general-recommends-public-health-studies/>

A short video interview with him is at vimeo.com/298535301/a4471c393a





Tedros Gebreyesus met with our MPH students in an open seminar

Our **VISION** is to be a leading academic centre for research and education which contributes to equitable and sustainable improvements in health and welfare across the globe.

Our **MISSION** is to conduct ethically sound, transdisciplinary, and innovative research and education, and to engage with society.

Our daily work is guided by the following **VALUES**:

- A concern for ethics, equity, empowerment, and the environment
- Freedom of thought and expression
- Open mindedness and mutual respect



September 2013
Epidemiology and Global Health
Umeå University
SWEDEN

<http://www.phmed.umu.se/english/units/epidemiology/>

Organisational setting

Organisation, Leadership and Staff

During 2018 we planned for an organisational change in order to become an independent Department from 2019 but remain located within the Medical Faculty.

The work of the Department of Epidemiology and Global Health (EpiGH) has been shaped by a set of key values that are central to the way in which we conduct research and education and engage with society. These efforts are underpinned by our aim which is to contribute to equitable and sustainable improvements in health and welfare across the globe. We adopt a broad definition of global health to include public health issues in Sweden, as well as in the rest of the world. Our mission, vision and values are presented on page 12.

EpiGH is a multidisciplinary research and teaching environment. We host Umeå International School of Public Health with Masters Programmes in Public Health (MPH) and we have an extensive PhD program. In recent years we have begun to revitalise our internal organisation.

A guiding principle of our organisation is to ensure that each and every member of the staff has the possibility to contribute, as far as possible, to our collective work, both in the short- and long-term. Our Research Strategic Group and the Educational Strategic Group have key responsibilities to guide future development in this regard. The Mid-point Researchers' Group involves "post-docs" and others at the beginning of their research careers. This Group is linked to the leadership through a representative in the Expanded Leadership Group and will from 2019 also be represented in the Department Leadership Group. The Academic Dialogue Spaces, which emerged from bottom-up initiatives to encourage increased scientific dialogue and to promote the development of cutting-edge expertise, were further developed during 2018 (see page 35-36). Three new research profiles: *Emerging Global Health Challenges*, *Health Systems and Policy*, and *Northern Sweden Health and*

Welfare, were further established during 2018 (see page 31-34).

The Leadership Group comprised the following members in 2018:

Anna-Karin Hurtig	Head of Unit (from 2019-01-01, Head of Department)
Klas-Göran Sahlén	Deputy Head of Unit (from 2019-01-01, Deputy Head of Department)
Marie Lindkvist	Study Director
Karin Johansson	Administrative Coordinator
Sara Forsberg	Finance Coordinator

EpiGH has a about 60 employed staff and additionally approximately 60 affiliated researchers and doctoral students. We benefit from the wide ranging prior education and experience in our membership. This includes physicians, nurses, sociologists, economists, social workers, dentists, statisticians, physiotherapists and nutritionists. This broad mix of experience - across clinical medicine and the social sciences - greatly enriches our multidisciplinary research and teaching environment.

All staff are encouraged to participate in our monthly staff meetings (PUMP) and the Department Days that are usually held each semester.

In recent years EpiGH demonstrated commitment to a sustainable environment. We implemented concrete actions for reducing the Unit's carbon footprint, for example by encouraging Skype Business-meetings instead of traveling, using train instead of flight travel when possible, having double-sided printing set as default on all computers, etc.

Since its inception in 1986 EpiGH has been housed in a 100-year old building that was part of the original hospital in Umeå. Our

new offices are finally in place. (building 5B, level 3 and 4, Figure 1). See interview with Karin Johansson on pages 2 and 3.

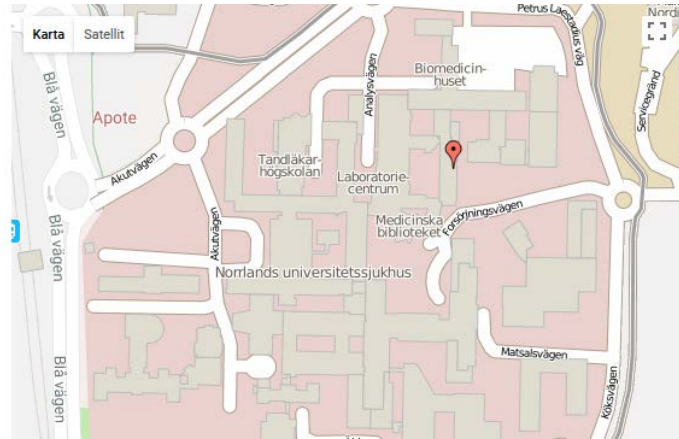


Figure 1. Map showing the location of our new offices within the hospital area.

Finances

The total budget for this year amounted to 45 MSEK, out of which 78 % originated from sources external to the University (Figure 2). Our main activities are reflected in the budget, i.e. education and research, and both

are key activities in our daily work, although research activities are the largest component (Table 1). This year costs were higher than revenues. A planned deficit resulted in a net loss of 4.2 MSEK.

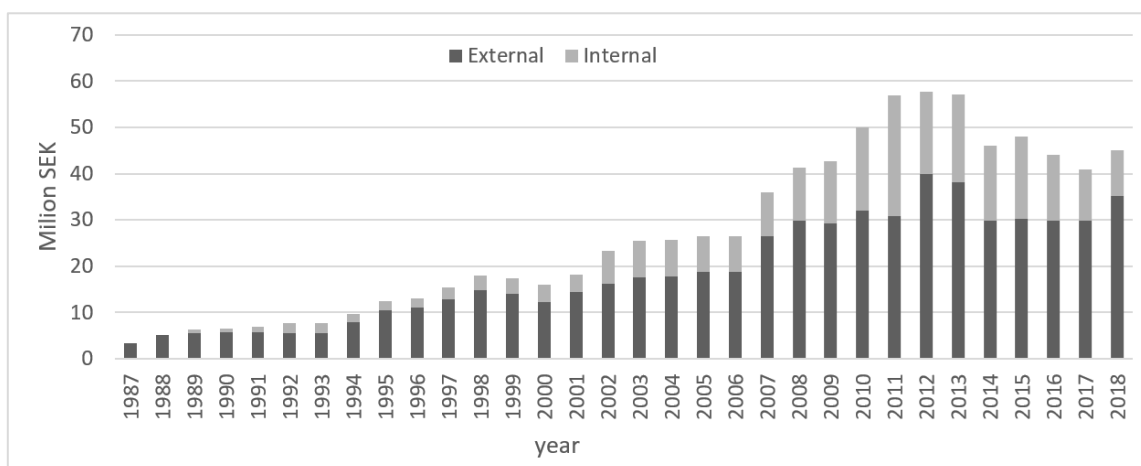


Figure 2. Development of annual budget 1987-2018. It shows what is internal and external funding including education, research, PhD training and commissioned research.

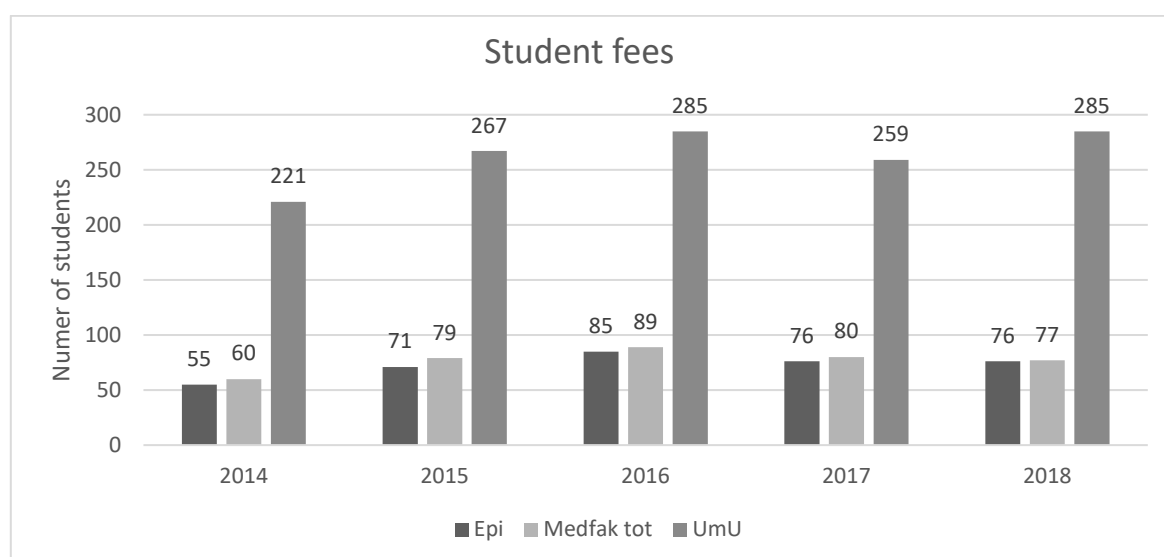
Table 1. Revenues and costs.

Revenues (1000 SEK)	Education	Research and PhD training	Commissioned research	Total
External grants	4 953	26 154	0	31 107
Accrued external funds		-7 561	-1 547	-9 108
External contracts	32	0	9 954	9 986
Government grants	3 328	5 901	0	9 229
Other revenues	123	2 897	968	3 988
Total	8 436	27 391	9 375	45 202

Costs (1000 SEK)				
Staff	5 382	18 072	6 908	30 362
Premises	216	810	0	1 026
Other operative expenses	915	6 807	1 718	9 440
Depreciation	0	86	0	86
Overheads	2 943	4 668	961	8 572
Total	9 456	30 443	9 587	49 486

Our education budget amounted to 8.4 MSEK, out of which 3.3 MSEK was support via governmental grants to our Master of Public Health (MPH) programmes. The other dominating source was tuition fees (Table 1). A few students paid these out-of-pocket, but the majority were awarded

scholarships from different sources: *Umeå University*, *Erling-Persson foundation*, the *Swedish Institute*, and *Science without Borders*. In (Figure 3) you can see that EpiGH is a major source of student fees both within the Medical Faculty and the University as a whole.

**Figure 3.** Number of students paying student fees 2014-2018.

However, the major part of research funding this year, as in previous years, was awarded from external sources comprising both external grants and external contracts.

Our external revenues for commissioned research have been increasing year after year, (Table 1), and one significant reason for this is that many contracts are with the Swedish Public Health Agency.

The reason why our education budget had a planned deficit was due to a reimbursement of 1.1 MSEK, for an overpayment in 2017. Next year we aim to have a balanced budget.

Zika is Umeå University's largest EU project and one of our main beneficiaries. Our biggest beneficiary in 2018 was the FORTE-Swedish Research Council for Health, Working Life and Welfare. Other beneficiaries are VR-Swedish Research Council and FORMAS-Swedish Research Council. More beneficiaries are shown in Figure 4.

A trend seen in 2018 was the increase in grant funding (see Figure 4). We expect that this trend will continue in 2019 (see Figure 5).

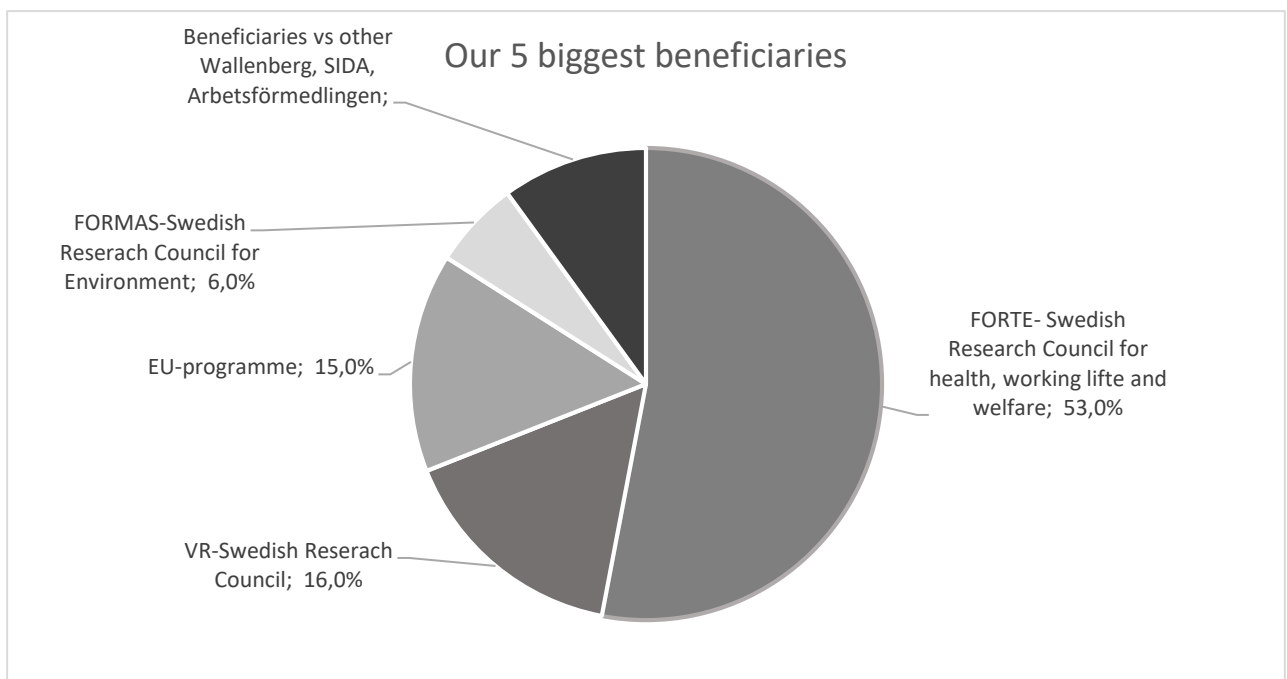


Figure 4. Our five biggest beneficiaries (other are SIDA, Wallenberg and Arbetsförmedlingen).

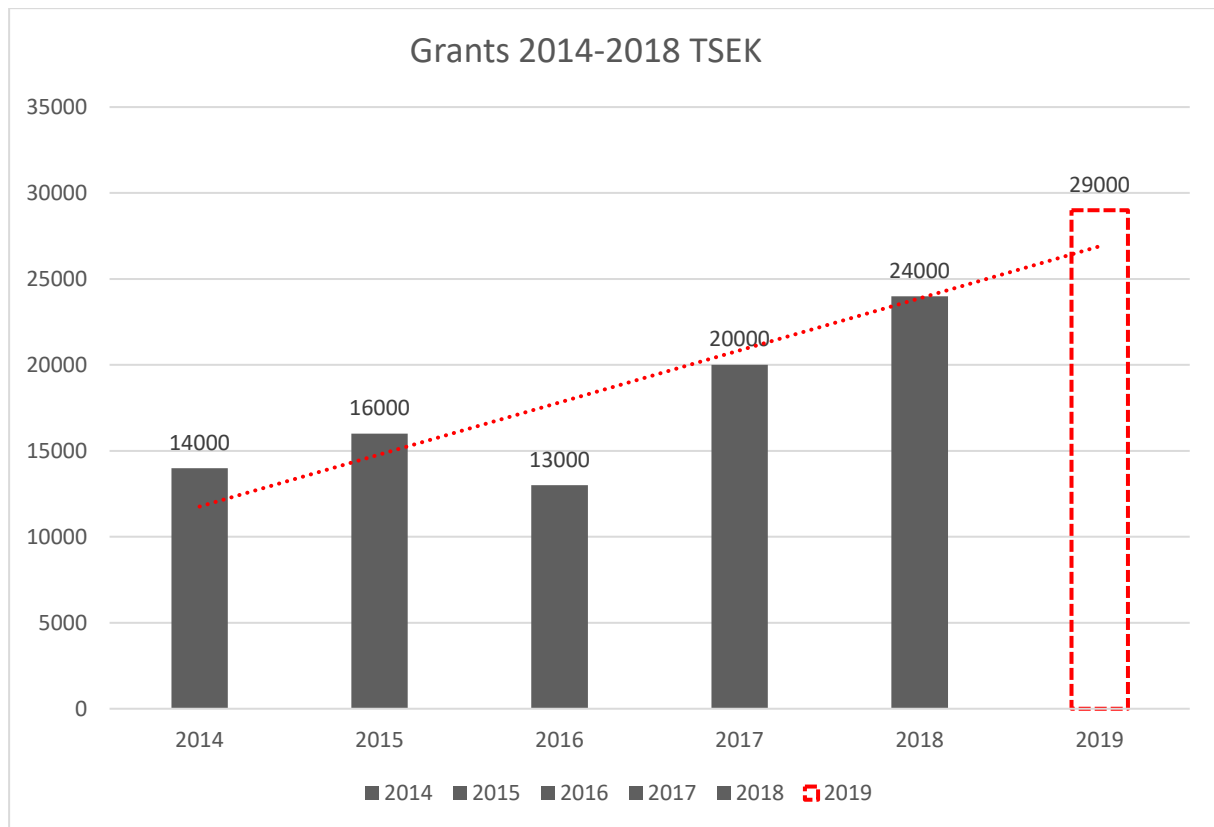


Figure 5. The incoming grants, 2014-2018.

Outputs

There are no measures that fully can evaluate our activities. However, one outcome criterion is the number of publications (Figure 6). The ups and downs of the curve result reflect the processes leading up to a publication, i.e. from a research idea over project planning, data collection and analysis, and ultimately to the measurable outcome - the published paper.

This year eleven PhD students successfully finalised their studies (Figure 7). At the end

of 2018, 39 PhD students were associated with our Department, including four new students registered during the year.

The Medical Faculty budget model uses three parameters for assessment of productivity: Publications, PhD exams, and external grants. Each department/unit is given a budget, based partly on this assessment system. EpiGH has been increasingly competitive in this regard.

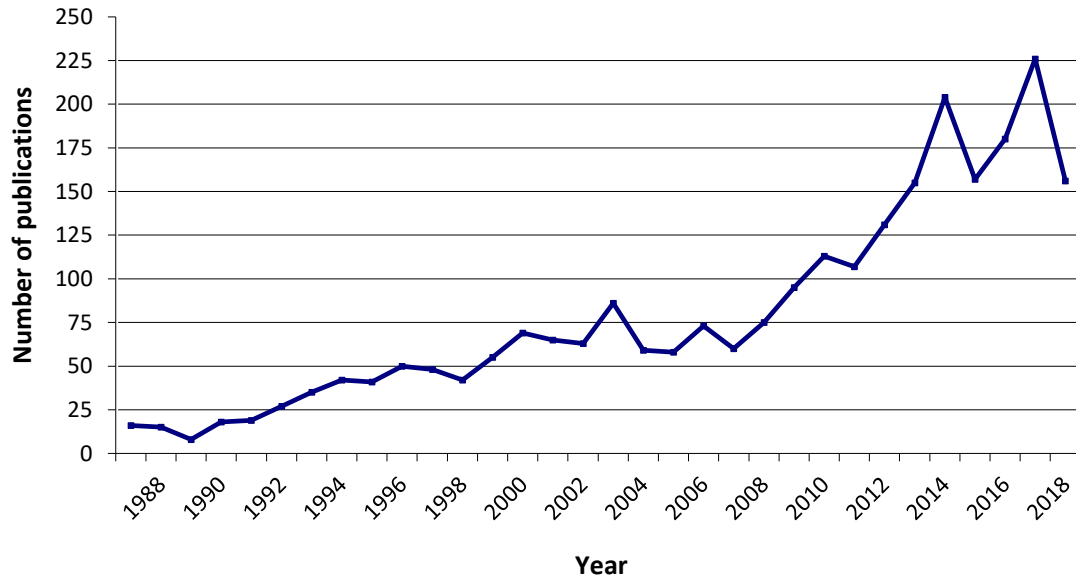


Figure 6. International peer reviewed publications by EpiGH members, 1986-2018 (registered in the publication database Diva).

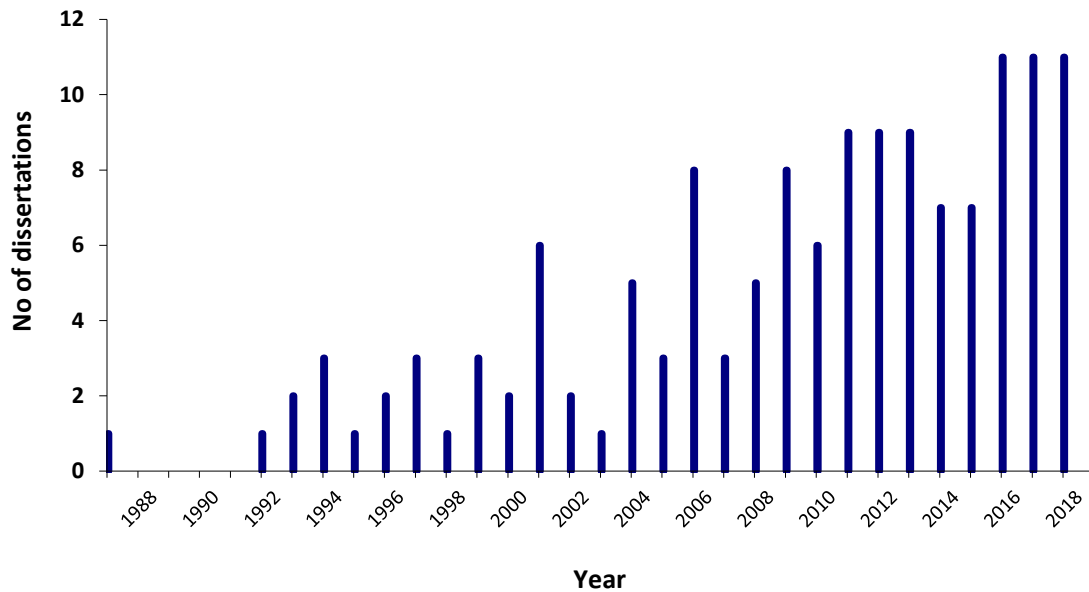


Figure 7. EpiGH, doctoral dissertations, 1987-2018.

Staff



Omar Alkudaimi. Service employee.

Camilla Andersson. Project assistant in Household Preferences for Reducing Greenhouse Gas Emissions in Four European High Income Countries. Is also working with a project on early warning systems for climate driven infectious disease in Indonesia. Camilla Andersson has a master of arts in media- and communication with specialization in public health. Her main research interest is in climate change, health- and risk communication and information systems.



Mazen Baroudi. Doctoral student working with the thesis 'Young immigrants' sexual and reproductive health and access to healthcare in Sweden'. The project explores sexual and reproductive health status and needs among young immigrants in Sweden and assesses their utilization of sexual and reproductive health services.

Leigh Bowman. Post doc. PhD in Dengue Epidemiology from the Liverpool School of Tropical Medicine. At Umeå University, Dr Bowman is engaged in research on planetary health, an area that advocates an understanding of natural systems and the importance of environmental conservation to help mitigate the adverse effects of global warming on public health. Leigh left for another position during 2018-



Peter Byass. Professor of Global Health and Director of the Umeå Centre for Global Health Research. He is Chief Editor of Global Health Action, our open-access journal. He collaborates closely with the World Health Organization and other agencies. He also holds honorary Professorships at the University of Aberdeen, Scotland and the University of the Witwatersrand, South Africa.

Kjerstin Dahlblom. Senior lecturer in Public Health, is a social scientist and currently involved in a Swedish collaborative research project entitled "Child health inequalities and place: Kjerstin has expertise in participatory research with children in Nicaragua and in Cambodia.



Mikael Emsing. Doctoral student at Epidemiology and Global Health and the Post-graduate school for Educational Sciences. Working on the thesis "Perceptions of conflict management and its association with mental health and quality of life among Swedish police officers". The project seeks to examine the associations of conflict management and personality with mental health and Quality of Life among Swedish Police.

Eva Eurenium. PhD in Physiotherapy and Associate Professor in Public Health – working mainly with the Salut Child Health Promotion Programme. Studies within the Salut Programme focus on the pregnant woman's and her partner's health, lifestyle and life situation with follow-ups of children's ditto, aged 0-18 years. Employed at the Public Health Unit, Strategic Management Office, Västerbotten County Council.



Osvaldo Fonseca. Post doc. PhD in Veterinary Science. MSc in Preventive Veterinary Medicine. Also affiliated (Post doc) to the Centre for Demographic and Ageing Research (CEDAR) at Umeå University. Involved in a research project "Health impacts of weather types in Sweden – the context of climatic and demographic change"..

Sara Forsberg. Financial coordinator. Responsible for budgeting, economic planning and accounting. Has worked previous as an accountant for the financial office at Umeå University.



Isabel Goicolea. MD, MSc, PhD. Associate professor, researcher. Her research interests are in gender relations, men's violence against women, young people's health and sexual and reproductive rights. Currently involved in research on youths' access to health care services in northern Sweden.

Anne Gotfredsen. Doctoral student at the Department for Epidemiology and Global Health. Also affiliated to the Umeå Centre for Gender Studies (UCGS). The overall aim of my doctoral thesis is to explore and understand how teenagers involved in various civic organizations and leisure activities (both online and offline) develop a collective capacity to influence their mental health.





Per Gustafsson. PhD in child and adolescent psychiatry, Associate Professor in Public Health. Research within social epidemiology and social inequalities in health. Also interested in life course epidemiology and neighborhoods and health. Teaching theory and methods in various courses at the Master of Public Health Programme, and on courses on PhD and basic level.

Belaynesh Habtay Kahsay. Service employee.



Ulrika Harju. PhD research administrator. Also administrator on the course in Epidemiology and Biostatistics within the biomedicine programme. Reviewer for the unit in the personnel administrative self-service system at Umeå University.

Jing Helmersson. Research scientist in epidemiology and global health. PhDs in both public health (2018) and in Physics (1989). Her current research project is mathematical modeling of vector-borne infectious diseases, i.e., Dengue, Zika and *Aedes* mosquito population dynamics and invasion of uninfected areas. Main areas of interest include infectious disease modelling, happiness and wellbeing modelling, wellbeing workshops, and developing system dynamics modelling method to integrate qualitative and quantitative research findings.



Anna-Karin Hurtig. MD, DrPH, DTM&H, MSc. Professor in public health. Head of the Department of Epidemiology and Global Health. Main areas of interest: international health systems and policy research, community based health systems and primary health care in low and middle income countries. Capacity building.

Elisabet Höög. MA in work- and organizational psychology. PhD. Research focus on facilitation and support structures for change and development in public organizations. Ongoing partnership with Region Västerbotten - FoU Välfärd and Memeologen, and also working at Karolinska Institutet, LIME/MMC.



Anneli Ivarsson. Professor in Epidemiology and Public Health Sciences. International Director of the Medical Faculty. MD with specialist training in Paediatrics and a PhD in Paediatrics. Nationally and internationally known for decades of coeliac disease research. Scientific leader of the Salut Child-Health Intervention Programme in Västerbotten. Principal investigator of the Umeå SIMSAM Lab focusing on multidisciplinary register-based research connecting childhood with life-long health and welfare. Attached to the Public Health Unit, Strategic Management Office, Västerbotten County Council.

Urban Janlert. MD, Senior Professor of Public Health, specialist in Social Medicine. Research in social epidemiology (unemployment, social deprivation). Also attached to the Public Health Unit at the County Council.



Angelica Johansson. Programme Administrator of the Public Health Programme. Secretary for the Programme council for master programmes in public health (PRPH) and responsible for the administration in Selma. Also working with student support and course administration.

Helene Johansson. Physiotherapist, PhD in Public Health. Teaching subjects: health, health promotion, health promoting health services, qualitative methodology. Supervision of students at the master's and PhD level. Research areas: health promotion, prevention, implementation, collaboration/ integration



Karin Johansson. Administrative co-ordinator. Responsible for departmental and staff administration.

Klara Johansson. PhD, researcher in epidemiology and public health. Research interests: 1) socioeconomic determinants of adolescents' mental health, safety & injury, and sexual health; and 2) interrelations between gender equality versus physical and mental health. Currently working on a project on macroeconomic factors in relation to adolescent mental health internationally.





Frida Jonsson. Postdoc doing health systems research in rural parts of northern Sweden, focusing on access to services among elderly and young people. PhD in public health (social epidemiology) and a special interest in social inequalities in health

Ulrika Järvholm. Department administrator. Working with research education, research administration in various projects, and some web and communication



John Kinsman. Associate Professor in Global Health. Social scientist with a primary focus on preparedness and response to infectious diseases in Africa, Latin America and the EU; and with additional work on health systems strengthening.

Evelina Landstedt. Associate Professor. PhD in health sciences, research fellow. Her research is within the field of public health and health sociology and focuses on self-reported mental health problems in young people and what factors and circumstances contribute to such problems. In her work she applies a gender and social class perspective.



Ida Linander. PhD in public health and research fellow. Does qualitative research about sexual consent, LGBTQ people's experiences of safety and transgender people's experiences of health and healthcare. Teaches gender- and queer theory, qualitative methods and LGBTQ perspectives on healthcare. Affiliated with Umeå Centre for Gender Studies (UCGS).

Lars Lindholm. Professor in Health economics. Studies on equity in health economic evaluation and the use of epidemiological data in the distribution of health care resources.



Marie Lindkvist. Director of Studies at the Unit. Associate professor in Epidemiology and Biostatistics, PhD in Statistics and B.Sc in Mathematics. Appointed as Excellent teacher in Umeå University's pedagogical qualification model. Lecturer in biostatistics and statistical consultant. Responsible for statistical considerations and analyses in the Salut child health intervention programme in Västerbotten.



Kristina Lindvall. Post doc, Dietitian, master in Food and Nutrition, PhD in Public Health. Involved in a research project studying attitudes, norms, behaviours, strategies and eating habits important for weight maintenance.

Wolfgang Lohr. Medical data manager, involved in different research projects.



Curt Löfgren. Senior lecturer in Economics. PhD in Public Health, particularly issues on health financing in low and middle income countries, e.g. how to protect households from catastrophic health expenditure.

Göran Lönnberg. Statistician, data scientist, research assistant. Involved in the projects: "Västerbotten Intervention Program" (VIP), "Sweden Stroke Prevention Study" (SSPS).



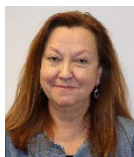
Paola Mosquera Mendez. Psy, MSc, PhD. Researcher. Her research focuses on the evaluation of public health policies, the measurement and explanation of health inequalities and the application of an equity lens to public health interventions. She is currently leading a research project exploring how to apply a life course approach to analyze socio economic inequalities in cardiovascular health and another one evaluating the effects of the primary care choice reform on population health and socioeconomic inequalities in health in Sweden..

Lena Mustonen. Department administrator, web editor and staff directory coordinator. Also administrating the publication database (DIVA) and the research database. Research administrator within the Umeå SIMSAM Lab, the EU-supported project ZikaPLAN and the SALUT Programme.



Nawi Ng. Professor of Epidemiology and Global Health. His research interests are in non-communicable diseases, wellbeing and disability among older people in Sweden and in low- and middle income countries. Lead a multidisciplinary research team in the FORTE Programme on developing digital coaching for behaviour change in Västerbotten County (2018-2021). Lead a VR

research project on cardiovascular disease risk prediction modelling using the VIPVIZA data. Affiliated to the Centre for Demographic and Ageing Research at Umeå University.



Maria Nilsson. Associate Professor. Research areas: climate change and health, and tobacco prevention and policy. Affiliated to the Public health unit, Västerbotten County Council.

Faustine Nkulu Kalengayi. MD, MPH, PhD. Postdoctoral Researcher. Research on Migrant health and access to health care services. Ongoing collaborative research with the Public Health Agency of Sweden on migrants' sexual and reproductive and rights and access to services.



Margareta Norberg. Associate Professor, MD, PhD. Senior adviser to the Västerbotten Intervention Programme (VIP), Region Västerbotten. Research activities are focused on prevention of cardiovascular diseases and diabetes and mainly based on data from the VIP. Co-PI for VIPVIZA, Visualization of asymptomatic Atherosclerotic disease for optimum cardiovascular prevention – a randomised controlled trial nested in the Västerbotten Intervention Program in Sweden), registered at ClinicalTrials.gov, NCT 01849575. Affiliated to the multidisciplinary research program CEDAR, Umeå University.

Fredrik Norström. Associate Professor in Epidemiology and Biostatistics. Principal investigator for the research project: "Is better public health worth the price? - A health economic evaluation of increased staffing in home care". Research interests are: i) health economic modelling, ii) unemployment and health, iii) quality in scientific publications, iv) development of statistical methodology within epidemiology and public health, and v) celiac disease.



Lennarth Nyström. Associate Professor in epidemiology, Senior consultant. Research focus on evaluation of the effectiveness of mammography screening in Sweden, effectiveness of treatment of hypertension in Västerbotten and efficacy of health coaching to promote healthier lifestyle among older people at moderate risk of cardiovascular disease, diabetes and depression in Sweden. Other research includes medical adherence to endocrine treatment for breast cancer in Sweden, epidemiological studies of hip

fractures and hip arthroplasty in Umeå and interventions to increase the use of vacuum extraction in the university hospital in Dar es Salaam.



Monica Nyström. Senior lecturer. Leads the FORTE project LST-STRATEGY – Strategies for large system transformations in a decentralized healthcare system and the Vinnova financed projects "Develop the developers of the future!", "Innovative development in the North - New forms for supporting innovative development in large healthcare organizations", and the SALAR funded "FK-Hälsa Works part time at Umeå University with her main employment at Medical Management Centre, Department LIME, at Karolinska Institutet where she is a research group leader for the SOLIID-group.

Solveig Petersen. PhD in Pediatrics, Associate Professor in Epidemiology and Public Health. Ongoing research in the fields of epidemiology and prevention of mental ill-health, recurrent pain and overweight in children in Sweden and internationally. Principal investigator of the Study of Health in schoolchildren from Umeå (the SISU project). Also holds an analyst position at the Public Health Agency of Sweden.



Raman Preet. BDS, MSc DPH, MPH. Dental public health professional with expertise in global health and extensive experience in coordination & management of large public health research projects especially European Union funded grants. Raman champions the inclusion of global health across disciplines; as such teaches and lectures on various topics of global health to medical, dental and public health students at Umeå University and many institutions internationally.

Anni-Maria Pulkki-Brännström. MSc, PhD. Researcher and teacher in health economics with a special interest in the evaluation of complex public health interventions. Coordinator of the Faculty's Equity and Health seminar series.



Susanne Ragnarsson. PhD student in Epidemiology and global health. Involved in the Study of Health in schoolchildren from Umeå (the SISU project). My PhD Studies are about recurrent pain in school-aged children and the relation to academic outcome. Also a part of Post-graduate School for the Educational Sciences.



Samson Redae Kahsay. Service employee.

Karl-Erik Renhorn. Research coordinator. Provides information, advice and support in relation to external funding to the researchers at Epidemiology and Global Health. Also assists researchers in the development of grant proposals and the management of research projects. Teaches on and co-ordinates the postgraduate course “How to write grant applications”.



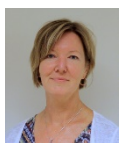
Joacim Rocklöv. Professor within Epidemiology and Global Health. He has a B.Sc. Mathematics, a M.Sc. in Statistics, and a PhD in Environmental Medicine. He has a specific interest in infectious disease epidemiology and modelling and the relationship between climate variability and global health. Joacim left for another position during 2018.

Klas-Göran Sahlén. R.N, PhD. Deputy head of the Department. Studies in the area of aging, prevention and health economics. Lecturer in two subjects; health economics, and qualitative methods. Also senior lecturer at the Department of Nursing.



Miguel San Sebastián. Professor and Medical Doctor with a MSc degree in control of infectious diseases and a Ph.D. degree in environmental epidemiology. He practiced public health during 12 years among indigenous communities of the Amazon basin of Ecuador. Currently working as Professor teaching different courses at Master and PhD level. His current research is focused on strengthening health systems in low income countries and social inequalities in health in the Swedish context.

Maquines Sewe. Post doc. Sewe left for another position during 2018.



Eva Selin. Study administrator and Study counselor of the Public health programme. Working with student support and course administration.



Julia Schröders. (M.A. & M.Med.Sc.) is a social scientist with training in medical anthropology as well as global public health and epidemiology. Currently a PhD student she is exploring the role of social networks among older adults suffering from chronic diseases and functional disability in Indonesia.

Barbara Schumann. Associate Professor/researcher; PhD in epidemiology. Affiliated also with CEDAR (Centre for Demographic and Ageing Research) at Umeå University. Research on health impacts of weather and climate change. Ongoing studies on weather-related infant mortality in northern Sweden since the 1800s, and on weather and mortality/morbidity in four Swedish cities 1991-2080. Another focus are public health issues of drought-related migration in the Horn of Africa.



Anna Stenling. MSc. Doctoral student evaluating the Västerbotten Intervention Programme from a health economic perspective.

Hans Stenlund. Senior professor in biostatistics. Statistical consultant in several epidemiological and medical research projects. Giving courses in biostatistics on various levels.



Jennifer Stewart Williams. Senior Consultant. PhD in epidemiology and biostatistics. Professional background in economic analysis, health services management, planning and policy development in Australia. Research focus on social inequalities in health. Supervises and mentors students enrolled in the Master of Public Health Program, and leads a course in which participants are guided in the process of scientific writing and manuscript preparation for submission to peer-reviewed journals. Coordinating Editor with *Global Health Action*.

Linda Sundberg. PhD, Reg. Psychologist. Her research focuses on factors influencing knowledge dissemination and implementation. By exploring policy formulation processes, implementation strategies and their outcome, the research aims to empirically verify determinants to quality improvements and research uptake in routine health care.





Nadja Trygg. PhD student and project assistant in the project Complex inequalities in mental health.

Stig Wall. Professor Emeritus of epidemiology and health care research. Epidemiologist with a social science background. Research on epidemiology and international health, environmental and social epidemiology, prevention and medical technology assessment.



Susanne Walther. Working with budget and departmental administration. Also involved in the project on celiac disease.

Masoud Vaezghasemi. Postdoc; PhD in Epidemiology and Public Health. Current research focuses on poor health and school achievements, and also social-emotional problems among preschool children in Sweden. Collaborating with the Global Burden of Disease at the Institute of Health Metrics and Evaluation (IHME), University of Washington and also the Norrland's Observatory for Equity in Health and Health Care (NOEHHC) at Umeå University. Research interest lies within social and contextual determinants of health and health inequalities. Also interested in the double burden of malnutrition in Low- and Middle-income Countries.



Anna-Karin Waenerlund. Ph.D. in Public Health, involved in research on youth-friendly health care services in Sweden. She is also involved in a project focusing on social inequalities in health in the Swedish context. Anna-Karin left for another position during 2018.

Lars Weinehall. Senior Professor in Epidemiology and Family Medicine. Was 1985-2007 the coordinator of development and countrywide implementation of one of the world's largest ongoing population-based intervention program for the prevention of cardiovascular diseases (CVD) and diabetes, the Västerbotten Intervention Program (VIP). Research on analysis of the role of primary care in population-oriented prevention and supervised a number of PhD students both from Sweden, the US, Indonesia and Vietnam.



Anna Westerlund. Post doc. PhD. MSc in work- and organizational psychology. Currently her research is focused on knowledge governance and implementation processes in healthcare and social services.

Annelies Wilder-Smith. Infectious disease physician and public health practitioner with a special interest in emerging infectious diseases and vaccine-preventable diseases. The past 15 years have been devoted to dengue research, in particular dengue vaccine development and dengue in international travelers. Prof Wilder-Smith is President of the International Society of Travel Medicine, Editorial Consultant to the Lancet, Senior Advisor to the Dengue Vaccine Initiative, and serves on various WHO committees. She is the Principal investigator of the EU funded project, "Zika Preparedness Latin American Network – ZikaPLAN".



Affiliated staff

Yulia Blomstedt. PhD. Head of Centre of Registry Northern Sweden. Research on health interventions, self-reported health, health care management.

Maria Emmelin. Professor of Global Health at Department of Clinical Sciences, Social Medicine and Global Health, Lund University. She has a special interest in public health evaluation and the social determinants of health. Her research has focussed on self-rated health and the social aspects of cardiovascular disease prevention in northern Sweden. She has worked with the HIV/AIDS epidemic in Tanzania, smoking cessation in South Africa, reproductive health in Ethiopia, and violence against women (and children) in Ethiopia, Tanzania and Indonesia.

Gabriel Granåsen. Statistician at the Registry Centre Northern Sweden.

Anne Hammarström. MD, DrPH, Professor in public health. PI for Northern Swedish Cohort and for several research programmes.

Alison Hernandez. PhD. Doctoral studies on Health Service Delivery in Rural Guatemala: Analysis of Strategies to Support the Performance of Auxiliary Nurses. Finalised her PhD during 2015.

Henrik Holmberg. Statistician at the Registry Centre Northern Sweden.

Kathleen Kahn. PhD, MPH, MBBCh. Collaborative work in child and adolescent health, community-based cause of death assessment, and

adult health and aging through INDEPTH multi-site work. Active in forging research and training links with Wits University, South Africa. Also based in the MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health, University of the Witwatersrand, South Africa.

Per Liv. Statistician at the Registry Centre Northern Sweden.

Anna Månsdotter. Associate professor in public health. Working at the Public Health Agency of Sweden (governmental assignments and scientific support). Research and teaching on public health, economics/ethics, and gender equality.

Annika Nordström. PhD. Senior lecturer in public health. Head of Welfare Research and Development Unit, Region Västerbotten. Studies on social services challenges in sparsely populated areas.

Anna Rosén. MD, PhD. Resident physician in Clinical genetics. Studies on mass screening for celiac disease utilizing a combination of qualitative, epidemiological and genetic research methods. Also attached to the department of Medical and Clinical genetics.

Sun Sun. Health economist. Involved in teaching and supervision at the unit. She is working at Synergus and is also affiliated to the Health outcomes and Economic Evaluation Research Group at Karolinska Institutet.

Hajime Takeuchi. Guest professor. Paediatrician and child neurologist. Guest Professor at Epidemiology and Global Health, otherwise working as a Professor at Bukkyo University, Kyoto, Japan.

Stephen Tollman. (MA MPH MMed PhD), Directs the Medical Research Council/Wits University Rural Public Health and Health Transitions Research Unit (Agincourt) in rural north-east South Africa. In the context of a rapidly transitioning society, his research is on burden of chronic diseases, strengthening of chronic primary health care systems, and population dynamics. Founding Board chair of the INDEPTH Network (2002-2006). Leads Network efforts in Adult Health and Aging.

Susanne Waldau Wiechel. PhD, knowledge management strategist at Region Västerbotten. Among relevant knowledge fields (besides medicine) are public health, epidemiology, sociology of medicine, health economics and medical ethics. Member of the Program Council for master programmes in public health.

Magnus Zingmark. Head of Research and Development on Active and Healthy Ageing at Municipality of Östersund. His work is with effects and [cost-effectiveness](#) of physiotherapeutic interventions among elderly.

Ann Öhman. Professor in gender studies and in public health, with special reference to health profession research, violence against women and constructions of masculinity. Theme manager of the research theme Gender and Global Health within Umeå Centre for Global Health Research. She is Professor and Scientific Leader at Umeå Centre for Gender Studies, Umeå University.

Education



Students and staff, May 2018

Photo: Mattias Pettersson

Umeå International School of Public Health

Public Health education and training has been integral to the success of our international research collaborations. Many ad hoc training courses, workshops and short courses in epidemiological methods have provided a springboard for international projects. These activities have helped to build what is now a highly regarded international school within the University. Maintaining a strong research focus in our teaching has been critical for mutual success in education, training and international partnerships.

The first courses in public health in Umeå were given in 1986. Five years later, in 1991, a one-year Master of Public Health (MPH) programme was introduced. The structure of the programme remained fairly similar with only minor revisions until 2007, when an additional two-year programme was introduced, covering a broader scope of epidemiology, health systems and the social determinants of health.

As a result of a decision taken by the Swedish Parliament, since the autumn of 2011, students from outside the European Economic Area (EEA) and Switzerland have been required to pay tuition fees for higher

education in Sweden. This led to a drop in enrolments from non-European students in 2011/12. Despite this challenge we remained committed to promoting the one- and two-year MPH programmes and further developing and diversifying their educational content.

In the autumn of 2015, in collaboration with Umeå School of Business and Economics, we introduced an MPH with a specialization in health economics. This recognises the breadth of health economics across a range of topics that include making evidence-based decisions about the best use of resources for maximising health gains and ways of analysing systems, organizational change and health financing.

To ensure flexibility and offer common ground for students, the first year of the MPH is identical for all students regardless of whether they are undertaking a one- or two-year program, with or without the health economics specialty. This first year includes courses in: global health conditions; health systems analysis; social determinants of and inequalities in health, and quantitative and qualitative methods useful for developing, implementing and

evaluating public health policies. The two profiles for the second year expand on the knowledge and skills developed so far, both when it comes to depth and breadth. They comprise a mix of set courses to ensure a foundation in core topics, but also a selection of elective courses on a range of relevant topics. This arrangement offers students possibilities to shape their own unique profiles according to their interests and needs. Taken together, the programmes provide public health practitioners and researchers with the skills needed to comprehensively understand, analyse and ultimately improve population health.

During the 2018/19 academic year we had an intake of 42 new students comprising 5 one-year students, 17 two-year students enrolled in the regular programme and 20 students enrolled in the health economics specialisation. In addition there are 29 second-year students, 17 of who are in the regular two-year program and 12 of whom are in the health economics programme. This year our incoming students originated from Sweden, Europe, Asia, Africa and Oceania. The multi-cultural composition of the students promotes a diverse intellectual and social climate, which students frequently highlight as a major strength of our programmes.

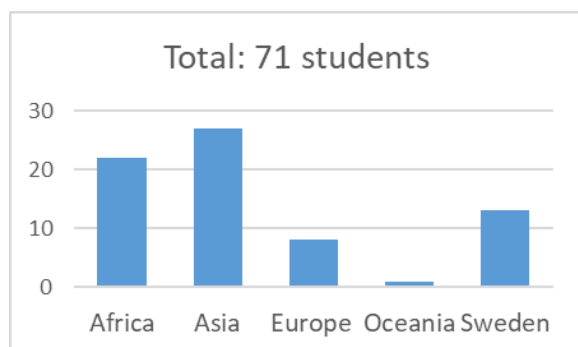


Figure 8. Masters students 2018/19

Since the introduction of tuition fees, scholarships from the Swedish Institute have been instrumental in the recruitment of students outside the EU. This year, 24 of our international students were fortunate enough to receive scholarships from the Swedish Institute. Nine students were supported by the Erling-Persson Family Foundation, to whom we are grateful for their many years of support in providing

scholarships to students from outside the EEA.

Korpen Veteranerna Västerbotten have also made a generous donation that allows us to reward MPH students for high quality theses.



Epidemiology and Global Health (EpiGH) is a member of tropEd, an international network for higher education in international/global health from Europe, Africa, Asia, Australia and Latin America. The Network provides postgraduate opportunities for education and training which contribute to sustainable development. The focus is on improving the management of health services for disadvantaged populations.

TropEd offers a Masters program in international health and EpiGH hosts some tropEd accredited courses on various public and global health related topics.

EpiGH is also part of a Nordic Network on global health. This Network, which was established in 2017 with support from Nordplus, currently comprises six universities from five Nordic countries. EpiGH has joined with other Nordic universities in an effort to further expand the course portfolio, and benefit from the learnings in different Nordic higher education environments. This underscores a strong commitment to the principles of equity and global health partnerships. The Nordic countries and their universities aim to build an extensive knowledge network of student and teacher exchange thereby strengthening their strong profiles within global health education.

Master programme courses 2018/19

First year

Global public health, 10 credits
 Biostatistics 5 credits
 Epidemiology, 10 credits
 Qualitative methods 5 credits
 Health systems: Organization and financing, 5 credits
 Health economic evaluation methods, 5 credits
 Social pathways in global health and health promotion, 5 credits
 Master thesis, 15 credits

Second year

Evidence based public health, 4 credits
 Equity and health, 3.5 credits
 Qualitative data analysis, 7.5 credits
 Advanced biostatistics and epidemiology, 7.5 credits
 Advanced topics in health economics evaluation methods, 7.5 credits **or**
 Social epidemiology – theory and methods, 7.5 credits
 Health, environment and sustainability, 7.5 credits **or**
 Planning and management in health care, 7.5 credits
 Evaluation in public health, 7.5 credits
 Master thesis, 15 credits

Second year with specialization in Health Economics

Tools and methods for economists, 7.5 ECTS **or**
 Evidence Based Public Health, 4 ECTS **and** Equity and health, 3.5 ECTS
 Health economic theory, 7.5 ECTS
 Social and environmental entrepreneurship, 7.5 ECTS **or**
 Project management, 7.5 ECTS **or**
 Environmental resource economics, 7.5 ECTS **or**
 Advanced biostatistics and epidemiology, 7.5 ECTS
 Advanced Topics in Health Economic Evaluation Methods, 7.5 ECTS
 Health, environment and sustainability, 7.5 ECTS **or**
 Planning and management in health care, 7.5 ECTS
 Evaluation in public health, 7.5 ECTS
 Master thesis, 15 ECTS

Other teaching activities

All courses within the MPH can be taken as single subjects. Priority is given to those enrolled in the MPH but a number of non-programme students are also accepted. This is especially true for the more methodologically oriented courses such as

Biostatistics, Epidemiology and Qualitative Methods, and courses concerning health systems, policy, organisation and financing, e.g. *Health Systems: Organizing and Financing* and *Health Economic Evaluation Methods*. In our view it is essential that these subjects are accessible to research students in related disciplines.

The Unit has been responsible for teaching community medicine (since 2002) and global health (since 2005) to medical students. The latter course was introduced in response to student requests. Almost all public health lectures to medical students are given during semester 5. The teaching is done in collaboration with the Unit of Occupational and Environmental Medicine and the Department of Law.

Staff at the Unit also teach into several other programmes. Teaching is carried out at all academic levels - from basic to doctoral. During the first semester of the 'Biomedical Programme' (180 credits), our Unit is responsible for teaching a 7.5-credit course in Epidemiology and Biostatistics. Members of the Unit are teaching (from basic to masters' level) into the Departments of Nursing, Community Medicine and Rehabilitation, Ontology and Food and Nutrition. Teaching is also undertaken at Umeå School of Education and at the Centre for Teaching and Learning (UPL) as part of the central course for supervisors at Umeå University.

Educational Strategic Group

The Educational Strategic Group was established in early 2017. The Group is headed by the Director of Studies for the Master of Public Health (MPH) Programmes. The other members are the Chair of the Program Council, the Director of Research Education and four teacher representatives. The purpose of the Group is to provide a strategic perspective on the educational development of MPH programmes and act as an advisory body for the Director of Studies. Ongoing work includes the review and improvement of the content and structure of different courses from an integrative programme perspective, the discussion of strategies for recruitment and collaborations, and devis-

ing solutions for programme issues as they arise. During 2018 one of the Group's priorities was to identify ways of increasing collaboration between the MPH programmes and broader society. These tasks

will continue in 2019, with the added priority of finding further opportunities for our teachers' professional development.

CONTACT: *Marie Lindkvist*



Figure 9. Home country of Master of Public Health students 1987-2018.



Nora Nindi Arista was awarded the Global Swede Diploma from the Minister for EU Affairs and Trade, Anne Linde, during a ceremony on May 8, 2018.



MPH Graduation Day, May 2018.



Sai San Moon Lu, Charlene Rufaro Mahachi and Amal Mohamed received scholarships for high quality theses. Here together with Marie Lindkvist, Director of studies.



Graduation in Aula Nordica May 2018



Students and staff football game teams, October 2018



Students and teachers participating in the Global Health Conference in Stockholm, April 2018



Open House at the Unit for MPH students, October 2018

Research

Umeå Centre for Global Health Research

Working under the umbrella of the Umeå Centre for Global Health Research, hosted within the Unit of Epidemiology and Global Health (EpiGH), our research falls into three broad profiles: Emerging Global Health Challenges; Health Systems and Policy; and Northern Sweden Health and Welfare. These

three profiles are overlapping and develop in synergy (Figure 10).

We embrace a multi-disciplinary approach to the research questions we address, where possible using a combination of complementary qualitative and quantitative approaches, and we work in collaboration with colleagues locally as well as from all continents of the globe.

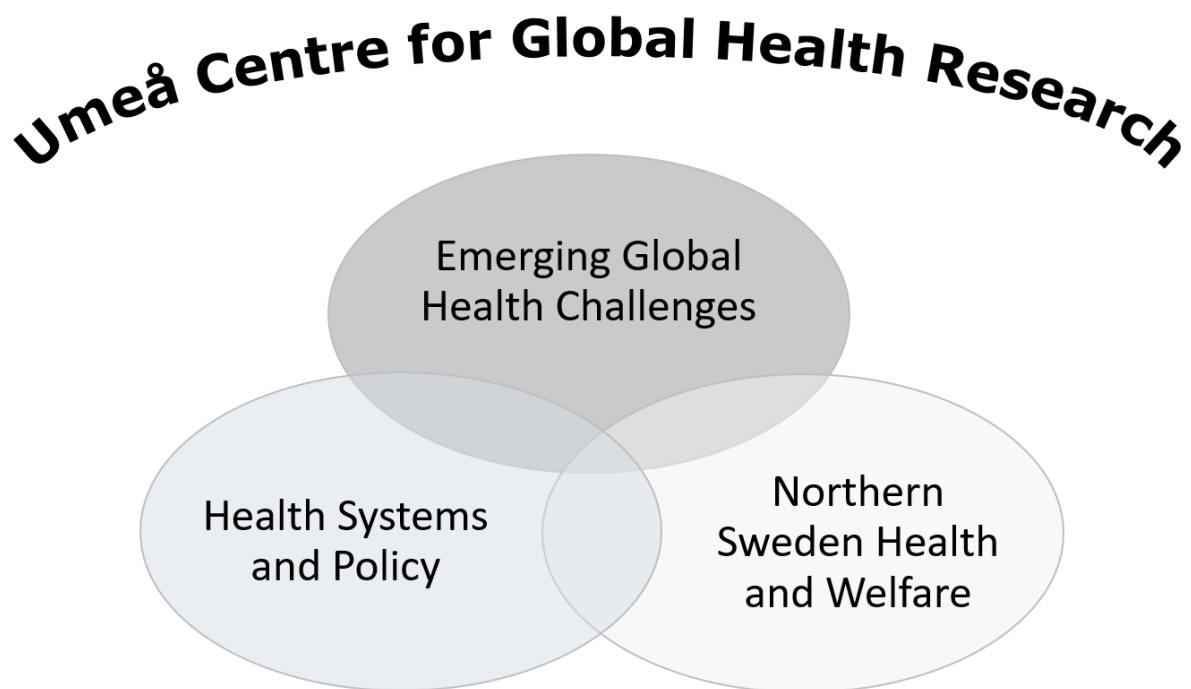


Figure 10. Three broad research profiles within Umeå Centre for Global Health Research

Ongoing research projects – the three profiles

Emerging Global Health Challenges

The world is becoming increasingly globalized and we are faced with challenges in health which do not respect national borders. Determinants such as migration, climate change and increasing ageing populations are emerging as important for

health and well-being world-wide. We need to interpret new patterns and follow the dynamic interactions developing over time and space. We also need to be prepared and coordinated in order to face challenges ranging, for example from the re-emergence of infectious diseases to complex inequalities in mental health.

EMERGING GLOBAL HEALTH CHALLENGES		
PROJECT TITLE	CONTACT PERSON	FUNDING AGENCY
Sexual and reproductive health and rights among migrants	Anna-Karin Hurtig	Public Health Agency of Sweden
Zika Preparedness Latin American Network	Annelies Wilder-Smith	European Commission
Health impacts of weather types in Sweden – the context of climatic and demographic change	Barbara Schumann	The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS)
How do civically-engaged youth develop the collective capacity to influence alcohol consumption?	Evelina Landstedt	Systembolagets alkoholforskningsråd
Sexual and reproductive health and rights: a qualitative study focusing on sexual consent	Isabel Goicolea	Public Health Agency of Sweden
Strengthening youth resilience and mental health in North India	Isabel Goicolea	Swedish Research Council
Predicting Global Aedes Vector Abundance and Future Outbreak Risks of Zika in a Changing Climate	Joacim Rocklöv	The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS)
Population dynamics and socioeconomic well-being	Joacim Rocklöv	SIDA
Antibiotic Access and Use (ABACUS)	John Kinsman	Wellcome Trust
Public Health Emergency Preparedness in the EU	John Kinsman	European Centre for Disease Prevention and Control (ECDC)
Adolescent mental health in relation to macroeconomic factors: protective and risk factors	Klara Johansson	Swedish Research Council for Health, Working Life and welfare (FORTE)
Household preferences for reducing greenhouse gas emission in four European high income countries – HOPE	Maria Nilsson	The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS)
Can mental health and health care be promoted among young prisoners in Cambodia?	Miguel San Sebastián	Swedish Research Council
Complex inequalities in mental health	Per Gustafsson	Public Health Agency of Sweden
Many children report psychosomatic disorders but how dangerous is it? A longitudinal study on potential negative effects on school achievements	Solveig Petersen	Public Health Agency of Sweden
Resilient public health in the context of large-scale, drought-related migration in East Africa: Knowledge status and knowledge needs	Barbara Schumann	The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS)

Health Systems and Policy

It is essential to understand and improve how societies organize themselves in achieving collective health goals, and how different actors interact in policy and the implementation processes to contribute to policy outcomes. Health systems worldwide

are struggling to respond to the needs of populations and provide universal health coverage. Inter-disciplinary research conducted in dialogue with decision makers and service providers can contribute to the strengthening of systems and implementation of interventions.

HEALTH SYSTEMS AND POLICY		
PROJECT TITLE	CONTACT PERSON	FUNDING AGENCY
Strengthening community-based health systems through e-health innovations?	Anna-Karin Hurtig	Swedish Research Council for Health, Working Life and welfare (FORTE)
Health policy and systems research. Strengthening community-based health systems	Anna-Karin Hurtig	STINT
Strengthening health system research capacity for enhancing innovations and sustainable socio-economic development	Anna-Karin Hurtig	SIDA
Community based interventions for strengthening adolescent sexual reproductive health and rights in Zambia	Anna-Karin Hurtig	Swedish Research Council
Is better public health worth the price? - A health economic evaluation of increased staffing in home care	Fredrik Norström	Swedish Research Council for Health, Working Life and welfare (FORTE)
Mass screening for coeliac disease – is it worth its price?	Fredrik Norström	Svenska Celiakiförbundet
Health care access for rural youth on equal terms?	Isabel Goicolea	Swedish Research Council for Health, Working Life and welfare (FORTE)
From policy to practice: Which factors explain the low priority given to disease prevention in primary care in Sweden and the US?	Lars Weinehall	Swedish Research Council for Health, Working Life and welfare (FORTE)
Epidemiology and control of endemic diseases in Bolivia	Miguel San Sebastián	SIDA
Applying systems thinking tools to strengthen health system accountability to marginalized populations in Guatemala	Miguel San Sebastián	Swedish Research Council
Using national quality registries to improve care of older people	Monica Nyström	Swedish Research Council for Health, Working Life and welfare (FORTE)
Are health inequities rooted in the past?	Paola Mosquera Mendez	COFAS, Swedish Research Council for Health, Working Life and welfare (FORTE)
Impact of the free patient choice reform on population health and health inequalities in Sweden	Paola Mosquera Mendez	Swedish Research Council for Health, Working Life and welfare (FORTE)

Northern Sweden Health and Welfare

Our home and point of departure is the Västerbotten County and Northern Sweden. This is a region which is sparsely populated and faces challenges such as the recruitment of health personnel and service provision.

Close collaboration with actors within the County Council and other institutions are important for us. Over years, many interventions to prevent ill-health over the life-span been collaboratively developed and implemented. Register data is a rich source of information and in this regard, Sweden is a “goldmine”.

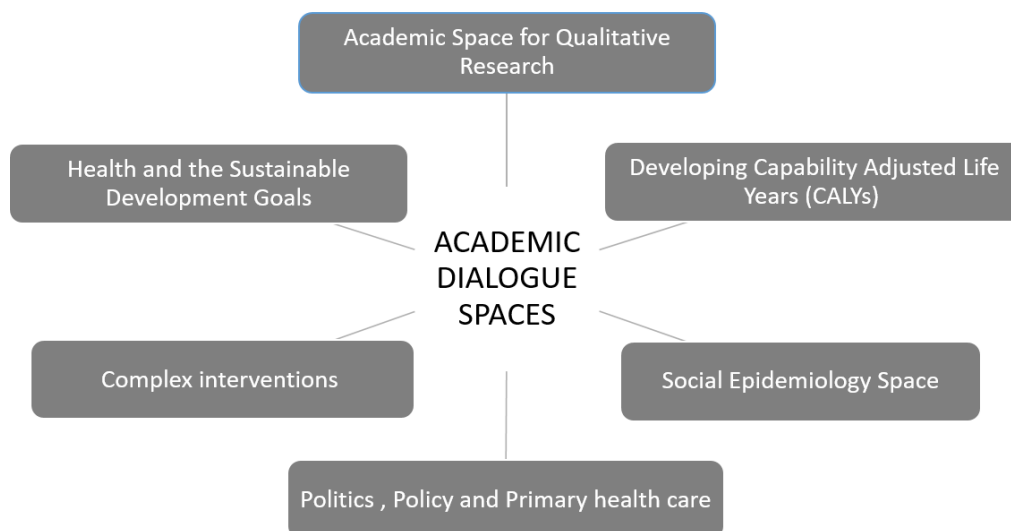
NORTHERN SWEDEN HEALTH AND WELFARE		
PROJECT TITLE	CONTACT PERSON	FUNDING AGENCY
Microdata Research on Childhood for Lifelong Health and Welfare. The Umeå SIMSAM Lab	Anneli Ivarsson	Swedish Research Council The Swedish Foundation for Humanities and Social Sciences (RJ)
The Salut Child-Health Intervention Programme	Anneli Ivarsson	Västerbotten County Council
Mental health among 3-year-olds – A population-based study in Västerbotten	Anneli Ivarsson	Public Health Agency of Sweden
Can a strengthened health promotion strategy for children and parents contribute to population health?	Anneli Ivarsson	Swedish Research Council for Health, Working Life and welfare (FORTE)
The National Celiac Disease Register in Children	Anneli Ivarsson	The national pediatric working group for celiac disease
From outsider to insider. Improved municipal decision support: A new calculation model for interventions aimed at social exclusion	Anni-Maria Pulkki-Brännström	Skandia – idéer för livet
The role of regional collaboration and support structures for knowledge governance within social services	Elisabet Höög	Swedish Research Council for Health, Working Life and welfare (FORTE)
Factors contributing to beneficial development of social emotional ability in early childhood	Eva Eurenus	Västerbotten County Council
The Västerbotten Intervention Program	Lars Weinehall	Västerbotten County Council
Visualization of asymptomatic atherosclerotic disease for optimum cardiovascular prevention. A population based RCT within the VIP – VIPVIZA	Margareta Norberg	VLL, Swedish Research Council, Svenska Läkaresällskapet, Visare Norr, Stroke Riksförbundet, Norrländska hjärtfonden, m. fl.
Applying an equity lens to cardiovascular disease prevention in northern Sweden	Miguel San Sebastián	Swedish Research Council for Health, Working Life and welfare (FORTE)
STAR-C: Sustainable behaviour change for health supported by person-Tailored, Adaptive, Risk-aware digital Coaching in a social context	Nawi Ng	Swedish Research Council for Health, Working Life and welfare (FORTE)
Causation and Novel Risk Modelling for Person-Centred Prevention and Control of Cardiovascular Diseases	Nawi Ng	Swedish Research Council

Research Strategic Group

The Research Strategic Group, consisting of senior researchers at the Unit, meets on a monthly basis to discuss short and long term strategic issues. Working Groups focus on specific priority areas and recommend strategic development and ways of implementing decisions. In 2018 we had five Working Groups 1) “Strategic outlook” which has the aim of keeping an eye on the research landscape and grant opportunities. 2) “Grant application support” which focuses on streamlining and strengthening support structures. 3) “PhD and MPH funding” which covers searching for funds for stipends. 4) “Public Website”, which works with the development of our webpage and the visibility of research 5) and “Academic Dialogue Spaces” which encourage researchers to establish meeting places for academic discussions. These are presented below.

Academic Dialogue Spaces

There are currently six Academic Dialogue Spaces in our Unit. These are formed around the following themes: 1) Qualitative Research, 2) Developing Capability Adjusted Life Years (CALYs), 3) Social Epidemiology 4) Politics, Policy and Primary Health Care, 5) Complex Interventions, and 6) Health and the Sustainable Development Goals (SDGs). Academic Spaces bring together researchers, often with diverse expertise and experience, around a research topic of mutual interest. They are forums for generating discussions, identifying synergies and promoting research development both for individual researchers and for the Unit as a whole. Members of each Space meet periodically. At times the Spaces meet together to discuss research topics from different perspectives. A brief description of each Academic Dialogue Space follows.



Qualitative Research

This Academic Space cultivates dialogue among those with interest in the methodological strengths and challenges of qualitative research, e.g. recruiting, interviewing, coding and analysis, and also theoretical discussions. The group meets on average once a month to discuss texts (our own and others), shared challenges and to plan open seminars. *Coordinators: Ida Linander, Anne Gotfredsen and Isabel Goicolea.*

Developing Capability Adjusted Life Years (CALYs)

This Space builds upon two research projects in which researchers from the Unit have participated. One is about social exclusion, and the costs of preventing exclusion. The second is about capabilities and their potential use in the evaluation of public interventions. These two projects have now joined forces to develop a common research agenda, which stretches from normative philosophy to statistical method. Dialogue on these issues is ongoing. *Coordinator: Lars Lindholm.*

Social Epidemiology

This Space gathers five-six times per year to discuss articles on conceptual and methodological issues of relevance for the field of social epidemiology, and occasionally drafts of articles or research proposals from the group. We also have lunch together every second week for mutual updates and discussions. Topics discussed in 2018 included fundamental cause theory, theories on the persistence of health inequalities, conceptualizations of social determinants of health and inequalities in health, methods for intersectionality, as well as Latin American Social Medicine, which will be a continued focus of the group. *Coordinators: Miguel San Sebastian and Per Gustafsson.*

Politics, Policy and Primary Health Care

This Space focuses on health policy and systems research with a focus on local and community based systems. Methodologies inspired by systems thinking are explored as well as current topics on the politics of health. The group meets once a month to share ideas/ongoing activities and discuss

published work. *Coordinators: Lars Lindholm and Anna-Karin Hurtig.*

Complex Interventions

Members of The Unit are undertaking research on implementation and evaluation of complex interventions across a range of different health settings and this provided a basis for the Complex Interventions Academic Space. Some examples of topics presented and discussed in seminars during 2018 are “Effectiveness and cost-effectiveness of the SALUT PROGRAMME – A universal health promotion intervention for parents and children?”, “Complex interventions as a concept” and “Can qualitative study be generalized and integrated with quantitative data? - A system dynamics model on happiness experience and life satisfaction” *Coordinators: Linda Richter Sundberg and Kristina Lindvall.*

Health and the Sustainable Development Goals

This Space focuses on health in the SDGs. We discuss health and sustainability with a holistic and broad perspective considering the natural environment, but also urbanization, consumption, and general issues around sustainable lifestyles and sustainable development in low- middle- and high-income regions. In 2018, topics included: Health aspects in other SDGs; HOPE project on household emission reduction; SDG 12 Responsible production and consumption, SDG 16 Strong institutions. *Coordinator: Barbara Schumann.*



From idea to awarded grant

Our extensive dependence on external funding for our research activities motivates strategic efforts and action to improve the quality and success rate of our grant proposals. Consequently, we are continuing to develop a system of grant proposal support, coupled with support for awarded grants for larger and more complex projects.

The basis for this work is the Working Group “Grant Support for Tomorrow” involving the Research Co-ordinator and two researchers (one mid-level and one senior). This Group identifies specific needs for support, and discusses and develops activities and actions directed towards researcher categories and/or specific calls for proposals. The Working Group reports to, and receives feedback from, the Strategic Committee through its regular meetings.

The Research Co-ordinator manages the Unit’s research proposals database, in which all proposals submitted by the Unit’s research staff are registered, along with any applications submitted in collaboration with the Unit’s research staff. Comprising proposals submitted from 1 January 2014, the database allows activity monitoring and serves as a basic instrument for developing quality grant proposals.

The Research Co-ordinator routinely searches for and identifies relevant external funding opportunities, and provides recurring general information to the Unit’s researchers, as well as directed information to individual researchers, ensuring that

funding opportunity information penetrates to all research staff.

To support and develop individual proposals, draft read-through and commenting support is continuously available to researchers by the Research Co-ordinator. For more complex efforts, the Research Co-ordinator joins the proposal development team to provide administrative and content-related support.

Proposal writing skills development is addressed in a 3-credit point PhD level course (“How to write grant applications” developed by the Research Co-ordinator and offered to doctoral students at the Faculty of Medicine. In abridged form, this course is also made available to the Unit’s research staff.

The year 2018 saw of a total of 36 grant proposals submitted to external funders, with an additional six proposals submitted to the Medical Faculty’s call for applications for Strategic Research Resources 2018. A further ten were submitted by external principal investigators, with participation from the Unit’s researchers. Funding from a total of 14 funders was sought during the year; the majority of proposals were directed to Forte (the Swedish Research Council for Health, Working Life and Welfare). Out of the proposals submitted by the Unit’s researchers, ten (10) grants were awarded, a success rate of nearly 28%; however, in terms of awarded grant sum (total amount awarded/total amount sought), the success rate was 23%. Four of the proposals led by non-Unit researchers were approved, but none of the proposals submitted in response to the Medical Faculty call were successful.

CONTACT: *Karl-Erik Renhorn*

ZikaPLAN – the large EU project completes two years

The EU H2020 funded **ZikaPLAN** (Zika Preparedness Latin American Network) undertook many activities during 2018. The year began with celebrations for the awarding of a (second) PhD to Jing Helmersson who was part of the successfully concluded EU funded FP7 project **DengueTools**. In conjunction with this defense, an open symposium, 'Infectious Disease Dynamics and Control' organised under Work Packages 8 & 9 of ZikaPLAN, was held on Feb 2, chaired by the Scientific Coordinator, Prof Annelies Wilder-Smith. From Feb 3-5 invited researchers attended a weekend retreat/workshop at Granö Beckasin (in the heart of North Swedish wilderness) to discuss aspects of Zika and other infectious disease dynamics and modelling.

From April 1 to May 30, the project prepared its 'First Periodic Report' that comprised technical and financial reports from the 25 member institutions in the consortium and submitted it on May 31. In June, we co-organised an International Zika conference together with other Zika Projects, **ZIKAlliance** and **ZIKAction**. During July to Sept, we revised and updated the ethical compliance program for the project, as an evaluation measure of our periodic report. After a couple of rounds of clarifications and intense communication and collaboration amongst all partners, the coordinators and the EU first report was accepted and cleared for interim payment in early November. It was a moment of joy for the coordinating office!

In the midst of this evaluation phase, on Sept 11 - 12, we organised our third general assembly, hosted by the London School of Hygiene and Tropical Medicine in the UK. This meeting marked the halfway point in the ZikaPLAN project. Scientists from all participating institutions shared the results of their efforts to tackle key knowledge gaps in the Zika virus outbreak and build response capacity for future epidemics.

Most impressively, the first two years of research conducted across the 15 work packages in ZikaPLAN has produced more than 60 peer-reviewed publications-many of which are in high impact journals. Together with our members under the leadership of University of Oxford, a digital network, **REDe**, has focused on building research capacity and preparedness to tackle emerging infectious disease outbreaks in Latin America and the Caribbean (<https://rede.tghn.org/>).



ZikaPLAN meeting at Granö Beckasin, outside Umeå, February 2018.

The Department of Epidemiology and Global Health at Umeå University is the coordinator of this large consortium funded by the European Union's H2020 research and innovation programme under Grant Agreement, 734584.

Professor Annelies Wilder-Smith (a medical doctor and specialist in public health and infectious diseases) is the scientific coordinator of ZikaPLAN and Guest Professor at Umeå University. Raman Preet (a dentist and global health researcher) is the co-coordinator and facilitates linkage with the European Commission.

Academic Seminars 2018

January	<p>Abdul Ghaffar Why is health policy and systems research important for low and middle income countries? The significance of academic research for healthcare in a fragile state</p> <p>Mazen Baroudi – <u>PhD plan seminar</u> Youth migrants' sexual and reproductive health and access to healthcare services in Sweden</p>
February	<p>Jing Helmersson – <u>Dissertation</u> Climate Change, Dengue and Aedes mosquitoes. Past Trends and Future Scenarios</p> <p>Open Symposium Infectious Disease Dynamics and Control</p> <p>Qualitative Academic Space Anne Gotfredsen - Visual methodology: using photovoice and photo elicitation in public health research</p>
March	<p>Nitin Gangane - <u>Dissertation</u> Breast cancer in rural India. Knowledge, attitudes, practices; delays to care and quality of life</p>
May	<p>Moses Tetui – <u>Pre-defense</u> Participatory approaches to strengthening district health managers' capacity: Ugandan and global experiences</p> <p>Utamie Pujilestari - <u>Pre-defense</u> Abdominal obesity among older populations in Indonesia: Patterns of socioeconomic and gender inequality and impacts on disability and death</p> <p>Anna Westerlund - <u>Dissertation</u> The role of implementation science in health care improvement efforts: Investigating three complex interventions</p> <p>Seminars: Case studies in health policy and systems research</p> <p>Nathanael Sirili – <u>Pre-defense</u> Health workforce development post-1990s' health sector reforms: the case of medical doctors in Tanzania</p> <p>Moses Tetui – <u>Dissertation</u> Participatory approaches to strengthening district health managers' capacity: Ugandan and global experiences</p> <p>Amaia Maquibar Landa – <u>Pre-defense</u> An insight into institutional responses to intimate partner violence against women in Spain</p> <p>Rebecka Assarsson How national gender inequality relates to suicide ideation in adolescents in 37 low- and middle-income countries</p>
August	<p>Linda Connor The Coal Rush and Beyond: Climate Change, Coal Reliance and Contested Futures, a Socio-Political Study</p> <p>Ida Linander – <u>Pre-defense</u> "It was like I had to fit into a category" People with trans experiences navigating access to trans-specific healthcare and health</p>
September	<p>Regis Hitimana – <u>Pre-defense</u> Using health economic evaluation to support evidence-informed health care decisions in low-resource settings. Case of antenatal care policy in Rwanda</p> <p>Alireza Khatami – <u>Dissertation</u> It is on my skin, on my soul, and on my life. Development of a disease-specific quality of life instrument for adult patients with acute cutaneous leishmaniasis in Iran.</p>
October	<p>Somesh Pratap Singh – <u>PhD plan presentation</u> Seminar Strengthening youth resilience and mental health in North India</p> <p>Puthy Pat – <u>PhD plan presentation</u> Seminar Promoting Mental Health of Young Prisoners in Cambodia</p>

October	Nathanael Sirili – <u>Dissertation</u> Health workforce development post 1990s' health sector reforms: the case of medical doctors in Tanzania
	Evelina Landstedt – <u>Associate Professor lecture</u> Increasing Mental health problems in young people – a matter of individual or societal responsibility?
	Johan Hambræus – <u>50% Seminar</u> Evaluation of international pain management mainly focused on zygapophyseal joint pain
	Cahya Utamie Pujilestari - <u>Dissertation</u> Abdominal obesity among older populations in Indonesia: Patterns of socioeconomic and gender inequality and impacts on disability and death
November	Naeemah Abrahams An overview of violence against women in South Africa with focus on femicide, sexual violence, health effects and prevention'.
	Amaia Maquibar Landa – <u>Dissertation</u> An insight into institutional responses to intimate partner violence against women in Spain.
	Edwinah Atusingwize - <u>PhD plan presentation</u> Practices, perceptions, experiences of alcohol and social media use, and feasibility and acceptability of an alcohol control social-media intervention among university students
	Elizabeth Rink Unraveling Indigenous Epistemologies and Western Science to Understand Sexual and Reproductive Health: The Use of Community Based Participatory Research Methodology
	Panduleni Penipawa Shimanda - <u>PhD plan presentation</u> The economical burden of rheumatic heart disease in Namibia
	Iratxe Perez Urdiales Analysing access of immigrant women to health care services in the Basque Country: A rights to health approach'
	Mikael Emsing – <u>PhD plan presentation</u> Conflict management and mental health among Swedish police trainees
	Chanvo Daka – <u>PhD plan presentation</u> Understanding the key drivers for maternal and child health in Mozambique: The role of socioeconomic inequality and the gaps between policy and implementation
	Moses Arinaitwe – <u>PhD plan presentation</u> Policy, Polity and Practice: Mitigating Retention gaps among certificate nurses and midwives in Uganda
	Ida Linander – <u>Dissertation</u> "It was like I had to fit into a category" – People with trans experiences navigating access to trans-specific healthcare and health.
	Per Nordin – <u>Pre-defense</u> Control and elimination. Public health interventions against tungiasis and schistosomiasis haematobium
December	Jing Helmersson Can qualitative study be generalized and integrated with quantitative data? A system dynamics model on happiness experience and life satisfaction
	Frida Jonsson – <u>Dissertation</u> The presence of the past; A life course approach to the social determinants of health and health inequalities in northern Sweden.
	Daniel Eid – <u>Pre-defense</u> The rough journey to access health care: the case of leishmaniasis disease in the Bolivian rainforest
	Kamila Al-Alawi – <u>Pre-defense</u> Exploring the feasibility of interdisciplinary teams in the management of diabetes at primary health care level in Muscat, Oman
	Regis Hitimana – <u>Dissertation</u> Using health economic evaluation to support evidence-informed health care decisions in low-resource settings. Case of antenatal care policy in Rwanda

Medical Faculty - The “Equity in Health” theme

National and international health policy goals include the reduction of health inequalities and promotion of equal opportunities for good health. In 2013, three departments/ units at the Medical Faculty, including Epidemiology and Global Health, started the theme Equity in Health to offer a meeting platform for senior researchers and doctoral students active in the field of equity in health. A PhD and Master’s level course, “Equity and Health” (3.5 ECTS), has been developed in close collaboration with

teachers from all three participating departments. The course was given for the third time in autumn 2018 with 25 participants.

A seminar series, which runs throughout the year, featured six speakers from the participating departments this year. Seminars attract 10-25 participants and offer ample time for discussion.

Contact: *Anni-Maria Pulkki-Brännström*

March	Dignity, participation and health among very old people Birgitta Olofsson, Department of Nursing
April	Sociocultural aspects of inequality in health Parvin Pooremamali, Department of Community Medicine and Rehabilitation
May	Making youth clinics accessible for mental health. A qualitative comparative analysis in northern Sweden Isabel Goicolea, Unit of Epidemiology and Global Health
September	Digital inclusion in later life – perspectives on Equity in Health Madeleine Blusi, Department of Community Medicine and Rehabilitation & Department of Computing Science
October	Can we all be Hans Rosling? The experience of Norrlands’ Observatory for Equity in Health and Health Care Miguel San Sebastian, Unit of Epidemiology and Global Health
November	Too much, too soon? Exploring increasing interventions in labor care Agneta Westergren, Department of Nursing, Sexual and Reproductive Health

Global Health Action – our flagship open-access journal

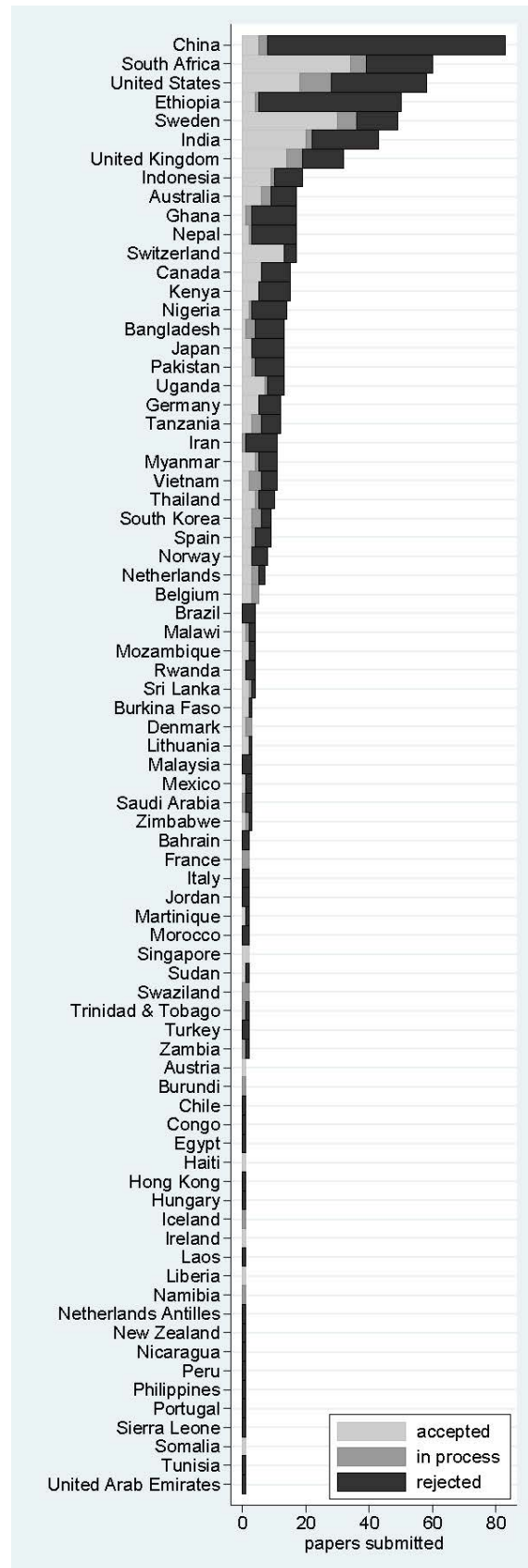
During 2018, Peter Byass took over from Nawi Ng as Chief Editor, and our journal continues to do well. In an Editorial at the end of 2018 (Global Health Action 12:1569847), we summarised the journal's progress since it was established in 2008, concentrating particularly on progress during 2017-18, since Taylor and Francis have been our publishers.

One of our major objectives is to provide a publishing platform for global health researchers around the world. Thus one important metric for us is the source of the manuscripts submitted, and the variation in acceptance between countries. The chart (from the Editorial) shows this for 2017-18.

China, with the world's largest population and a lot of researchers, was perhaps not surprisingly the leader in terms of manuscripts submitted. However, many of these had significant problems, resulting in a disappointingly low acceptance rate. Ethiopia also generated many submissions, but relatively low acceptance. By contrast Switzerland – possibly due to the “WHO effect” – achieved the highest acceptance rate. Swedish researchers – perhaps due to being the home country for the journal – also submitted a good number of manuscripts and achieved a reasonable acceptance rate. Many countries of course contributed to the long tail of the distribution with just a few submissions, but receiving manuscripts from 77 countries – around 40% of the world – was a good endorsement of the journal's global reach.

Other significant numbers from Google Scholar at the end of 2018 include an h-index of 55 (which means that 55 papers had 55 or more citations); and a total of 20,751 citations to our 1,349 published papers (mean 15 citations per paper).

Prospective authors legitimately need to know what to expect if they submit to a particular journal. Overall by the end of 2018, 58% of 2017-18 submissions had been rejected and 32% accepted. Mean time to rejection was 32 days, or to acceptance 118 days, and only 7% of manuscripts stayed in editing for more than 6 months. We look forward to your next submission!



Research Training

Our PhD program

During 2018, we offered 15 courses at doctoral level. Five of these (Health, Environment and Sustainability, Equity in Health, Methods in Social Epidemiology Evidence-based Public Health and Qualitative Data Analysis) are given in combination with courses for second-year MPH students.

Four new doctoral students were registered during 2018 - two from Tanzania as part of the research training partnerships funded by SIDA, and two from Sweden.

During 2018, a total of 43 research students (22 men and 21 women) were registered and actively engaged with their research activities at the Unit.

Thirty-two students are recruited from international research collaborations and eleven are Swedish based research students. Eleven PhD students defended their theses during 2018. In the period 1987–2018, a total of 144 PhD theses and 9 licentiate theses have been defended at the Unit.

During 2018 our PhD students organized two doctoral days. In the first one, the academic spaces were discussed, a visit to Gammlia Museum took place, and the day ended with a grill. In the second one (October), two main themes were discussed: “What does it mean to be a co-author, co-supervisor?” and a reflection on “research assumptions” based on Rosling’s book Factfulness. This was held in Vännäs, 20 km outside Umeå.



Grill outside Gammlia in the PhD day

In 2018 we received the first batch of three PhD students (one from Namibia, two from Uganda) funded by the Erling Persson Foundation. During spring of 2018, a new announcement was made and three new candidates were selected.



PhD students and supervisors in the PhD day

CONTACT: *Miguel San Sebastian*



Figure 11. Home countries of PhD students, 1987-2018.

Somali-Swedish research training programme

A bilateral research collaboration between Somalia and Sweden, which was originally launched in 1981/82, has since forged effective partnerships between several faculties of the Somali National University and numerous Swedish universities and research institutions. The research partnership, which focused primarily on capacity building, has led to the training of an impressive body of Somali academics and critical research outputs. A major outcome has been the uptake and use of evidence from research in policy formulation in Somalia, particularly in the health sector. However this “golden era” of the Somalia and Sweden partnership was interrupted by conflict and extended civil war in Somalia which began in the early 1990s.

In late 2013, for the first time in two decades, a health conference was held in Mogadishu, Somalia. The conference was co-organized by the Somali-Swedish Researcher's Association (SSRA) and co-sponsored by Forum Syd of Sweden through Sida (Swedish International Development Agency) support. As a result of this initiative, contacts were established between six Somali universities (two each from the south-central zone, Puntland and Somaliland), and five Swedish universities (Umeå, Uppsala, Karolinska, Lund and Dalarna). A joint conference was held in Umeå in 2014 and this was followed up with a workshop in 2015. Both events had active participation from representatives of the above academic institutions and SSRA.

There was broad agreement that it was crucial to continue to develop the partnership and realise the important opportunities that this provided. In particular, in regard to generating much needed evidence through implementation research that will ultimately contribute to effective capacity building and health system strengthening.

Accordingly, a two-year online research training programme began starting with a two-week intensive face-to-face course in October 2016 in Hargeisa, Somaliland. This event brought together 24 Somali participants from the six Somali universities and the three engaged ministries of health. The course focused on teaching the basics of epidemiological and qualitative design, analysis and interpretation. During the course, the trainees were guided on refining methodologies for their study projects to be implemented over a one- year period. After the mid-term seminar in October 2017, the final seminar was held in June 2018.

In October EpiGH hosted a workshop with representatives from all participating universities. The aim was to strengthen and advance the existing Somali-Swedish research collaboration and create a platform and road map that will guide the academic institutions to engage in strengthening the fragile Somali health system.

CONTACT: *Klas-Göran Sahlén*



Final seminars in Hargeisa, June 2018



Meeting in Umeå, January 2018



Meeting in Umeå, October 2018

PhD students and projects



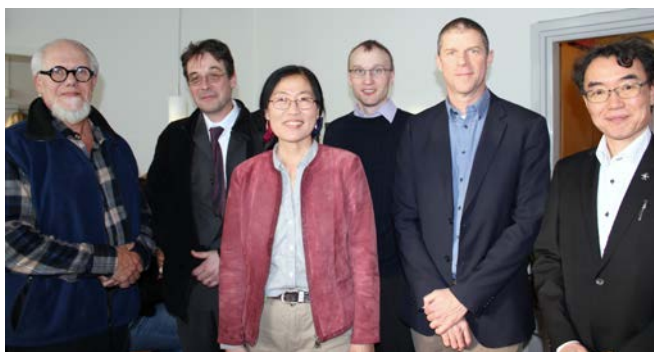
Table 5. PhD students registered EpiGH during 2018.

Name	Background	Country	Thesis subject	Main supervisor
Kamila Al Alawi	MD	Oman	Exploring the feasibility of interdisciplinary teams in the management of diabetes at primary health care level in Muscat, Oman.	Helene Johansson
Paul Amani	MA Public policy	Tanzania	Health care utilization by the elderly in Tanzania: Does insurance status matter? A case study of Igunga and Nzega districts.	Miguel San Sebastián
Mazen Baroudi (Registered 2018)	MD	Sweden	Youth migrants' sexual and reproductive health and access to healthcare services in Sweden	Anna-Karin Hurtig
Atakelti Derbew	MSc Public Health	Ethiopia	Under 5-year morbidity and mortality in Tigray Region, Ethiopia: an equity perspective.	John Kinsman
Daniel Eid Rodriguez	MD	Bolivia	Public health strategies for the control of Leishmaniasis in Bolivia.	Miguel San Sebastian
Rakhal Gaitonde	MD	India	Policy formulation and implementation of community accountability & governance mechanisms in the National Rural Health Mission in Tamilnadu, India	Anna-Karin Hurtig
Nitin Gangane (Dissertation 2018)	MD	India	Breast cancer scenario in India: Knowledge, attitude, practices, delay in presentation and management, post treatment quality of life and self-coping	Miguel San Sebastian
Hendrew Gekawaky	Nurse	DR Congo	Masculinity and HIV prevention in DR Congo	Kerstin Edin
Tsigemariam Teklu Gebereslassie	BSc Public Health	Ethiopia	Epidemiology of Visceral Leishmaniasis and epidemiological interaction with concomitant infections in north Ethiopia.	Anna Myléus
Anne Gotfredsen	MSc Global Health	Sweden	Samhällsaktiva ungdomars kollektiva förmåga att utöva inflytande över sociala bestämningsfaktorer för emotionellt välbefinnande.	Evelina Landstedt
Johan Hambræus	MD	Sweden	Evaluation of intervention al pain management mainly focused on zygapophysical joint pain	Lars Lindholm
Jing Helmersson (Dissertation 2018)	PhD Atomic Physics & Laser Spectr., MPH	Sweden	The development of a dynamic epidemiological weather driven model.	Joacim Rocklöv
Regis Hitimana (Dissertation 2018)	MSc Epidemiology	Rwanda	Cost-effectiveness of maternal health interventions in Rwanda.	Anni-Maria Pulkki-Brännström
Junia Joffer	BSc Social Science, MPH	Sweden	Self-rated health in adolescence – Experiences of and predictors for good health	Lars Jerdén
Frida Jonsson (Dissertation 2018)	Public Health	Sweden	A life course approach to social determinants of mental Health	Per Gustafsson
Robert Jonzon	Nurse, MPH	Sweden	Health examinations of asylum seekers within the Swedish health care system	Anna-Karin Hurtig

Name	Background	Country	Thesis subject	Main supervisor
Alireza Khatami (Dissertation 2018)	MD	Iran	Development and validation of a disease-specific instrument for evaluation of quality of life in adult Iranian patients with acute old world cutaneous leishmaniasis	Berndt Stenberg
Prasad Liyanage	BSc Medicine and bachelor of surgery	Sri Lanka	Implementation of Early warning decisions for control and prevention of dengue in Kalutara (Sri Lanka)	Joacim Rocklöv
Septi Kurnia Listari	BA Nutrition	Indonesia	The role of social relationship on health ageing among European population	Nawi Ng
Utamie Pujilestari (Dissertation 2018)	Nurse, MPH	Indonesia	Risk factor of type 2 diabetes and their trends in Purworejo district, Indonesia	Nawi Ng
Ida Linander (Dissertation 2018)	MD	Sweden	How are sex, gender, mental health interwoven? A gender theoretical approach	Lisa Harryson
Anna Lundgren	MD	Sweden	Visualisering av asymtomatisk arteriosklerotisk sjukdom inom VIPVIZA projektet – Aspekter av nya metoder för optimal primärprevention av kardiovaskulär sjukdom	Margareta Norberg
Vu Thi Quynh Mai (Registered 2018)	MSc Health economics	Vietnam	Feasibility and applicability of health related quality of life in Vietnam healthcare planning system	Klas-Göran Sahlén
Yercin Mamani Ortiz (Registered 2018)	MD	Bolivia	Cardiovascular diseases in Cochabamba, Bolivia: Identifying preventable risk factors and assessing social inequalities.	Paola Mosquera Mendez
Amaia Maquibar Landa (Dissertation 2018)	Nurse, MSc Public health	Spain	Exploring intimate partner violence in the Basque country: a focus on young people and institutions	Isabel Goicolea
Chama Mulubwa (Registered 2018)	BSc Biological sciences, MPH	Zambia	Community-based reproductive and health system for adolescents in Zambia: A realist evaluation approach	Isabel Goicolea
Per Nordin	Statistician	Sweden	Terms for public health interventions against tungiasis and schistosomiasis haematobium	Ingela Krantz
Susanne Ragnarsson	Nurse	Sweden	Recent pain in school-aged children and the relation to academic performance – an epidemiologic study	Solveig Petersen
Aditya Ramadona	MSc Environmental science	Indonesia	Developing and validating a dynamic model of dengue transmission with application to early warning and climate change projections	Joacim Rocklöv
Julia Schröders	MPH	Sweden	Chronic disease and disability in a transitional lower middle-income country: Exploring the causal role of social networks in Indonesia	Miguel San Sebastián
Melissa Scribani	BS in Biology, MPH	US	Consequences of obesity and determinants of weight maintenance: a study of adult populations in rural New York State and Västerbotten County, moving towards an intervention to stem the tide of the obesity epidemic	Margareta Norberg
Natanael Sirili (Dissertation 2018)	MSc Health System	Tanzania	Training and deployment of Human resources for health in Tanzania	Anna-Karin Hurtig

Name	Background	Country	Thesis subject	Main supervisor
Anna Stenling	Civ engineer, BA economics	Sweden	Hälsoekonomisk utvärdering av hjärt-kärlförebyggande befolkningsintervention – Västerbottens hälsoundersökningar	Fredrik Norström
Sulistyawati	MPH	Indonesia	Mapping human health vulnerability and response to climate change in Yogyakarta, Indonesia	Åsa Holmner
Moses Tetui (Dissertation 2018)	Sociologist, MPH	Uganda	Participatory approaches to program design and implementation: lessons from a maternal health program in Eastern Uganda.	Anna-Britt Coe
Pamela Tinc	MPH	US	Translating evidence-based programs into practice: Exploring barriers and facilitators to research translation in public health using the consolidated framework for implementation research.	Kristina Lindvall
Nadja Trygg	Health sciences, MPH	Sweden	Complex inequalities in mental health	Anna Månsdotter
Malale Tungu	MA Economics	Tanzania	Health care priority setting for elderly under decentralized governance system in rural Tanzania; A case of Nzega and Igunga districts.	Lars Lindholm
Anna Westerlund (Dissertation 2018)	MA psychology, BA Sociology	Sweden	Handling important conditions for change during initial implementation of interventions to develop work practices in healthcare.	Monica Nyström

Dissertation events and thesis abstracts



JING HELMERSSON



NITIN GANGANE



ANNA WESTERLUND



MOSES TETUI



ALIREZA KHATAMI



NATHANAEL SIRILI



CAHYA UTAMIE PUJILESTARI



AMAIA MAQUIBAR LANDA



IDA LINANDER



FRIDA JONSSON



REGIS HITIMANA

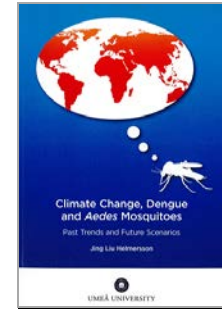
JING HELMERSSON

Climate Change, Dengue and *Aedes* Mosquitoes: Past Trends and Future Scenarios

Thesis defended: February 2, 2018

Supervisors: Joacim Rocklöv, Åke Brännström, Kristie Ebi, Eduardo Massad

Opponent: Richard Paul, Functional Genetics of Infectious Diseases Unit, Institut Pasteur, Paris



Background: Climate change, global travel and trade have facilitated the spread of *Aedes* mosquitoes and have consequently enabled the diseases they transmit (dengue fever, Chikungunya, Zika and yellow fever) to emerge and re-emerge in uninfected areas. Large dengue outbreaks occurred in Athens in 1927 and in Portuguese island, Madeira in 2012, but there are almost no recent reports of *Aedes aegypti*, the principal vector, in Europe. A dengue outbreak needs four conditions: sufficient susceptible humans, abundant *Aedes* vector, dengue virus introduction, and conducive climate. Can *Aedes aegypti* establish themselves again in Europe in the near future if they are introduced? How do the current and future climate affect dengue transmission globally, and regionally as in Europe? This thesis tries to answer these questions.

Methods: Two process-based mathematical models were developed in this thesis. Model 1 describes a vector's ability to transmit dengue – vectorial capacity – based on temperature and diurnal temperature range (DTR). Model 2 describes vector population dynamics based on the lifecycle of *Aedes aegypti*. From this model, vector abundance was estimated using both climate as a single driver, and climate together with human population and GDP as multiple drivers; vector population growth rate was derived as a threshold condition to estimate the vector's invasion to a new place.

Results: Using vectorial capacity, we estimate dengue epidemic potential globally for *Aedes aegypti* and in Europe for *Aedes aegypti* and *Aedes albopictus*. We show that mean temperature and DTR are both important in modelling dengue transmission, especially in a temperate climate zone like Europe. Currently, South Europe is over the threshold for dengue epidemics if sufficient dengue vectors are present. *Aedes aegypti* is on the borderline of invasion into the southern tip of Europe. However, by end of this century, the invasion of *Aedes aegypti* may reach as far north as the middle of Europe under the business-as-usual climate scenario. Or it may be restricted to the south Europe from the middle of the century if the low carbon emission – Paris Agreement – is implemented to limit global warming to below 2°C.

Conclusion: Climate change will increase the area and time window for *Aedes aegypti*'s invasion and consequently the dengue epidemic potential globally, and in Europe in particular. Successfully achieving the Paris Agreement would considerably change the future risk scenario of a highly competent vector – *Aedes aegypti*'s – invasion into Europe. Therefore, the risk of transmission of dengue and other infectious diseases to the mainland of Europe depends largely on human efforts to mitigate climate change.

NITIN GANGANE

Breast cancer in rural India: knowledge, attitudes, practices; delays to care and quality of life

Thesis defended: March 28, 2018

Supervisors: Miguel San Sebastián, Nawi Ng, Anna-Karin Hurtig

Opponent: Professor Peter Vedsted, Department of Public Health, Aarhus University, Denmark



Background: Cancer is a major public health problem globally. The incidence of cancer is increasing rapidly in many low- and middle-income countries like India due to the epidemiological transition. At present, breast cancer is the leading cancer in females in many countries including India. In spite of all of the epidemiological evidence pointing towards a surge in breast cancer cases, the National Cancer Control Programme of India has not yet taken sufficient measures to understand the disease burden and to plan a course of action to cope with the increasing cancer burden.

Aim: The aim of this thesis is to explore the knowledge, attitudes, and practices regarding breast cancer in a predominantly rural district of central India along with identifying the determinants of delays to care and quality of life (QoL) in breast cancer patients. This understanding may help to strengthen the health system by improving breast cancer control and management programmes and the delivery of care.

Methods: This thesis combines findings from two cross-sectional studies in the predominantly rural district of Wardha. The first study was a population-based cross-sectional survey conducted on 1000 women, in which face-to-face interviews were conducted with the help of a questionnaire covering demographic and socio-economic information, knowledge, attitudes and practices regarding breast cancer screening and breast cancer. The Chi-square test for proportions and t-test for means were used and multivariable linear regression analysis was performed to study the association between socio-demographic factors and knowledge, attitude and practices. The second study was a patient-based cross-sectional study conducted in 212 breast cancer patients. All 212 breast cancer patients were included for patient delay. However, 208 female breast cancer patients could be included for system delay, quality of life and self-efficacy, as there was some information lacking in 4 patients. Information on socio-demographic characteristics, patient and system delays and also reasons for the delays were collected. The study also utilised WHOQOL-BREF for QoL and self-efficacy measurements in breast cancer patients. Socio-demographic determinants were examined by frequencies and means and multivariable logistic and linear regression analysis to assess the relationship between exposure and outcome variables.

Results: One third of the respondents had not heard about breast cancer, and more than 90% of women from both rural and semi-urban areas were not aware of breast self-examination. Patient delay of more than 3 months was observed in almost half of participants, while a system delay of more than 12 weeks was seen in 23% of the breast cancer patients. The late clinical stage of the disease was also significantly associated with patient delay. The most common reason for patient delay was painlessness of the breast lump. Incorrect initial diagnosis or late reference for diagnosis were the most common reasons for diagnostic delay while the high cost of treatment was the most common reason for treatment delay. Self-efficacy was positively associated with QoL, after adjusting for socio-demographic factors, patient delay and clinical stage of disease.

Conclusions: Our research showed poor awareness and knowledge about breast cancer, its symptoms and risk factors in women in rural India. Breast self-examination was hardly practiced, although the willingness to learn was high. Although the ideal is no delay in diagnosis and treatment, diagnostic and treatment delays observed in the study were not much higher than those reported in the literature, even from countries with good health facilities. However, further research is needed to identify access barriers throughout the process of cancer diagnosis and treatment. The quality of life was moderately good and its strong relationship with self-efficacy makes these two dimensions of breast cancer patients relevant enough to be considered for health workers and policy makers in the future. Interventions focused on improving breast awareness in women and the breast cancer continuum of care should be implemented at a district level. The role of community social health activists in breast cancer prevention should be encouraged and the implementation of an operational national breast cancer program is urgently required.

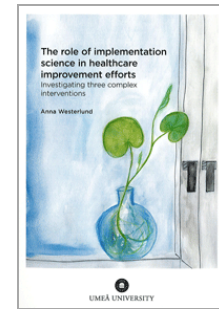
ANNA WESTERLUND

The role of implementation science in healthcare improvement efforts: investigating three complex interventions

Thesis defended: May 9, 2018

Supervisors: Monica Nyström, Anneli Ivarsson, Rickard Garvare, Eva Eurenus

Opponent: Docent Johan Thor, Jönköping Academy for Improvement of Health and Welfare, Högskolan i Jönköping



For decades, scholars have found significant gaps between the knowledge available and the knowledge applied in healthcare. Many potential benefits of adequate knowledge based interventions are therefore never achieved. A considerable body of knowledge has evolved on how to promote a better uptake of evidence-based knowledge into routine use. Even so, the actual impact and usefulness of implementation research findings among healthcare practitioners have not been extensively studied.

Accordingly, the overall aim of this thesis is to contribute to the understanding of how the implementation of complex interventions into healthcare can be improved. This is done by investigating whether some of these efforts do correspond with available scientific knowledge on implementation.

The thesis is based on three cases contributing to four studies. The cases studied are: the National Perinatal Patient Safety program (NPPS), the Dynamic and Viable Organisation initiative (DVO), and the International Child Development Program (ICDP). All studies focus on the early stages of implementation.

A mixed methods approach was adopted, involving both qualitative and quantitative methods. Data collection consisted of interviews, questionnaires, observations, and process diaries. Qualitative content analysis (conventional and directed), descriptive and non-parametric statistics were used. The focus was on implementation strategies used by healthcare actors in relation to factors influencing implementation processes and outcomes. More specifically, healthcare actors' perspectives on such factors and whether they were addressed by the strategies used, was investigated. An evaluation of implementation outcomes by process evaluation was also part of the thesis.

The healthcare actors in focus were the adopters, i.e. practitioners expected to change their work practices, and implementation facilitators. The latter refer to actors with a more or less explicit responsibility to implement new practices or interventions aimed at improving the quality and effectiveness of the provided health services.

Variation was found regarding how the implementation strategies used in the three cases corresponded with available scientific knowledge on implementation. In Case NPPS, the implementation facilitators planned, designed, and ensured that the core interventions of the implementation strategy were executed in a rational manner. Several important implementation factors were addressed by the strategy. The process evaluation of effects on readiness for change by the development of a team mental model among adopters showed positive results.

In Case DVO a strategy was used that evolved over time, partly based on raised questions and feedback from staff and managers involved. The strategy can be described as an intuitive 'socially accomplished activity'. This strategy involved addressing 'Implementation Process-related factors' in order to affect motivation and increase the tension for change among adopters.

In Case ICDP, the results reflected a shortage of strategies during the early stage of implementation. The main intervention was the stepwise ICDP-education. A more comprehensive implementation strategy covering implementation factors highlighted as important among adopters was not developed. The process evaluation revealed vague directives on what was expected regarding the use and adaptation of ICDP to current practice versus preservation of fidelity to the original ICDP. This situation resulted in a rather large variation in how the changes in work practices were perceived among the health centres involved. No health centre practiced ICDP in its original form.

A new knowledge-practice gap is discussed based on the findings in this thesis: a gap between the scientific knowledge on implementation and the actual implementation strategies used in practice during improvement efforts initiated by healthcare actors. The findings show that correspondence between scientific knowledge on implementation and what is actually done in order to accomplish change in practice might be more random (or implicit) than systematic.

The question of how to transfer scientific knowledge on implementation into user-friendly resources for practitioners is discussed. A tentative model is suggested, which contributes to existing determinant frameworks by focusing on relations among factors. The model may be used in healthcare practice, to guide the design of an implementation strategy (or as a pathway for tailored implementation interventions) and aid the assignment of responsibilities in relation to factors that are known to affect implementation processes and outcomes. The question of how to transfer models and frameworks into user-friendly resources needs further attention. It is suggested that action oriented research aiming at further developing and establishing the concept of 'practical implementation science' should be conducted. This could be a way of bridging the knowledge-practice gap in healthcare.

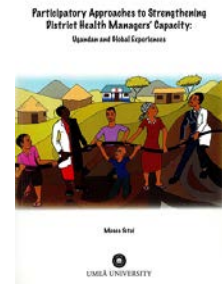
MOSES TETUI

Participatory approaches to strengthening district health managers' capacity: Ugandan and global experiences

Thesis defended: May 18, 2018

Supervisors: Anna-Britt Coe, Anna Karin Hurtig, Elisabeth Ekirapa, Suzanne Kiwanuka

Opponent: Professor Bart Criel, Department of Public Health, Institute of Tropical Medicine, Antwerpen, Belgium



Introduction: Residents of low in-come countries have persistently suffered poor health outcomes, modest progress made over time notwithstanding. Weak health systems are one of the key reasons for the less than optimum progress. These health systems are constrained by inadequately equipped managers who play a main role in curbing this progress. Strengthening the capacity of health managers capacity is one of the known ways to improve the performance of health systems. This study examined strategies for strengthening the capacity of health managers at the sub-national level, with a special focus on the Participatory Action Research (PAR) approach.

Methods: I used an emergent qualitative design which included both primary data collection and a literature review. Primary data collection techniques included individual interviews, Focus Group Discussions (FGDs), participant observations, and a review of project documents and meeting minutes, while searching for peer-reviewed databases was used for the literature review. Several analytical tools were adopted to answer the objectives, including the grounded theory, content and thematic analysis approaches. The Critical Interpretive Synthesis (CIS) method was used to analyse the literature reviewed.

Findings: Stakeholders' perceived the approaches to strengthening health managers' capacity as an overarching process comprised of three interconnected sub-processes namely: the professionalizing of health managers, the use of engaging approaches to learning, and the availability of a supportive work environment. PAR as an engaging approach to learning was experienced by stakeholders as a nuanced awakening approach. On the one hand, stakeholders felt engaged, valued, responsible, awakened and a sense of ownership. On the other hand, they felt conflicted, stressed and uncertain. The PAR approach enhanced health managers' capacity to collaborate with others, be creative, attain goals, and review progress. Expanded spaces for interaction, the encouragement of flexibility, the empowerment of local managers and the promotion of reflection and accountability enabled this enhancement. Lastly, the literature reviewed revealed five interrelated elements for harnessing PAR to strengthen health managers capacity. These were: a shared purpose, skilled facilitation and social psychological safety, activity integration into organizational procedures, organizational support and supportive external monitoring.

Conclusions: Health managers have a central role in strengthening health systems; hence the formalization of their role, especially within the public-sector, is needed. In addition, significant investments into developing and strengthening their capacity is required. Strengthening the capacity of health managers is an iterative process that draws synergies from different approaches. The process leans on formal trainings as well as more engaging means of learning, such as PAR. As an engaging approach to learning, PAR expands interaction spaces, provides inclusiveness and flexibility, promotes local ingenuity and shared responsibility, and allows for monitoring and learning. PAR had positive effects on the strengthening of the capacity of health managers while at the same time achieving other project outcomes. Participatory approaches are hence relevant for dealing with the complex challenges bedevilling health systems. The approach nonetheless should be applied with a more nuanced appreciation of the challenges when using it and the elements for harnessing it to strengthen health systems.

ALIREZA KHATAMI

It is on my skin, on my soul, and on my life: development of a disease-specific quality of life instrument for adult patients with acute cutaneous leishmaniasis in Iran

Thesis defended: September 21, 2018

Supervisors: Berndt Stenberg, Maria Emmelin, Hans Stenlund, Alireza Firooz

Opponent: Associate Professor Farhad Handjani, Department of Dermatology, Shiraz University of Medical Sciences, Iran



Background: Cutaneous leishmaniasis (CL), is the most common form of a group of diseases known as leishmaniasis. They are caused by obligatory intracellular protozoa from the genus *Leishmania* and transmitted by sandflies. Over 350 million people are at risk of getting leishmaniasis and 1,000,000 to 1,200,000 individual get CL each year, the majority of them are living in developing countries. CL may affect a patient's physical and mental health, and social relations impairing his/her quality of life (QoL).

Aim: The aim of this thesis was to develop a disease-specific instrument for measuring QoL in adult patients suffering from the acute form of CL in Iran according to a needs-based approach.

Methods: This thesis used a mixed-method approach and was based on two quantitative studies and one qualitative study. The first study was a systematic review on the randomized controlled clinical trials (RCTs) conducted on acute CL in the Old World. The second one was a qualitative content analysis study conducted through interviews with patients with CL in Iran. The third study was a psychometric evaluation of an instrument that was developed according to the results of the second study. For making a QoL instrument with fundamental measurement properties, the Rasch method was used.

Results: The findings of the first paper demonstrated that the majority of the 50 reviewed RCTs were of poor quality of conduct and report. An important finding was that none of those studies included a patient-reported outcome in their primary, secondary, or even tertiary outcome assessments. To obtain the patients' lived experience and perspectives on their disease, 12 individual in-depth interviews were conducted with patients with CL. Four themes were developed: "Fearing an agonizing disease" reflects patients' experiences of disease development resulting in sadness and depression, "struggling to cope" and "taking on the blame" both illustrate how patients experience living with the disease, which included both felt and enacted stigma as major social concerns. "Longing for being seen and heard" refers to patients' experiences with healthcare as well as their expectations and demands from communities and healthcare system to be involved in closing the knowledge and awareness gap. The third study was conducted as a survey on 107 patients with acute CL answering 50 questions with four response categories focusing different aspects of QoL, named "P-CL-QoL", an acronym for Preliminary Cutaneous Leishmaniasis Quality of Life instrument. The Rasch fitness criteria for the original 50-item questionnaire indicated that it was not optimal for fundamental measurement of the QoL in CL patients. Two more Rasch models were developed by merging the last two response categories and making a 3-point Likert scale, and the three last response categories, making a dichotomized "Yes" and "No" response choices to each item. The final 34-item instrument with dichotomous responses showed improved measurement properties including very good targeting and item-separation index, internal consistency (Cronbach's $\alpha=0.94$), and a log-likelihood Chi square=2242.50 (degree of freedom=2640, and $P=1.000$) indicating excellent fitting to the Rasch model. This version was named Cutaneous Leishmaniasis Quality of Life instrument (CL-QoL). According our findings, the mean (\pm standard deviation) of raw scores and 0-34 scaled measures of the participants were 15.9 (± 9.2) and 16.8 (± 6.9), respectively. The impact of CL on the QoL of the patients was none to minimal in 17.0 %, mild in 25.0 %, moderate in 31.8 %, high in 12.5 %, and very high in 13.7 % of the participants. QoL impairment was not related to the sex and age of the individuals, geographic location where CL was caught, duration of the disease, and its severity ($P>0.05$).

Conclusion: This thesis demonstrated that there is a lack of patients' reported outcomes in clinical trials on CL, and that mental and social dimensions of CL are complex and adversely affect patients' lives by causing psychological burden and limiting their social interactions. The health authorities have to plan programs to increase the disease awareness in communities and among healthcare professionals to prevent the existing stigma and improve patients' social condition and medical care. While we could suggest a disease-specific QoL measurement instrument through our third study, we acknowledge that the developed instrument may not be optimal and has to be validated in other populations, preferably using the Rasch method.

NATHANAEL SIRILI

Health workforce development post-1990s health sector reforms: the case of medical doctors in Tanzania

Thesis defended: October 5, 2018

Supervisors: Anna-Karin Hurtig, Angwara Kiwara, Isabel Goicolea, Gasto Frumence

Opponent: Ottar Mædstad, CMI - Chr. Michelsen Institute, Bergen, Norge



Background: Health systems in many low- and middle-income countries suffer from critical shortages and inequitable geographical distribution of the health workforce. Since the 1940s, many low- and middle-income countries have passed through different regimes of health sector reforms; the most recent one was in the 1990s. Tanzania is a good example of these countries. From the 1990s, Tanzania has been implementing the third generation of health sector reforms. This thesis analysed the health workforce development following the 1990s health sector reforms in Tanzania.

Methods: An exploratory case study employing both quantitative and qualitative research approaches was used to analyse the training, deployment, and retention of medical doctors about two decades following the 1990s health-sector reforms. The quantitative approach involved analysis of graduation books and records from the Medical Council of Tanganyika to document the number of doctors who graduated locally and abroad, a countrywide survey of available doctors as of July 2011, and analysis of staffing levels to document the number of doctors recommended for the health sector as of 2012. The gap between the number of available and required doctors was computed by subtracting available from required in that period. The qualitative approach involved key informant interviews, focus group discussions, and a documents review. Key informants were recruited from districts, regions, government ministries, national hospitals, medical training institutions in both the public and private sectors, Christian Social Services Commission and the Association of Private Health Facilities in Tanzania. Focused group discussion participants were members of Council Health Management Teams in three selected districts. Documents reviewed included country human resources for health profiles, health sector strategic plans, human resources for health strategic plans and published and grey literature on health sector reforms, health workforce training, and deployment and retention documentation. For the training, analysis of data was done thematically with the guide of policy analysis framework. For deployment and retention, qualitative content analysis was adopted.

Results: Re-introduction of the private sector in the form of public-private partnerships has boosted the number of doctors graduating annually seven-fold in 2010 compared to that in 1992. Despite the increase in the number of doctors graduating annually, their training faces some challenges, including the erosion of university autonomies prescribed by the law; coercive admission of many medical students greater than the capacity of the medical schools, thus threatening the quality of the graduates; and lack of coordination between trainers and employers. Tanzania requires a minimum of 3,326 doctors to attain the minimum threshold of 0.1 doctor per 1,000 population, as recommended by the World Health Organization. However, a countrywide survey has revealed the existence of around 1,300 doctors working in the health sector—almost the same as the number before the reforms. Failure to offer employment to all graduating doctors, uncertainties around the first appointment, failure to respect doctors' preferences for first-appointment workplaces, and the feelings of insecurity in going to districts are among the major challenges haunting the deployment of doctors in Tanzania. For those who went to the districts, the issues of unfavourable working conditions, unsupportive environment in the community, and resource scarcity have all challenged their retention.

Conclusions: The development of human resources for health after the 1990s health sector reforms have to some extent been contradictory. On the one hand, Tanzania has succeeded in training more doctors than the minimum it requires, despite some challenges facing the training institutions. On the other hand, failure to deploy and retain an adequate number of doctors in its health system has left the country to continue suffering from a shortage and inequitable distribution of doctors in favour of urban areas. For health sector reforms to bring successes with minimal challenges in health workforce development, a holistic approach that targets doctors' training, deployment, and retention is recommended.

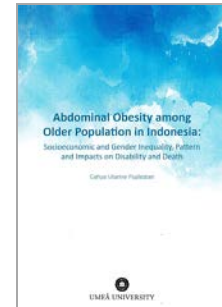
CAHYA UTAMIE PUJILESTARI

Abdominal obesity among older population in Indonesia: socioeconomic and gender inequality, pattern and impacts on disability and death

Thesis defended: October 26, 2018

Supervisors: Nawi Ng, Lennarth Nyström, Margareta Norberg, Lars Weinehall, Mohammad Hakimi

Opponent: Professor Alexandra Krettek, Institutionen för hälsa och lärande, Högskolan i Skövde, Sverige



Background: Population ageing has contributed to the rise of chronic non-communicable diseases (NCDs). Concurrently, obesity prevalence is increasing in all age groups and has become a serious public health problem. Obesity is the main risk factors of the major chronic NCDs such as type 2 diabetes and has been linked to disability and mortality. Studies of socioeconomic inequalities in obesity among older people in Indonesia are scarce. Understanding socioeconomic inequalities are essential to develop appropriate health programme to improve the population health. This thesis describes the pattern of socioeconomic and gender inequality in abdominal obesity and analyses its impact on disability and all-cause mortality among older people in Indonesia.

Methods: This thesis is based on four studies conducted in Purworejo Health and Demographic Surveillance System (HDSS) site in Purworejo district, Central Java, Indonesia. This thesis uses both quantitative and qualitative methods. The qualitative study (sub-study 1) was based on 12 Focus Group Discussions (FGDs) with 68 participants from different age groups, sex, and living area. Content analysis was used to describe the community perceptions on diabetes and its risk factors. The quantitative studies (sub-study 2 to 4) utilized longitudinal panel data from the 1st (n = 11,753 individuals) and 2nd wave (n = 14,235 individuals) of the WHO-INDEPTH Study on global AGEing and adult health (SAGE) conducted among all individuals aged 50 years and older in 2007 and 2010. Sub-study 2 used concentration index and decomposition analysis to analyse the pattern of socioeconomic and gender inequality in abdominal obesity. Sub-study 3 used linear regression to examine the association between abdominal obesity and disability. Sub-study 4 used Cox regression analysis with restricted cubic splines to examine the impact of abdominal obesity on all-cause mortality.

Results: The FGDs reveals that the community holds unrealistic optimism in perceiving diabetes its risk factors. The community stated that chronic NCD such as diabetes is caused by modern lifestyles and mostly attacks those who are considered as the wealthy (sub-study 1). Socioeconomic inequality in abdominal obesity exists in Purworejo HDSS. Abdominal obesity was more prevalent among the affluent men and women, with a lesser inequality gaps between rich and poor among women. The main contributing factors to inequalities in abdominal obesity were occupation, wealth index, and education (sub-study 2). In three-year period, the mean waist circumference decreased significantly among the poor. An increase in waist circumference was significantly associated with disability, and the poor people were more disabled compared to the rich (sub-study 3). A U-shaped association was observed between waist circumference and all-cause mortality, particularly among women. This indicated an increased risk of mortality in the lower and upper end of the waist circumference distribution. The poor with low waist circumference had a higher risk of mortality than the rich (sub-study 4).

Conclusion: Abdominal obesity was disproportionately more prevalent among older Indonesian women. Though the wealthy people have higher burden of abdominal obesity, the poor people experiences more disability and higher risk of death. Misperception on chronic NCDs and its risk factors exist among the Indonesian population. Abdominal obesity prevention strategies are needed to prevent chronic NCDs, disabilities, and mortality among Indonesian older population. The prevention strategies should be culturally sensitive and address all socioeconomic levels. Special attention should be given to disadvantaged women as the most vulnerable group.

AMAIA MAQUIBAR LANDA

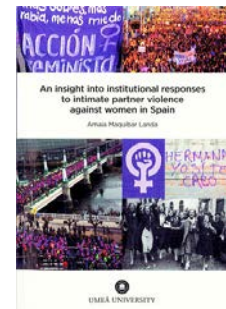
An insight into institutional responses to intimate partner violence against women in Spain

Thesis defended: November 9, 2018

Supervisors: Isabel Goicolea, Anna-Karin Hurtig, Carmen Vives, Itziar Estalella

Opponent: Professor Naeemah Abrahams,

School of Public Health, University of Western Cape, South Africa.



Background: Intimate Partner Violence (IPV) has been widely acknowledged as a major public health issue and a human rights concern. The international burden of this type of violence have lead countries to develop institutional responses to address the consequences for women as well as to reduce its prevalence. With this aim, the Spanish government enacted in 2004 one of the most comprehensive laws in the world. Among all sectors, the role of health care professionals in the identification, management and prevention of IPV becomes essential. Thus, this thesis analyses institutional responses to intimate partner violence against women in Spain, focusing on the public health-care sector.

Methods: This thesis is based on three qualitative papers and one mixed methods paper. Data collection was conducted through in-depth interviews in the two first papers, documentary review and in-depth interviews in the third paper and focus groups in the fourth paper. In the first paper I used thematic analysis to explore the perceptions of professionals working in different sectors regarding institutional responses to IPV with special attention to prevention campaigns aimed at young people. In the second paper we used grounded theory to develop a conceptual model representing the diverse responses generated when attempting to integrate a response to IPV into a biomedical health system. The third paper mapped and explored the training in IPV that nursing students receive at the undergraduate level in Spain through the revision of public documents and individual in-depth interviews. The fourth paper explored nursing students' perceptions of, and attitudes towards, IPV after having received specific training in the topic.

Main findings: One of the main findings in Paper I was that the sustainability of programmes to address IPV was always jeopardized by politicians and colleagues that did not considered that IPV should be prioritized. Concerning prevention campaigns, participants in that study perceived that they sent messages that did not fit young people's needs and thus were ineffective. Besides, they stressed that institutional responses failed to focus on on men to discourage violence. The main finding of Paper II was the coexistence of a range of responses in the health sector that included avoidance, voluntariness, medicalization and comprehensiveness. Attitudes and beliefs of health-care professionals about IPV were strongly related with the development of this variety of responses. In relation with training (Paper III), the majority of nursing training programmes in the country have incorporated IPV training in their curricula. However, there was a great variability between universities in the topics included in the training. Which topics were included in the training programme was influenced by lecturers' perceptions of IPV. Nursing students who have received training on IPV (Paper IV) showed an increased acknowledgement of IPV as a health issue and consequently considered that early identification of IPV and referral were part of their nursing role. However, readiness to act was limited by persistence of myths around IPV as believing false accusations of IPV being widespread.

Conclusions: Policies enacted with the aim of reducing IPV and its consequences in Spain have been essential for initiating institutional responses to IPV, specifically in the health sector. However, responses have been weakly institutionalized so far, favouring front line workers or 'street level bureaucrats' exercise of discretion. This leads to inequalities between and within regions in the country in the implementation of the policies. The most relevant element influencing the use of discretion in the case of IPV responses was the understanding of the relationships between gender inequities and IPV. The predominant gender regime of the institutions responsible for policy implementation influenced political and economic support for the development of responses to IPV.

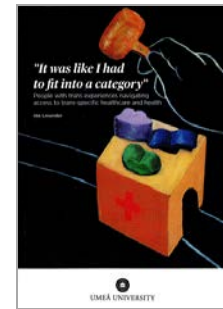
IDA LINANDER

“It was like I had to fit into a category”: people with trans experiences navigating access to trans-specific healthcare and health

Thesis defended: November 23, 2018

Supervisors: Lisa Harryson, Isabel Goicolea, Anne Hammarström, Erika Alm

Opponent: Docent Jan Wickman, Svenska social- och kommunalhögskolan, Helsingfors, Finland



Background: Trans issues have received increased attention over the last couple of years and important changes have been made in the legislation relating to gender reassignment and in trans-specific healthcare practices. At the same time, many people with trans experiences report poor mental health, bad experiences when encountering the healthcare and a tendency to postpone seeking care due to being badly treated. Previous research has also shown that gender norms guide the evaluation that precedes access to gender-confirming medical procedures. Critical studies examining practices within trans-specific healthcare in the Swedish context and health among people with trans experiences are limited, especially qualitative interview studies involving people with trans experiences. The overall aim is to analyse how constructions of trans experiences and gender can affect trans-specific healthcare practices, experiences of navigating access to gender-confirming medical procedures, inhabitancy of different spaces and, ultimately, health.

Methods: The thesis includes three sub-studies (generating four articles): two interview studies that build on interviews with 18 people with trans experiences, and a policy analysis of the guidelines for trans-specific healthcare published by the Swedish National Board of Health and Welfare. For the interview studies, grounded theory and thematic analysis were used as the analytical method. The guidelines were analysed using Bacchi's method: "What's the problem represented to be?".

Results: The participants experienced trans-specific healthcare as difficult to navigate due to waiting times, lack of knowledge and/or support and relationships of dependency between healthcare users and providers. In the evaluation, gender is reconstructed as linear –stereotypical, binary and stable – and the space for action available to care-seekers is affected by discourses existing both inside and outside trans-specific healthcare. The difficulties in navigating access to care were experienced as creating ill-health. In order to negotiate access to gender-confirming medical procedures, the participants took responsibility for the care process by, for example, ordering hormones from abroad, acquiring medical knowledge and finding alternative support. The linear gendered positioning was variously resisted, negotiated and embraced by the participants. The analysis of the guidelines showed that gender identity is constructed as a fixed linear essence but that the guidelines also open up space for a non-linear embodiment. Gender dysphoria is closely constructed in relation to psychiatric knowledge and mental health and the gate-keeping function among mental healthcare professionals is reconstituted in the guidelines. Hence, care-seekers are constructed as not competent enough to make decisions concerning access to gender-confirming medical procedures. The participants experienced several different spaces, such as bars, public toilets and changing rooms, gyms and cafés, as unsafe and as contributing to ill-health. In order to overcome the barriers to comfortably inhabiting spaces, the participants performed a kind of labour; for example, preparing in order to visit public baths and to answer transphobic comments and questions. Some spaces, such as trans-separatist, feminist and queer spaces, were experienced as safer and contributed to improved health through experiences of belonging, being able to share bad experiences and being able to relax.

Conclusions: Trans-specific healthcare practices need to become more affirming and change so that care-seekers have more space for self-determination. Trans-specific healthcare needs more resources in order to decrease waiting times, improve knowledge and support, and hence to improve access to gender-confirming medical procedures. Actions need to be initiated to make spaces safer in order to improve the health of people with trans experiences.

FRIDA JONSSON

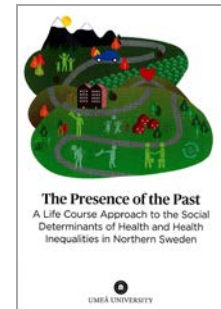
The presence of the past: a life course approach to the social determinants of health and health inequalities in northern Sweden

Thesis defended: December 7, 2018

Supervisors: Per Gustafsson, Miguel San Sebastián, Anne Hammarström

Opponent: Professor Ilona Koupil, Department of Public Health

Sciences, Public Health Epidemiology, Karolinska Institute, Stockholm



Background: Positioned at the intersection between the social and life course epidemiological sub-fields, this thesis builds on the idea that the health implications of life and living conditions can extend over years and decades before becoming expressed in the population patterns of ill-health. The overall purpose was to assess how multiple types of social determinants of health across the life course may contribute to ill-health and health inequalities in midlife. Several gaps in knowledge served as the basis for four research questions that focused on: 1) the intermediate role of socio-economic, material and psychosocial factors in young adulthood, in the long-term association between adolescent socio-economic position and midlife ill-health; 2) the implications of poor social capital in adolescence and accumulated over the life course for midlife ill-health; 3) the consequences of intra-generational social mobility for midlife ill-health and 4) the contribution of socio-economic, material and psychosocial circumstances in adolescence, young adulthood and middle-age to midlife neighbourhood deprivation inequalities in ill-health.

Methods: The setting of the thesis is Sweden spanning over nearly three decades, from the early 1980s and until the mid-2010s. With information drawn from the Northern Swedish Cohort the study population consists of 1,083 pupils (506 girls and 577 boys) who attended, or should have attended, the last year of compulsory school in 1981. The data used came from questionnaires answered by the participants in the follow-ups at the ages of 16 (in 1981), 21 (in 1986), 30 (in 1995) and 42 (in 2007). The attrition rate was low with 1,010 out of the 1,071 students who were alive over the 26-years participated in all waves (94.3%). Data was also included from the Swedish registers for the same ages as the surveys on the participants' neighbourhoods and sociodemographic characteristics on all other residents in these areas. The health outcome was functional somatic symptoms, referring to the occurrence of common physical complaints such as musculoskeletal pain, headache, palpitations and fatigue. To capture various social determinants of health, socio-economic, material and psychosocial factors were operationalised as main exposures. The research questions were analysed using: 1) path analysis, 2) multiple linear regression, 3) diagonal reference models and 4) a decomposition analysis.

Results: With regard to the four research questions, the results firstly indicated that the long-term association between adolescent socio-economic position and midlife ill-health was linked by socio-economic position in young adulthood and further via material and psychosocial factors in middle-age. Secondly, that poor social capital in adolescence also could play a role in the development of adult ill-health, but that this influence seem to be largely dependent on recent or current conditions in adulthood. Thirdly, that downward mobility in the socio-economic hierarchy during middle-age may have little to no health implications, while upward movements could have a small positive effect on health. Fourthly, that ill-health was concentrated in more socio-economically deprived neighbourhoods and that this inequality was to a small extent attributed to conditions in earlier life period and mainly to factors in adulthood.

Conclusions: Based on patterns cutting across the original research questions, the findings from this thesis indicate broadly that socio-economic, material and psychosocial conditions may be meaningful for midlife ill-health and health disparities, jointly and independently from each other. The results also suggests that determinants in the present on the surface appear to be more important for midlife ill-health and health inequalities than those of the past, but at the same time that life circumstances in the earlier life course may not be irrelevant. Rather than representing permanent or resilient health implications, however, the long-term influence of adolescent conditions seem to reflect mainly social processes that are conditional on recent or concurrent adult factors. In sum, the results indicate that a continuum of various life and living conditions may be a key phenomenon underlying ill-health and health disparities in midlife. Specifically, this thesis illustrates how the past may become part of the present through the accumulation and chains of unfavourable circumstances over the life course and conversely, how the present health reflects and embodies a life-long past.

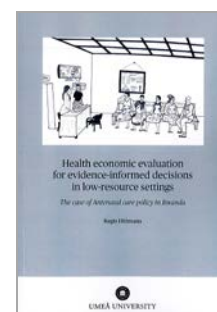
REGIS HITIMANA

Health economic evaluation for evidence-informed decisions in low-resource settings: the case of Antenatal care policy in Rwanda

Thesis defended: December 19, 2018

Supervisors: Anni-Maria Pulkki-Brännström, Lars Lindholm, Manasse Nzayirambaho, Jeannine Condo, Gunilla Krantz

Opponent: Professor Peter C Smith,
Imperial College Business School, London, United Kingdom



Introduction: The general aim of this thesis is to contribute to the use of health economic evidence for informed health care decisions in low-resource settings, using antenatal care (ANC) policy in Rwanda as a case study. Despite impressive and sustained progress over the last 15 years, Rwanda's maternal mortality ratio is still among the highest in the world. Persistent gaps in health care during pregnancy make ANC a good candidate among interventions that can, if improved, contribute to better health and well-being of mothers and newborns in Rwanda.

Methods: Data used in this thesis were gathered from primary and secondary data collections. The primary data sources included a cross-sectional household survey (N=922) and a health facility survey (N=6) conducted in Kigali city and the Northern Province, as well as expert elicitation with Rwandan specialists (N=8). Health-related quality of life (HRQoL) for women during the first-year post-partum was measured using the EQ-5D-3L instrument. The association between HRQoL and adequacy of ANC utilization and socioeconomic and demographic predictors was tested through bivariate and linear regression analyses (Paper I). The costs of current ANC practices in Rwanda for both the health sector and households were estimated through analysis of primary data (Paper II). Incremental cost associated with the implementation of the 2016 World Health Organization (WHO) ANC recommendations compared to current practice in Rwanda was estimated through simulation of attendance and adaptation of the unit cost estimates (Paper III). Incremental health outcomes of the 2016 WHO ANC recommendations were estimated as life-years saved from perinatal and maternal mortality reduction obtained from the expert elicitation (Paper III). Lastly, a systematic review of the evidence base for the cost and cost-effectiveness of routine ultrasound during pregnancy was conducted (Paper IV). The review included 606 studies published between January 1999 and April 2018 and retrieved from PubMed, Scopus, and the Cochrane database.

Results: Sixty one percent of women had not adequately attended ANC according to the Rwandan guidelines during their last pregnancy; either attending late or fewer than four times. Adequate utilization of ANC was significantly associated with better HRQoL after delivery measured using EQ-VAS, as were good social support and household wealth. The most prevalent health problems were anxiety or depression and pain or discomfort. The first ANC visit accounted for about half the societal cost of ANC, which was \$44 per woman (2015 USD) in public/faith-based facilities and \$160 in the surveyed private facility. Implementing the 2016 WHO recommendations in Rwanda would have an incremental national annual cost between \$5.8 million and \$11 million across different attendance scenarios. The estimated reduction in perinatal mortality would be between 22.5% and 55%, while maternal mortality reduction would range from 7% to 52.5%. Out of six combinations of attendance and health outcome scenarios, four were below the GDP-based cost-effectiveness threshold. Out of the 606 studies on cost and cost-effectiveness of ultrasound during pregnancy retrieved from the databases, only nine reached the data extraction stage. Routine ultrasound screening was reported to be a cost-effective intervention for screening pregnant women for cervical length, for vasa previa, and congenital heart disease, and cost-saving when used for screening for fetal malformations.

Conclusions: The use of health economic evidence in decision making for low-income countries should be promoted. It is currently among the least used types of evidence, yet there is a huge potential of gaining many QALYs given persistent and avoidable morbidity and mortality. In this thesis, ANC policy in Rwanda was used as a case to contribute to evidence informed decision-making using health economic evaluation methods. Low-income countries, particularly those that still have a high burden of maternal and perinatal mortality should consider implementing the 2016 WHO ANC recommendations.

Engaging with society - a mission for research and education

At the Department of EpiGH we have even greater opportunities to engage with society since our research and education directly relates to the health and social sectors and is therefore relevant for policy development. A new challenge for EpiGH is embrace our institutional responsibility and not rely exclusively on individual initiatives that have been successful in the past.

During 2018, we continued our collaboration with partners in low- and middle-income countries as well as with Västerbotten County Council locally.

To address policy and society relevant questions outside of Europe and Sweden, such as in low- and middle-income countries, we must not only deepen existing collaborations, but also introduce new partners and areas. Collaboration with new Chinese universities is one example of what was achieved in this regard in 2018.

Several researchers have been working on different assignments for the Public Health Agency of Sweden.

At EpiGH we seek to contribute to equitable and sustainable improvements in health and welfare across the globe.

Translating Research into Practice

When the EpiGH Unit was established in 1986, interaction with society was and continues to be a core objective. Working with problems in villages such as Butajira, Ethiopia, ideas in cities like Hanoi, Vietnam, and possible solutions to health issues in the County of Västerbotten, are all examples of how our research and teaching have interacted with the surrounding society. More recently, we are jointly finding ways to strengthen the research capacity of Somali universities and promote collaborative action research which will also help to strengthen that country's health system.

Another collaboration which focused on comparing climate change and health issues

in Västerbotten County Council, Sweden, and Yogyakarta City Government, Indonesia, serves as an example of cooperation between researchers, decision makers and industry across country borders.

Collaboration locally and regionally

To understand the importance of engagement with society it is also important to invest in collaboration, both locally and regionally.

As one example of many regional collaborative projects, VIPVIZA is a randomised controlled trial that is conducted as an integrated part of primary care and CVD prevention under the Västerbotten Intervention Programme. In VIPVIZA, the impact of pictorial presentations of silent atherosclerosis based on carotid ultrasonography provided in addition to usual therapy, is compared with conventional management. The ultrasound information is presented in colour graphics to show the presence of plaque and vascular age in relation to the individual's chronological age.

Another example of our successful collaboration is the SALUT Child Health Promotion Programme. This has a multi-sectorial and family-centred approach to health promotion, targeting all children up to age of 18 years, starting with "parents-to-be". The main goal of the Programme is to give every child the best possible start in life and to improve the health of all children in the County of Västerbotten.

There were several projects in which different faculty members collaborated with regional or national actors. Examples include health economics research in cancer care or social welfare activities and climate knowledge to advise local and national stakeholders.

Our collaboration with regional actors such as FoU Valfärd (part of the regional research

and development unit) as well as with the County Council in general and more specifically with the Center of Rural Medicine, the Public Health Unit and the Northern Register Center, was strengthened during the year.

Promoting Educational Ex-change

Finally, we aim to promote opportunities for educational exchanges with low- and middle-income countries. As part of these efforts, we have launched two “new” MPH initiatives whereby foreign students can take first year courses in their home countries and can continue into a second year in Umeå in 2018.

During 2018 we continued our collaboration with Nordic countries as part of a Nordic-Plus application. EpiGH hosted a workshop,

which aimed to deepen possible collaborative arenas within the Nordic countries and plan for ongoing activities.

In summary, we are proud to say that engaging with society is at the heart of all our activities. At the Department of EpiGH we continuously strive for high quality research and teaching, which gives us rich possibilities for international interaction. All this can only be achieved with the support of our devoted leadership, administrative staff, researchers, and lecturers, in addition to our collaborators from all around the world. Rather than a separate *third mission*, it is important that engagement with and in society is truly incorporated into our research and education, in ways that contribute positively to societal development and lead to improvements in health and welfare.

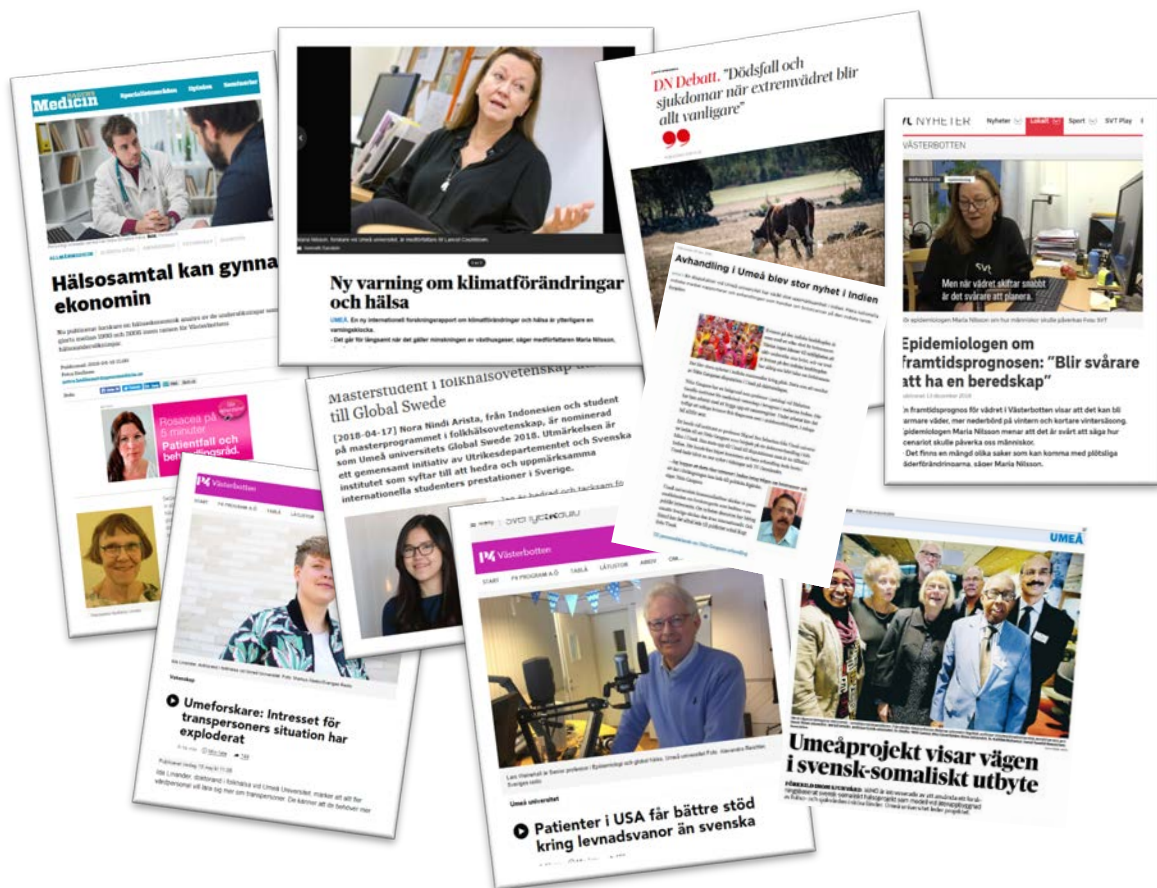


Figure 12. During 2018 we have presented our research through many different media.

Consultancy and advisory functions

We regularly contribute our time and expertise within Umeå University and externally, the latter at local, regional, national and international levels through a variety of consultancy and advisory functions. Examples of such roles are given below (Table 3). In addition, our researchers are of course referees and on editorial boards for a large number of scientific journals.

We are key advisers behind the Västerbotten County Council Public Health Policy programme. On a regular basis we train local

and regional political assemblies, as well as patient organisations and public associations. We participate in many public health education activities, both for basic public health training and the dissemination of public health research. We regularly inform decision-makers, such as politicians and officials from the municipalities and the county councils, of public health issues in the northern region of Sweden.

Table 3. Consultancy and advisory tasks among the staff.

Name	Institution	Task
Peter Byass	Ethiopian Federal Ministry of Health	Member, Board of International Institute for Primary Health Care
	INDEPTH	Chair, INDEPTH Network Scientific Advisory Committee
	WHO	Consultant
	Lancet	Member, Lancet Countdown on Climate and Health
Anna-Karin Hurtig	Umeå University	Member of Board of Research, Medical faculty
		Member of Strategic Committee for Internationalization, Medical Faculty
		Member of the Committee for Equal opportunities, Medical faculty
		Member of Board and Secretary
	The Swedish Association of Social Medicine	Member of Board and Secretary
	Swedish Medical Association	Member, International Committee for Global Health
Anneli Ivarsson	Consortium for Advanced Research Training in Africa (CARTA)	Focal person UmU
	Medical Faculty, Umeå University	International Director
		Chair, Strategic Committee for Internationalisation
		Chair, Council for internationalization of the education
		Member of the evaluation group for infrastructure financial support
	The Swedish Foundation for Humanities and Social Sciences - Riksbankens Jubileumsfond	Member of the assessment group for research infrastructure applications
	Forte/Formas/VR	Member of the evaluation group for research on child mental health
	Swedish Medical Association	Member, International Committee for Global Health
	Centre for Demographic and Ageing Research (CEDAR), Umeå University	Board member
	Save the Children Sweden – Rädda Barnen	Chair of the Västerbotten district
Klara Johansson	Västerbotten County Council	Mapping efforts and activities to counter segregation and inequity in health and healthcare in Västerbotten
	Västerbotten County administrative board	Mapping efforts and activities to counter intimate partner violence and men's violence against women in Västerbotten

John Kinsman	INDEPTH Social Science Working Group	Vice Chair
Evelina Landstedt	BMC Public Health	Associate Editor
	Socialmedicinsk tidskrift	Board member
Curt Löfgren	Umeå University	Member, Council for the internationalization of education, Faculty of Medicine
Nawi Ng	Hanoi University of Public Health, Vietnam	Member of the International Publishing Adviser
	Gadjah Mada University, Indonesia	Member of Scientific Advisory Committee for Sleman HDSS
	SEACO – Southeast Asia Community Observatory, Malaysia	Member of Scientific Advisory Group
Maria Nilsson	European Academies Science Advisory Council (EASAC)	Member of working group on Climate Change and Health
	Lancet	Member, Lancet Countdown on Climate Change and Health
	Umeå University	Member, Research Education Committee, Faculty of Medicine
Margareta Norberg	Västerbotten County Council	Member of the Scientific Board Västerbotten Intervention Programme
Fredrik Norström	BMC Public Health	Associate Editor
	Swedish Statistical Society	Board Member representing the division of Medical Statistics
Lennarth Nyström	Joint Research Centre, Ispra, Italy	Expert, European Guidelines for breast cancer screening and diagnosis
	Swedish Cancer Society	Member of the assessment group for additional grants
	Swedish Cancer Society	Board member for assessment of applications of additional support
Klas-Göran Sahlén	Umeå University	Member of the Education Strategic Committee, Medical faculty
	Umeå University	Board member, CERUM
Barbara Schumann	Public Health Agency of Sweden	Support to the Unit of Environmental Health
Lars Weinehall	Umeå University	Member, Faculty of Medicine committee on ethical issues
	Swedish Research Council for Health, Working Life and Welfare (FORTE)	Chairman, Assessment group on Guest researchers and conference funding applications
	Swedish Research Council (VR)	Member of the Scientific Panel MH-G1: Public Health
	National Board of Health and Welfare	Revision of National Guidelines for evidence based disease prevention methods (Chair of the Priority Committee)
Ann Öhman	Västerbotten County Council	Expert advice regarding 'Violence in close relations'

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