The Global Health Scholarships

Summary of research 2007-2011 at the Division of Epidemiology and Global Health, Umeå University, conducted with the support of the Swedish Centre Party donation for global health research
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**Example of advertisement for the PhD scholarships**

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Introduction

In September 2006, the Swedish Centre Party donated 10 million SEK to the Division of Epidemiology and Global Health at Umeå University. The purpose of the donation was to support global health research through increased cooperation between academic institutions in Sweden and low-and middle-income countries. At the donation announcement September 4, 2006, the Centre Party Chair Maud Olofsson, saw the donation as an recognition of the global public health research and training Epidemiology and Global Health for many years was engaged in, and an opportunity to further develop an already strong research environment.

According to the donation a sum of about 1 million SEK should annually be awarded to doctoral students at Epidemiology and Global Health and masters students at Umeå International School of Public Health. The decisions on stipends should be based on individual applications and the applications evaluated by experienced global health researchers.

This publication presents how the donation funds have been used during the first five years by presenting all the research fellows receiving stipends. It also illustrated how some of the fellows themselves value their scholarships.

At a seminar at Umeå University, April 29, 2011, ongoing and completed research projects are reported. Experiences of the first five years of donations will be discussed in the presence of representatives from both the Centre Party and Umeå University.
Doctoral students

Number of applicants and totally received PhD scholarships

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*The scholarships are awarded annually, so a student may have received an award more than once.

Doctoral students’ home countries, numbers and sex

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Master students

Master students home countries, numbers and sex

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Doctoral students finished with their PhD
The devastating consequences of HIV/AIDS have caused untold harm and human suffering globally. Over 33 million people worldwide are estimated to be living with HIV and AIDS and a majority of these are in sub-Saharan Africa. Women and children are more infected particularly in sub-Saharan countries. Globally, an estimated number of 370 000 children were newly infected in 2007, mainly through mother to child transmission (MTCT). Implementation of prevention of mother to child transmission (PMTCT) programmes has been introduced in many sub-Saharan countries during the last years.

Operational research was conducted to study the demand and adherence of key components within a PMTCT Programme among women in rural Malawi. This study was carried out at Malamulo SDA Hospital in rural Malawi and employed a mixture of both quantitative and qualitative approaches. Data sources included antenatal care (ANC), PMTCT and delivery registers, structured questionnaires, in-depth interviews with HIV positive women in the programme and focus group discussions with community members, health care workers and traditional birth attendants.

Over the three year period of the study (January 2005 to December 2007), three interventions were introduced in the antenatal care (ANC) at the hospital at different times. These were HIV testing integrated in the ANC clinic in March 2005, opt-out testing in January 2006 and free maternal services in October 2006. A steady increase of the service uptake as interventions were being introduced was observed over time. HIV testing was generally accepted by the community and women within the programme. However, positive HIV tests among pregnant women were also experienced to cause conflicts and fear within the family. Although hospital deliveries were recognised to be safe and clean, home deliveries were common. Lack of transport, spouse support and negative attitudes among staff were some of the underlying factors.

Further study on the quality of care offered in the presence of increased service uptake is required. Community sensitisation on free maternal care and male involvement should be strengthened to enable full utilisation of services. Additionally, service providers at facility and community levels, policymakers at all levels and the communities should see themselves as co-workers in development to reduce preventable maternal and infant mortality including MTCT of HIV.

"It is worth and very rewarding that I studied in Umeå especially through the Epidemiology and Public Health/Global Health department. The benefits that I got through the completion of my PhD education are not only for the personal consumption but also important to my family, work place, as well as the nation or community at large.

You may have heard from my Supervisors namely: Anna-Karin, Prof. Peter Byass and Maria Emmelin that soon after the completion of my PhD studies in Umeå, life has not been the same. It was only after 3 months when I was appointed as the Health Ministries Director for the Malawi Union of the Seventh Day Adventist Church. Now I moved from Malamulo SDA Hospital to the Headquarters in Blantyre. My position involves looking after all the Seventh Day Adventist health facilities in Malawi including Malamulo hospital where I have been in the past 10 years. I also look after all the health programmes of the church and do organisation assessment to maintain quality and effectiveness of
these adventist institutions. Therefore, I am in touch with the Ministry of Health through the District Health Offices, civil agencies and different non-Governmental Organisations. Therefore, in short, I would say I am making contributions using the knowledge that I gained during my PhD training in Umeå. I can as well conclude that you made a remarkable contribution to Malawi as a nation through my training - thank you! I am now planning to undergo post doctoral studies given the opportunity to continue making the difference in this part of the world. The advantage we have is that we are able to reach the disadvantaged communities because our health facilities are placed in rural and remote areas where our services are needed the most. This is one of the driving agents why we look for support to be able to help others more". 
Adolescent pregnancy has been associated with adverse health and social outcomes, but it has also been favorably viewed as a pathway to adulthood. In Ecuador, where 20% of girls aged between 15-19 years get pregnant, the adolescent fertility rate has increased and inequalities between adolescent girls from different educational, socio-economic levels and geographical regions are prominent: 43% of illiterate adolescents become pregnant compared to 11% with secondary education. The highest adolescent fertility rates are found in the Amazon Basin.

The overall aim of this study was to explore adolescent pregnancy in the Amazon Basin of Ecuador (Orellana province) from a rights and gender approach. Specific aims and methodologies included: to explore women’s reproductive health situation, focusing on government’s obligations, utilization of services, inequities and implementation challenges, assessed through a community-based cross-sectional survey and a policy analysis (Paper I); to examine risk factors associated with adolescent pregnancy, through a case-control study (Paper II); to explore experiences and emotions around pregnancy and motherhood among adolescent girls, using content analysis (Paper III); and to analyze providers” and policy makers” discourses on adolescent pregnancies (Paper IV).

Reproductive health status findings for women in Orellana indicated a reality more dismal than that depicted in official national health data and policies. Inequities existed within the province, with rural indigenous women having reduced access to reproductive health services. In Orellana, 37.4% of girls aged 15-19 had experienced pregnancy, almost double the national average. Risk factors associated with adolescent pregnancy at the behavioral level included early sexual debut and non-use of contraception, and at the structural level poverty, having suffered from sexual abuse, and family disruption. Gender inequity played a key role through the machismo-marianismo system. Girls were raised to be fearful and ignorant regarding sexuality and reproduction, to be submissive and obedient, to be fatalistic, and to accept the established order of the male and adult dominance. Sexuality was conceptualized as negative, while motherhood was idealized. Those gender structures constrained girls’ agency, making them less able to make choices regarding their sexual and reproductive lives. Providers” discourses and practices were also strongly influenced by gender structures. Adolescent sexuality was not sanctioned, girls’ access to contraceptives still faced opposition, adolescent autonomy was regarded as dangerous, and pregnancy and reproductive health issues were conceptualized as girls’ responsibility. However, mechanisms of resistance and challenge were also found both among adolescent girls and providers.

Programs addressing adolescent pregnancies in the area need to look at the general situation of women’s reproductive health and address the gaps regarding access and accountability. Adolescent pregnancy prevention programs should acknowledge the key role of structural factors and put emphasis on gender issues. Gender inequity affects many of the factors that influence adolescent pregnancies; sexual abuse, girls’ limited access to use contraceptives, and girls’ curtailed capability to
decide regarding marriage or sexual intercourse, are strongly linked with young women’s subordination. By challenging negative attitudes towards adolescents’ sexuality, the encounter between providers and adolescents could become an opportunity for strengthening girls’ reproductive and sexual agency.

"When I got to know about the PhD program at the Unit of Epidemiology and Global Health I was working with the United Nations Population Fund in the Amazon Basin. I was in charge of a project aimed to the promotion of sexual and reproductive health and rights in a remote province of Ecuador, and the opportunity of doing research that was connected with my work just seemed a perfect combination. The research topic of my thesis -adolescent pregnancies in the Amazon Basin of Ecuador-, was chosen because it was an issue that kept on happening despite the implementation of sex education programs and the promotional work of youth and women’s organizations. The fact that I was working in the area while at the same time conducting my PhD research, facilitated the sharing and dissemination of results for local and national policymakers. And the fact that I had the possibility to spend some months in Umea, working closely with my supervisors and "liberated" from my job tasks, smoothed the progress of my thesis. The research process produced as well as scientific publications, two reports in Spanish and two workshops for sharing preliminary results with young leaders and national and local stakeholders, so I guess it’s fair to say that not only myself but also Orellana- the province where the PhD research was based-, has benefited from it.

At the same time that my thesis progressed, a regional initiative for preventing adolescent pregnancies was launched- the Andean Plan for Adolescent Pregnancy Prevention-, involving the ministries of health of the six Andean countries of LA (Chile, Bolivia, Peru, Ecuador, Colombia and Venezuela). Together with stakeholder involved in the Plan and building on my PhD thesis, we constructed a research proposal aimed to shed light on how existing health services in these countries could become "youth friendly services", fulfilling the health needs of young men and women. This research proposal set the basis of my actual Post Doc position at the Unit of Epidemiology and Global Health & Umea Center for Gender Studies. As a Post Doc I am actually involved in research in different countries of Latin America, Africa and Asia, focusing on issues of sexual and reproductive health, young people’s health, maternal health, gender relations and masculinities. I feel that my PhD in Umea has been the starting point of my career as a researcher in Global Health and Gender, but also as the basis for continuing, strengthening and widening research on young people and sexual and reproductive health in Latin America."
Hussein Kidanto, PhD, MD
Tanzania

Improving quality of perinatal care through clinical audit. A study from a tertiary hospital in Dar es Salaam, Tanzania

(Thesis defended in 2009)

Perinatal audit has been tested and proved an important tool for reduction of perinatal mortality and assessment of quality of perinatal care. At Muhimbili National Hospital (MNH), a tertiary hospital in Dar es Salaam, Tanzania we performed a retrospective cross-sectional study using data from an obstetrics database to classify all perinatal deaths during 1999-2003. We also determined the prevalence of anaemia in pregnancy and its impact on perinatal outcome. Furthermore, we conducted a perinatal audit to study potential determinants and causes of perinatal and neonatal deaths and their avoidability. We also assessed the quality of care of patients admitted with eclampsia using a criteria based audit. Stillbirth, early neonatal and perinatal mortality rates (PMR) were 96, 27 and 124 respectively. A large proportion of foetuses (38%) had no audible foetal heart beat on admission at MNH labour ward and the majority of the neonatal deaths were asphyxiated at delivery. The PMR for multiples and singletons were 269 and 118 respectively resulting in a rate ratio of 2.4 (95%CI: 2.1-2.4). The prevalence of anaemia and severe anaemia was 68% and 5.8%, respectively. Severity of anaemia increased the risk of preterm delivery with ORs of 1.4, 1.4 and 4.1 for women with mild, moderate and severe anaemia as compared to women with normal haemoglobin levels. The corresponding risks for LBW and VLBW were 1.2, 1.7 and 3.8, and 1.5, 1.9 and 4.2 respectively. The prevalence of preterm delivery and LBW was 17% and 14% respectively. The hospital-based incidence of eclampsia was 504 per 10,000 women or 5.1% of all mothers admitted. Suboptimal care were identified on criteria regarding management plan by senior staff, review of the plans by specialist obstetrician, delay on caesarean section, monitoring patients on magnesium sulphate and inadequate use of the laboratory. Two out of three patients requiring operation were not operated within set standards. Birth asphyxia was the main cause of intrapartum birth asphyxia (47%) and early neonatal deaths (51%), whereas eclampsia (25%) and preeclampsia (8.3%) were main maternal medical conditions. The majority of stillbirths were fresh, indicating foetal demise during labour or just before delivery. The audit study identified suboptimal care in about 80% of audited cases out of which about 50% were found to be the likely cause of the adverse perinatal outcome. Inadequate maternal and foetal monitoring during labour were the main suboptimal factors, though delay in referral and operative interventions were also prominent.

Based on these studies, we conclude that:
- The perinatal mortality (PMR) in this study was higher than the national average.
- About one in four perinatal deaths at MNH can be attributed to avoidable factors linked to obstetric care.
- Main causes of perinatal and neonatal deaths were intrapartum birth asphyxia, immaturity related and infections. Management of patients in labour needs to be improved.
- Suboptimal care that is essentially avoidable included: inadequate monitoring of patients during labour, delay of care, e.g. long decision to surgery interval, and delayed referral of patients from primary hospitals.
-The prevalence of anaemia in pregnancy was very high; and low birth weight and preterm delivery was independently associated with severity of anaemia.

-The prevalence of eclampsia at MNH was high and the case management needs to be improved.

"Being PhD has meant more responsibility to me, more students to supervise, more meetings and consultancies. However as far as promotion is concerned, I expected more than what I got! Just a small salary increase. The scholarship I got in Umea was very helpful to me and I suggest that it is a good exercise".
Background: People in Cameroon are experiencing a dietary transition characterized by changing from traditional food habits to increased intake of highly processed sweet and fatty food. The rapid change in food pattern combined with an increased sedentary lifestyle has resulted in a rather high prevalence of obesity, hypertension, cardiovascular diseases and type 2 diabetes. Nutritional intake is important during adolescence for growth spurt, health, cognitive development and performance in school.

Objective: The aim of this thesis was to assess dietary intake, anthropometry and physical activity of adolescents according to sex and socioeconomic status (SES) and to investigate food perceptions of adolescents living in urban and rural areas of Cameroon.

Methods: Girls and boys, 12-16 years of age, were randomly selected from schools in urban and rural areas. Food frequency questionnaire, 24-hour dietary and physical activity recalls, anthropometric measurements, qualitative interviews and a background questionnaire were used for data collection.

Results: The proportion of overweight was three times higher in girls (14%) compared to boys (4%). Stunting and underweight were more common among boys (15% and 6%) than girls (5% and 1%). The prevalence of stunting was two times higher among the urban adolescents with low SES (12%) compared to those with high SES (5%). The rural adolescents had the highest proportion of stunting but more muscle than the urban adolescents. The rural adolescents ate in order to live and to maintain health. Urban adolescents with low SES ate in order to maintain health, while those with high SES ate for pleasure. More than 30% of the adolescents skipped breakfast in the urban area. Urban adolescents with high SES and girls reported a more frequent consumption of in-between meals and most food groups compared to the rural adolescents, boys and those with low SES. Over 55% of the adolescents had a protein intake below 10% of the energy (E%), Twenty-six percent of the adolescents had fat intake below 25 E%, and 25% had fat intake above 35 E%. A large proportion of the adolescents had an intake of micronutrients below the estimated average recommendation. Boys and the adolescents with low SES reported a higher energy expenditure and physical activity level than girls and the adolescents with high SES, respectively. Both under- and over-reporting of energy intake were common among the adolescents.

Conclusions: The present study showed that nutrient inadequacy, stunting, underweight, as well as overweight and obesity were common among the adolescents in Cameroon. Therefore an intervention program targeting both under- and over nutrition among school adolescents is needed. Sex and socioeconomic differences also need to be considered.
“Now working as part-time junior lecturer at the University of Yaoundé, dept of Public Heath in Yaoundé. I am teaching three courses: Epidemiology of infectious disease, Public health nutrition and Public health. I am also doing research about infant feeding practices, nutritional intervention in school and coordinating the Swedish-Cameroon collaboration and the University (medical Swedish students are coming from Umeå to Yaoundé).

I have a higher position now when I have a Doctor in Public Health Exam from Sweden (you need to have a PhD degree to be employed here), and my salary is better especially when I will be a full-time lecturer in Yaoundé University.

I will lecture in Umeå in April 27-29 about Public Health in Cameroon (with Helena Palmgren)”
Stephen Maluka, MA
Development studies
Tanzania

Strengthening Fairness, Transparency and Accountability in Health Care Priority Setting at District Level in Tanzania.
Opportunities, challenges and the way forward

(Thesis defended in 2011)

Background: During the 1990s, Tanzania, like many other developing countries, adopted health sector reforms. The most common policy change under health sector reforms has been decentralisation, which involves the transfer of power and authority from the central levels to the local governments. However, while decentralisation of health care planning and priority-setting in Tanzania gained currency in the last decade, its performance has, so far, been less than satisfactory. In a five-year EU-supported project, which started in 2006, ways of strengthening fairness and accountability in priority-setting in district health management were studied through action research. As part of this overall project, this doctoral thesis aims to analyse the existing health care organisation and management systems, and explore the potential and challenges of implementing Accountability for Reasonableness approach to priority setting in Tanzania. Methods A qualitative case study in Mbarali district formed the basis of exploring the socio-political and institutional contexts within which health care decision-making takes place. The thesis also explores how the Accountability for Reasonableness intervention was shaped, enabled and constrained by the interaction between the contexts and mechanisms. Key informant interviews were conducted with the Council Health Management Team, local government officials, and other stakeholders, using a semi-structured interview guide. Relevant documents were also gathered and group priority-setting processes in the district were observed. Main findings The study revealed that, despite the obvious national rhetoric on decentralisation, actual practice in the district involved little community participation. The findings showed that decentralisation, in whatever form, does not automatically provide space for community engagement. The assumption that devolution to local government promotes transparency, accountability and community participation, is far from reality. In addition, the thesis found that while the Accountability for Reasonableness approach to priority setting was perceived to be helpful in strengthening transparency, accountability, stakeholder engagement and fairness, integrating the innovation into the current district health system was challenging.

Conclusion: This thesis underscores the idea that greater involvement and accountability among local actors may increase the legitimacy and fairness of priority-setting decisions. A broader and more detailed analysis of health system elements, and socio-cultural context, can lead to better prediction of the effects of the innovation, pinpoint stakeholders’ concerns, and thereby illuminate areas requiring special attention in fostering sustainability. Additionally, the thesis stresses the need to recognise and deal with power asymmetries among various actors in priority-setting contexts.

"Will get the position as "Lecturer” at the University of Dar Es Salaam after returning back to Tanzania".
Tuberculosis (TB) is a major public health problem in many low- and middle-income countries, including Indonesia. To accelerate TB case detection, and to improve the quality of diagnosis and treatment provided by all providers, the Public-Private Mix for implementing Directly Observed Treatment Short-course (PPM DOTS) was introduced in 2000. However, previous studies on PPM DOTS have focused on private practitioners and there has been a scarcity of research on PPM DOTS in the hospital setting. This dissertation aims to capture the potential of the PPM DOTS strategy, and identify the barriers to its implementation in hospitals in Indonesia.

This dissertation is based on four separate but interrelated studies: 1. A cost-effectiveness analysis, comparing incremental cost per additional number of TB cases successfully treated under three strategies of PPM DOTS in four provinces. 2. An evaluation of the access to TB services by a cross-sectional study among 62 hospitals, by estimating the proportion of TB cases receiving standardised diagnosis and treatment according to the DOTS strategy. The data were analysed using poststratification analysis. 3. The quality aspect was explored in a multiple-case study, including eight selected hospitals. The data were analysed using cross-case analysis. 4. The process of partnership was explored through a qualitative study. In-depth interviews were conducted with 33 informants, who were actors involved in PPM DOTS in hospitals in Yogyakarta province. Content analysis was applied to the qualitative data.

PPM DOTS in hospitals was shown to be a cost-effective intervention in this particular context. However, the quality of the implementation was commonly suboptimal. In addition, a substantial number of TB cases did not get standardised diagnosis and treatment as per the DOTS strategy. The process of creating partnership among hospitals and National TB Programme was shown to be complex and dynamic. Process factors, such as commitment to collaboration and interaction and trust among the actors, were shown to be important. The rapid scaling-up of PPM DOTS in hospitals at the national level in Indonesia should be revisited. Indeed, considering the importance of hospitals in TB control, the implementation should be continued and expanded. However, more attention needs to be given to process, context and governance.

"I had been registered as a PhD student at UISPH during November 2006- December 2010. I can say that by becoming PhD (doktorand) is ‘a new door’ for further career development. In recent, I am still working in the same institution as before I proceed to PhD training, i.e. Universitas Sebelas Maret Surakarta. After I got PhD I received more responsibilities such as in teaching and supervising students. I got recognition from the national level in regard to my PhD research. Now I am appointed as a member of Tuberculosis Operations Research Working Group which is coordinated by the National Tuberculosis Program unit at the Ministry of Health. I also received more invitations to teach and supervise Master Students from other university such as Universitas Gadjah Mada, Yogyakarta.”
Smoking remains a leading cause of premature, preventable death in South Africa killing 44 000 South Africans each year. Through the introduction of comprehensive tobacco control policies, the South African government has tried to reduce the death toll and a significant reduction in tobacco use has been recorded since its peak in the 1990’s. Smoking among women, however have remained unchanged, which calls for actions. Pregnant mothers are specifically vulnerable as their smoking detrimentally affects their own health as well as the health of their babies. This thesis gives an account of the role the antenatal care system could play in reducing the burden caused by cigarette smoking.

The overall aim was to contribute to an understanding of how a person-centred approach to smoking cessation among disadvantaged pregnant women with high smoking rates may influence smoking behaviour. The specific objectives were to confirm the high smoking rates of the target population, assess their readiness to quit, explore existing barriers and promoting factors towards smoking cessation efforts within the public antenatal health care system, and to qualitatively assess the attitudes and perceptions of disadvantaged pregnant women regarding a person-centred smoking cessation intervention.

The high smoking rates of the target population was confirmed based on a cross-sectional study at antenatal clinics in four main cities of South Africa. It focused on the prevalence of smoking during pregnancy and used the stages of change theory to identify their readiness to quit. Additional questions concerned pregnancy related disease experiences, socio-economic determinants of continued smoking as well as attitudes towards the existing clinic services and its possible role in smoking cessation. A qualitative interview study analyzed more in-depth barriers for two-way communication between pregnant mothers and midwives. Both these studies informed the design and development of a person-centred smoking cessation intervention delivered at four public sector antenatal clinics in Cape Town. The intervention was subjected to a comprehensive evaluation based on a combination of quantitative and qualitative measures. This thesis utilizes data from the qualitative process assessment part, comprising individual interviews and focus group discussions with pregnant women during the implementation period of the intervention.

The survey results pointed out a high prevalence of smoking of 46% amongst disadvantaged pregnant women, with varying readiness for behaviour change. Most women were in the contemplation stage of behaviour change and thus ready to quit. Many of the women felt positive about the role of the midwife as an antenatal care provider, but they did not have confidence in midwives concerning encouraging or supporting women to change addictive behaviour be it smoking, alcohol or other illegal substances. The qualitative research highlighted the need for revised curricula for health education and counselling. The analysis illustrated how the current situation created tension between clinic staff and pregnant women making women feel unworthy and thus leaving little room for changing behaviour. The in-depth interviews and the focus group discussions provided an analytical account of how the person-centred approach in this population was perceived by the women themselves. It illustrated that
a multifaceted intervention programme, using peer counselors and educational material designed specifically for a given target population, can successfully bring about behaviour change. The intervention succeeded in shifting women’s perceptions of hopelessness into feelings of being empowered to face their addictions and competent to make a change. Though the intervention meant greater rapport with the midwives, involving peer counsellors was rated highly by the participating women. The women reported having used the educational material and attached a great value to the appropriateness of the material to their life situations, and the effectiveness of having it combined with counselling from a peer counsellor. This qualitative evaluation showed the importance of a multifaceted intervention approach, in helping women identify with their behaviour change.

The thesis highlights the importance of designing smoking cessation interventions that are specific to the needs of target populations. When smoking cessation efforts are included into routine antenatal services it is important that the target group inform the nature and specific components of the intervention.
Doctoral students actively working with their PhD
Alireza Khatami, 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

Cutaneous leishmaniasis (CL) is a skin disease caused by different species of parasites from the genus Leishmania. It is estimated that around 350 million people are at risk of leishmaniasis and that each year 1 to 1.5 million individuals, most commonly in developing countries, are infected. Because of different causative agents, reservoirs, vectors as well as different clinical manifestations, CL is divided into old world and new world CL. Iran is well-known country for having areas endemic for old world CL and in several other countries is acute old world CL (AOWCL) caused by either Leishmania major or L. tropica. Due to its presentations and clinical course, AOWCL may cause several problems for the patients and adversely affect their quality of life (QoL) Since the disease etiology, clinical manifestations, and prognosis are different from the majority of the skin diseases upon which generic-dermatology QoL instruments have been developed, it looks reasonable to develop a disease-specific QoL instrument for AOWCL in order to measure the patients’ perspectives about their disease and consequently improve the provided care.

Targets: The overall aim of the study is to develop and validate an instrument to evaluate the QoL of Iranian adult patients who suffer AOWCL. The objectives of the study are: (1) to explore how patients perceive, feel and experience having AOWCL, (2) to understand the beliefs and norm systems related to AOWCL, (3) to develop a diseases-specific instrument more measuring QoL in AOWCL patients based on the analysis of the qualitative studies, and (4) to validate the developed instrument.

Ana Lorena Ruano, Sociologist
Guatemala

The role of rural participation in local health systems: a case study in Guatemala

Social participation (SP) is an important part of Alma-Ata’s Primary Health Care (PHC) approach. Through it, communities and local organizations can plan, organize, operate and decentralization process that most developing countries are going through. In Guatemala, this process has lead to the creation of development councils (DC) as the main scheme of participation for all the population. At the local level, the DC’s have health commissions. It is through these commissions that SP takes place in the health system. However, participation could be influenced by instrumental participation practices or by social determinants which might contribute to limit the scope and depth of SP. Also, political and governance process may also have some influence on the SP process. The role that SP plays in democratic governance and the implications it may have on the health system have not been systematically studied in the country.

The main objective of the study is to contribute to the improvement of equity in the Guatemalan health system through effective participation in the governance process of local health policy. Specifically, the aim is to analyze the SP process in the Guatemalan health system. Based on that analysis to formulate and then implement an intervention aimed at improving the quality and effectiveness of social participation. Finally, evaluation the intervention will be important to measure changes in SP in the health system.
Barnabas Njozing Nwarbébé, MD
Cameroon

The co-epidemic of tuberculosis and HIV/AIDS. Barriers to voluntary counseling and testing (VCT) for HIV amongst TB patients in the Northwest Province (NWP) of Cameroon

In Cameroon, since the first HIV case was reported in 1986; the national prevalence increased from 0.5% then to 7.73% in 1999 and by 2002 the national prevalence was 12%. A recent demographic and health survey (DSH-III) in 2004, puts the overall HIV prevalence at 5.5% with women having 6.8% and men 4.1%. The Northwest province (NWP) had the highest prevalence of 8.7%. The prevalence for all TB cases was 206/100 000 population/year in 2005, of which 26% were HIV positive new TB cases aged 15-49 years. In Bamenda, the capital of the NWP, 55.3% of TB patients who accepted VCT were HIV positive. However, the VCT refusal rate was almost 60%. The prevalence of HIV among TB patients in the Provincial hospitals alone was 60% in 2005.

General Objective: To determine the various barriers to VCT for HIV amongst TB patients in the NWP of Cameroon in order to highlight the benefits of collaborative TB/HIV activities to policy makers, within the aim of improving uptake of VCT services in the province.

Bhoomikumar Jegannathan, Psychiatrist
Cambodia

Evaluating school-based intervention to prevent suicidal behavior among young people in Cambodia

Background: Suicide among young people is a substantial public health problem worldwide [1] and Cambodia is no exception [2]. The preliminary study funded by SAREC showed that among Cambodian adolescents, 24% reported death wishes during recent year, 17% reported suicide ideation and 10% reported that they had planned or committed an attempt during recent years [3]. In the Cambodian study the exposure to suicide was high as 12% of the young people reported that their parents or siblings had attempted or completed suicide, and as many as 23% of them had a partner who had attempted or completed suicide. These are interesting from the perspective of gender [4], as significantly more males reported serious expressions such as plans or attempts. Males had also a significantly higher load of exposure to suicidal behavior [3]. Mental health problems such as depression or anxiety and drug abuse problems are well known risk factors for suicidal behavior [5], but these factors have not been fully investigated in Cambodia, a post-conflict country [6] in social, economic and cultural transition. Complex interaction between exposure, attitudes and risk factors for suicide

Aim: To evaluate the school based intervention (Life skills education module by WHO) to promote mental health and to prevent suicidal behavior by comparing the outcome in the intervention and control groups

Participants in the study: Three hundred and twenty students, aged 15-18 years in grades 10 and 11 from two high schools in Takhmoua, a semi-urban area close to the Cambodian capital Phnom Penh take part in the study. All the students in the randomly selected classes were invited to participate.
Instruments: Youth Self Report (YSR): The YSR is a self-administered questionnaire that provides data on a broad spectrum of problems and competencies of young people in the 11 to 18 age group [7]. The “Attitudes Towards Suicide” (ATTS): The ATTS is a semi-structured questionnaire that reveals exposure to suicidal expressions among significant others and the respondent’s own suicidal expressions during the past year. The psychometric properties of the instrument were reported in previous studies [8].

Life Skills Development Scale (LSDS)-Adolescent Form: The LSDS-Adolescent Form is a 65 item instrument that measures four life skill dimensions: interpersonal communication/human relation skills, problem solving/decision making skills, physical fitness/health maintenance skills, and identity development/purpose in life skills. The reliability and validity of the LSDS-Adolescent Form has been established by previous studies [9].

All the above instruments were translated to Khmer (Cambodian language) and field-tested by the mental health professionals working at the Center for Child and Adolescent Mental Health (CCAMH), Takhmau, Kandal province, Cambodia.

Analysis: We perform bivariate and multivariate analyses using the SPSS statistical version 16. Chi-square tests were used to analyze frequency distributions and Student’s t-tests were used to compare independent sample means. We dichotomized scores on the YSR and Life Skills Development Scale at the 90th percentile for the multivariate logistic regressions model. Serious suicidal expression (plans plus attempts) was used as a dependent variable with gender, YSR syndrome, Life Skills Development domains, and exposure to suicide as covariates.

Expected results: We expect this study to increase the knowledge about suicidal behavior among young people in Cambodia, whose mental health needs have been hitherto neglected. There are no previous studies on this topic in a developing country like Cambodia, more so when it comes to evidence based intervention. This research on the prevalence of the suicidal expressions and their determinants will enable the research-team to develop models of interventions in the schools of Cambodia. As similar study is undertaken in Nicaragua [10], there is the possibility of cross-cultural comparison of mental health problems and suicidal expressions among young people in diverse settings across the globe.

Cahya Utamie Puji Lestari, MD
Indonesia

Risk factors of type 2 diabetes and their trends in Purworejo District, Indonesia

The study in Purworejo is a part of Purworejo Health Study which is designed as a follow-up study for respondents who participated in the NCD risk factor studies in 2001 (supported by FAS, Sweden) and in 2005 (supported by INDEPTH Network), and in the SAGE study in 2007 (supported by FAS, Sweden). This study aims to assess the burdens of Type 2 Diabetes Mellitus (T2DM) and its risk factors in Purworejo district, Central Java Province, Indonesia.

The specific objectives are:
- To estimate the prevalence of T2DM and to identify risk factors associated with T2DM.
- To explore the community perception and knowledge on T2DM and its risk factors.
- To analyze the trends of T2DM risk factors and to identify how risk factors changed over time in different groups of population.
- To develop a diabetes risk score and to evaluate its properties against the FINDRISK score.
Cynthia Anticona Huaynate, Dentist
Peru

Heavy metals exposure in the indigenous communities of the Corrientes river basin – Peru

Three toxicological evaluations (DIGESA, 2006; CENSOPAS, 2007 and ERI et al., 2007) have reported that the population of the Corrientes river communities (north eastern part of Peru) presents elevated levels of lead (Pb) and cadmium (Cd). All of them have suggested that oil exploitation (the only industry in this area) might be the source of exposure. However, some methodological aspects, not previously addressed (like the inclusion of a ‘control’ community and the lack of a comprehensive environmental assessment) have not allowed to establish convincing conclusions. This research plan aims to overcome the previous limitations in order to clarify the sources and risk factors associated with the exposure. In addition, the way this research process has developed, will allow us to explore how research information permits decision making at different levels.

The main objective is to understand the reasons for the elevated levels of Pb and Cd in the population of the Corrientes river communities, to then, recommend preventive and control strategies, which could be also relevant for other communities with similar characteristics.

Elli Nur Hayati, Psychologist
Indonesia

Domestic violence in urban and rural Indonesia women’s experiences and men’s roles for prevention

Domestic violence, or violence perpetrated by a person known to them victim, is not limited to any class or culture. It occurs in all countries, irrespective of social, economic, religious or cultural group. Domestic violence by an intimate male partner has both physical and mental health consequences. Research focusing on health consequences of domestic violence has shown that women who suffer from violence tend to have more physical and mental complaints and report to have more negative health behaviors such as alcohol drink and cigarette smoking. Other studies have indicated that violence can be a serious threat to a women’s reproductive health as well as to other aspects of her physical and mental well-being. During the last three decades international organizations and activists have focused much on supporting women victims while the scientific community has given emphasis on measuring the magnitude of the problem and on identifying the risk factors and consequences of violence to be able to suggest feasible interventions, and few studies have focused on the men’s perceptions of their role in reducing the prevalence of domestic violence itself. Further researches on men’s perceptions about domestic violence are needed for the development of appropriate programs for treatment as well as for men’s involvement in preventing domestic violence. As the fourth biggest populated country in the world, studies on domestic violence will contribute to the better knowledge on the magnitude of this problem among Indonesian women. Studies on different aspects of domestic violence in the Indonesian setting are highly needed to increase the health quality of woman in particular and of the community as a whole. The overall objectives of this PhD project is to gain a better understanding of women’s experiences and perceptions of domestic violence in urban and rural Indonesia, and to identify feasible preventive strategies at the community level, especially focusing on men’s involvement as health promoters for prevention.
Fatwa Sari Tetra Dewi, MD
Indonesia

Reducing cardiovascular disease risk factors in a developing country: a preparatory study to design a community intervention in urban Yogyakarta, Indonesia

Following the epidemiologic transition, cardiovascular disease (CVD) recently became the leading cause of death. The burden of CVD is nowadays most prominent in developing countries, and it is estimated that 60% of coronary heart disease occurs there (Mackay, 2004). Many studies have verified modifiable risk factors of CVD such as high blood pressure, abnormal blood lipid, tobacco use, sedentary lifestyle, and low fiber intake (Mackay, 2004).

The aim of this study is to describe the CVD risk factor pattern in an urban region of Indonesia, and based on that design, implement and evaluate pilot CVD interventions in villages, schools and work sites as preparatory studies for a future comprehensive community intervention to prevent CVD. This study project called PRORIVA (Program to reduce cardiovascular disease risk factors in Yogyakarta city).

Felix Kisanga, MD
Tanzania

The socio-cultural context of child sexual abuse (CSA) in Tanzania: possibilities and barriers for community prevention

Child Sexual Abuse (SA) include acts that violate human rights as well as social and cultural mores. It is defined as “any activity with a child before the age of legal consent that is for sexual gratification of an adult or a substantially older child. The perpetrators take advantage of, violate or deceive children or young people who have less power over elders”. The acts include contact and non contact forms. In a review from Europe, the estimated prevalence of CSA for girls varies between 6-36% and 1-5% for boys. Few studies on CSA have been conducted in Sub-Saharan Africa. However, a recent study conducted among high school students in Ethiopia showed the prevalence of all forms of sexual abuse to be 69%. The most common type of abuse was verbal sexual harassment (51%) followed by sexual intercourse (18%). In South Africa the highest reported CSA prevalence was 54%. Of these, 86% were kissed sexually, 61% were touched sexually, whereas 29% were victims of oral, anal or vaginal intercourse. In Tanzania, a recent retrospective study among university college students indicated several forms of sexual abuse to be prevalent with fondling as the most common followed by sexual intercourse and anal sex. Public hospitals in Tanzania have the mandate to examine and treat the victims. Justice is sought through the legal system using the complaints made to police by victims and the evidence accrued through police and medical experts’ investigations. Non Governmental Organizations (NGOs) such as Crisis Centres and the Legal and Human Rights Centres provide legal assistance to victims on request. No study has explored the role of these key players in dealing with CSA incidents. The overall aim of the study is to explore the perceptions and experiences of government officials and representatives of associated NGO, in handling CSA cases. The recently published WHO multi-country study on “women’s health and domestic violence against women and children’ performed during 2001 are so far the only source on the prevalence of CSA in Tanzania. It reported a slightly higher prevalence of CSA in urban (4% to 11%) than in the rural (4% to 9%) Tanzania. Direct interviews and limited
an anonymous pictoral selection by informants were used in data collection. Noted the WHO study was limited to women and that the approach used might compromise disclosure of CSA events it is likely that the magnitude was underestimated. Factors associated to CSA were not studied. In general CSA is associated with multiple consequences including trauma, infections and psychological manifestations, etc. These have not been studied in Tanzania.

Main research questions are; What are the community experiences, attitudes and perception about child sexual abuse? What is the magnitude of child sexual abuse, the associated socio-cultural factors and health indicators?

The aim if the study is to contribute to a better understanding of CSA; the magnitude, community’s perceptions, the socio-cultural factors that perpetuate its occurrence, and the perceived roles of different community groups in handling the problem.

Firdy Permana, MD
Indonesia

Environmental tobacco smoke exposure (ETS): respiratory effects and the strategy to reduce domestic exposure

Exposure to environmental tobacco smoke (ETS) has been found to have an impact on the respiratory symptoms and diseases and the pulmonary function. In children of all ages ETS exposure has been found to be associated with increased respiratory symptoms. Persistent ETS exposure can initiate development of COPH and asthma. The prevalence of active and passive smoking is high in Indonesia and respiratory symptoms and diseases are a frequent reason for health care utilization. In 1996, about 14% of all deaths in Java Region were due to respiratory diseases. Moreover, the prevalence of smoking is predicted increase and thereby the proportion ETS exposure.

The overall objective is to study the effects of ETS exposure on the respiratory status of adolescents and to understand social norms and beliefs for implementing a feasible strategy to reduce domestic ETS exposure in Jogjakarta, Indonesia.
Hailemariam Lemma Reda, B Sc Biology
Ethiopia

**Early diagnosis and treatment of uncomplicated malaria: implications of a new malaria control policy in Ethiopia**

Even though, malaria is curable and also preventable disease, it is a disaster that people in affected countries lack access to prevention and treatment. At present, the incidence of malaria is estimated to be 300-500 million with 1.1-1.3 million deaths each year. Malaria in Ethiopia is an old and long standing major public health problem. It is estimated that about more than 60 million of its population and three fourth of its land is at risk of malaria. In 2004/2005, the disease was reported as the first cause of illness and death accounting for 17% of outpatients visits, 15% of admissions and 29% of deaths. Malaria in Ethiopia is unstable in time and place. The unstable nature of malaria makes the population non-immune and prone to epidemic.

Objective of the study: The overall aim of the research is to evaluate the implication of the new malaria control policy on early diagnosis and prompt treatment strategy in low-to-moderate malaria transmission area where P.falciparum and P.vivax co-exist, in rural Tigray, Ethiopia.

Hassen Mohammad Nuru, MD
Ethiopia

**Health Care Financing Reform in Addis Ababa (AA) Public Sector: Does it have any implications on Health Resource availability, Health Service Quality and Utilization?**

Background: Recognizing the growing gap between the demands for health care and the resources availed to the sector, Ethiopian government has endorsed Health Care Financing Reform strategies in 1998. The Reform objectives were “Promote sustainable financing policies in the Public Sector through generating additional resources, increasing efficiency in resources utilization, and in doing so improve quality, equity and utilization of Health Services in public sector. Pertaining to the federal strategies Addis Ababa City Government passed its own HCF regulation in September 2008 and then embarked on its implementation since Jan. 2009. The new regulation calls for introduction of two major policies. One is User fee retention and utilization by Public facilities, where Hosp. and Health centers are given the right to retain and utilize 100% of revenues they generate from rendering services. The other is revision of existing waiver and exemption policies in order to protect the poor from effects of user fees and promote public access to health intervention with public health significance.

General objective: Evaluate impacts of Health Care Financing Reform on Health resource availability, health service quality and service utilization in AA Public sector.
Hendrew Gekawaku Lusey, Nurse
Congo

Masculinity and HIV prevention in DR Congo

Men are father, partners, brothers and sons, making their lives intertwined with those of women, girls, children and other men. Rather than perceiving gender as a women’s issue, we need to think in terms of relations of power and powerlessness in which both women and men could experience vulnerability due to HIV infection. Indeed, gender inequality is a main driver behind the spread of HIV. In spite of many remaining challenges, studies have shown that men and the world of men have changed. Now it is time for all men to support further transition with determination of love in order to prevent HIV/AIDS.

The general objective of this planned thesis in Kinshasa, DR Congo, is to explore the notions of masculinity and its linkage to sexual risk behavior and HIV/AIDS and to determine whether a planned intervention programme makes a difference in knowledge, attitudes, beliefs and practices. Specifically, the study seeks: 1) to explore the knowledge, beliefs, attitudes and practices regarding sexuality, masculinity, risk behaviours and HIV/AIDS among male and females community members. 2) to describe the context of implementation of HIV prevention agenda to churches provided by the World Council of Churches. 3) to perform a survey that create baseline information about knowledge, beliefs, attitudes and practices regarding sexuality, masculinity, risk behavior and HIV/AIDS among men and boys participating in a church based HIV prevention programme. 4) to evaluate the process of implementation from policy to practice of the initiated intervention programme focusing on masculinity and HIV prevention and to assess the likely changes pertaining to knowledge, attitudes, beliefs and practices.

Rose Laisser, Midwife
Tanzania

Healthcare workers’ and community groups’ perceptions about intimate partner violence and their roles in care and prevention in Tanzania

Intimate partner violence against women (IPV) is one form of interpersonal violence against women caused by a partner or other family members. The term domestic violence is often exchanged with intimate partner violence (IPV) when the violence refers to women perpetuated by a partner or husband. IPV prevalence is reported from most countries and levels range from 10% to 70%. These results are however hard to compare due to differences in definitions and methodologies used. A WHO multi-country study conducted in 10 different countries, including Tanzania, was initiated to overcome these problems. The results, presented in 2005 confirmed a great variation with a lifetime prevalence of physical or sexual violence ranging from 15% in Japan to 71% in rural Ethiopia and 66% in Peru. The study showed that IPV is a serious problem both in rural and urban Tanzania with lifetime prevalence of physical violence to be 47% in the urban and 31% in the rural area.

General objectives: The general objectives of this PhD project are to explore health workers’ and community groups’ perceptions about IPV, their roles in care and prevention and to suggest relevant intervention strategies within the health care organization as well as at the community level.
Setareh Forouzan, MD
Iran

The mental health care system responsiveness in Iran

The main objective of this study is to assess the responsiveness of mental health care system in Teheran (Iran) in accordance with “WHO” responsiveness concept. Specifically, the study seeks to appraise critically the “WHO” responsiveness concept regarding its applicability to mental health care systems in (Teheran/Iran); to develop the Iranial mental health responsiveness scale (IMHRS), to assess the performance (responsiveness) of mental health care as defined by “WHO” in respect of service users with IMHRS and to explore variations in responsiveness domains importance in respect of service users.

Tej Ram Jat, Master of Sc in health policy, planning and financing
India

Maternal health and emergency obstetric care in Madhya Pradesh state of India: A case study of Khargone district

The fifth millennium development goal (MDG) aims at improving maternal health and reducing maternal mortality ratio (MMR) by 75% between 1990 and 2015. The progress towards achieving the goal is far slow and still more than 500 000 maternal deaths occur every year globally. Around 99% of total global maternal deaths take place in developing countries With more than 100 000 maternal deaths every year, India has the largest number of maternal deaths among all countries. The MDG target for India is to reduce the MMR to 109 by 2015. The latest MMR of India is 254.

Globally, around 80% of maternal deaths are because of obstetric complications; mainly haemorrhage, complications of unsafe abortion, pregnancy-induced hypertension, infection, and obstructed labour. Pregnancy related complications can not be accurately predicted and most often can not be prevented but they can be treated by providing adequate emergency obstetric care (EmOC) to women with obstetric complications.

Main objective: The main objective of the proposed research is to assess the status of maternal health and political priority for safe motherhood along with assessing the current status of emergency obstetric care in Madhya Pradesh in order to identify the gaps and to make specific recommendations for future action.
Background information: Maternal health services have been among the most affected by the decimation of public health sector, and inequalities in the access to maternal health services remain prominent and are mirrored in the maternal health outcomes (1, 2). Several factors contribute to this situation and constitute major bottlenecks to the achievement of MDG 5 and among the most relevant are: gender inequality, low utilization of services, absence of social pressure to improve access, lack of coordination, weak information and fragile health system (3).

In Ethiopia MMR is 673 per 100,000 live births, approximately 26,000 women die annually of pregnancy and birth related events. Only 12% of women had 4 or more Ante Natal Care visits. In fact almost all births in Ethiopia take place at home and only 10% are assisted by skilled attendants. In order to close this gap, the government introduced the health extension program that gives much focus on the components of primary health care, which most of them are related to the MDG goals.

Despite the efforts of the government to create a community based health care system, the utilization of maternal health services remains to be low and the reasons for low utilization are still unclear. Consequently, this research seeks to shed light on the situation of maternal health, barriers for access and utilization plus suggests possible approaches for policy makers to develop appropriate responses to the issue.

Objectives: To Explore barriers of utilization from women aged 15-49 years, men and health workers perspective on ANC, delivery care, and to assess the effect of interventions in improving maternal health in Northern part of Ethiopia.
Recently accepted PhD students or PhD students in pipeline
**Ailiana Santosa, MD**
*Indonesia*

**Toward a better understanding of epidemiological transition, based on Sweden’s experience**

Global understanding of mortality transition and its epidemiological implications remains an unsolved puzzle for public health practitioners. More than half of the world’s deaths are unrecorded. Availability of good and detailed mortality data are therefore important to understand the historical changes of populations and to provide better understanding on epidemiological transition processes in developing countries. Sweden was the first country in the world to organize routine vital data registration, however, analysis of cause-of-death Sweden is still limited by variation in the classification of causes of death. Detailed analyses of patterns of mortality across different geographical areas are still limited. Yet so far, a fragmented picture of epidemiological transition in Sweden has been explored, but a detailed description and overview of its components, determinants and characteristics are still lacking in the published literature.

Overall objective: To appraise the existing evidences on epidemiological transition theory, and to utilize rich historical Swedish register data on risk factors, morbidity and mortality, as well as reliable demographic and health data from developing countries to elaborate and comprehend the applicability of the epidemiological transition theory in a global context.

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**Jennifer Crowe, MPH**
*Costa Rica*

**Exposure to extreme heat in sugarcane harvesters in the face of climate change: Health and productivity outcomes and potential solutions**

Climate change will undoubtedly have major effects worldwide including increasing temperatures in many already hot parts of the world. Increasing temperature creates environmental concerns as well as serious human health concerns. Although the human body is remarkably capable of maintaining the core temperature necessary to sustain basic bodily functions, a combination of conditions such as high humidity (decreasing the efficiency of sweating), clothing that increases core temperature (and reduces ability to sweat), strenuous physical work and dehydration can compromise the body’s ability to maintain the necessary core body temperature and physiological functions. This can result in heat strain and heat exhaustion, and, when severe, can cause heat stroke and death.

The production and processing of sugarcane is an important source of employment in Costa Rica for both Costa Ricans as well as Nicaraguans who travel to work in the harvest and processing (“zafra”) period. The vast majority of sugarcane is produced and processed in the Guanacaste province, located in the northwest portion of the country. Guanacaste is one of the hottest areas of the country, with monthly averages of daily maximum temperatures that reach 36 degrees Celsius during the harvest season. The work of manual sugarcane harvesting is intense as it requires cutting the tall heavy stalks at ground level with a machete under full sun with no access to shade.

In the proposed study, qualitative (observation, key informant interviews and focus groups) and quantitative (symptom questionnaires, measurements of pulse, weight and body temperature before and after the work shift) methods as well as Wet Bulb Glove Temperature and heat-stress estimates, will be used to achieve the following specific objectives:
Describe the socio-economic contexts that exist for workers in the sugarcane industry in Costa Rica, specifically in relation to heat stress, and describe the need for future studies on heat exposure.

Document the current heat stress exposures faced by sugarcane harvesters in Costa Rica.
Document the current health and productivity outcomes resulting from heat exposure in sugarcane workers in Costa Rica.
Design and implement a strategy to reduce negative health and productivity outcomes in one sugarcane company in Costa Rica.

The importance of sugarcane as an income generator for the country as well as individual workers combined with continuing increases in sugarcane production, the potentially very serious health risks for worker populations and the likely changes in climate in near future for Costa Rica, highlight the need to develop strategies that allow for a more sustainable production of sugarcane without putting at risk the health of workers. This project will be an important first step towards this goal.

Results from this study can be applied to other tropical countries in which sugarcane harvesting takes place. Likewise, the results can be applied to other industries in which heat exposure is a threat to worker health and productivity. Because work is paid according to production in the sugarcane industry, it is possible to calculate productivity and economic effects in a way that is much more challenging in other jobs such as construction or other agricultural processes, which have heat exposures.

Joseph Zulu,
M Sc in Social and Cultural Anthropology
Zambia

Community participation in addressing social, cultural and economic insecurities of HIV testing, treatment and care services in Zambia

About 15.2% of the total population in Zambia (11,669,530) is HIV positive. Due to the high HIV infection rates, and consequent impact on mortality, clinical services and communities, the Government, in June 2005, made access to HIV testing, treatment and care services free. Despite making access to these services free, uptake of these services is poor. Just 28% of Zambian adults aged 15-49 know their HIV status. This negatively affects HIV prevention, treatment and care in that those who do not know their HIV status can spread the virus to others before they become ill, and without early diagnosis may not get health care attention (WHO/UNAIDS/UNICEF, 2009).

Several scholars have provided models for understanding general health-seeking behavior, including uptake of HIV services. These include Shaikh et al (2007); and Tabi et al (2006). However, in the context of this study, I prefer Kroeger’s (1983) model of studying health-seeking behaviour, not only because the other models hinge on it, but because it is an appropriate and detailed framework for examining, analyzing and interpreting factors that influence health services utilization, particularly for developing countries. Kroeger (ibid) explains that factors broadly put as socio-cultural; economic; physical accessibility; financial accessibility; women’s autonomy and health service dynamics influence health-seeking behaviour. Even though he divided them into six, I will categorize them into three: with financial and physical accessibility included in the economic factors; whilst women’s autonomy comes under social-cultural factors and health dynamics fits into all the three broad categories.

The social and cultural barriers to uptake of HIV services include peoples’ conceptions of life and death; religious beliefs, gender dynamics and HIV stigmatisation (Breievlt, 2006, Sponk, 2006,
Mwaura, N. P. 2008 and Zulu J. M. 2009); whereas economic factors include indirect health costs such as transport and nutritional costs (Castro and Farmer 2005 and Bond et al., 2008).

Literature on health seeking behavior has argued that to effectively address barriers to uptake of HIV services, there is need to fully involve the community in the decision making process, implementation and evaluation of HIV health care services; especially programmes aimed at deconstructing health seeking barriers. This is based on the view that the community, especially in Africa, plays a great role in shaping people’s decisions, including health seeking attitudes. This is due to the strong sense of kin or ties that exists in African countries (Kabeer, 2005, Chen et al. 2007).

Despite the vital role that the local context plays in influencing people’s decisions, not much is known about the degree to which the local people are involved in community HIV programmes such as the home based care and how their involvement impact on uptake of HIV services, hence the need for this study.

Overall Research Question: How are community home based care volunteers involved in decision making, implementation and evaluation of the HIV testing, treatment and care services; and programmes aimed at deconstructing barriers to uptake of HIV services; and how does this influence uptake of HIV services in the community?

Moctar Ouedraogo, MSc Demography
Burkina Faso

Continuum of care for maternal, newborn and child health in Burkina Faso. Progress to date, determinants and prospective for achieving MDGs 4 and 5

The continuum of care has become a rallying call to reduce the yearly toll of half a million maternal deaths, 4 million neonatal deaths, and 6 million child deaths. Within the continuum of care, all women should have access to reproductive health choices to help them plan and space their pregnancies and avoid or treat sexually transmitted infections. Pregnant women need antenatal care that is linked to safe childbirth care provided by skill attendants. Both mothers and babies need postnatal care during the crucial 6 weeks after birth; postnatal care should also link the mother to family-planning services and the baby to child health care.

Objective: As 189 countries in 2000, Burkina Faso pledged to reduce child and maternal mortality respectively by two thirds and three quarter toward 2015. The objective is to track a global progress in key components/variables of maternal, newborn and child health, and determine the main factors which generated these changes and highlighted them. Based on such principal determinants, design a scenario that can be considered to achieve Burkina Faso commitment for child and maternal mortality reduction; at least to reach any renewing pledge as it known that Burkina Faso cannot meet the MDGs 4 and 5.
Yalem Tsegay Assfaw, Nurse, MPH
Ethiopia

Long term consequences of obstetric complications, understanding the problem and assessing the need for an integrated approach of primary health care and emergency obstetric care to prevent obstetric fistula in Tigray, Ethiopia

As any other Sub Saharan Africa countries, Ethiopia has one of the highest maternal mortality rates (673/100000) and more than 500000 Ethiopian women and girls develop disabilities from complications during pregnancy and child birth each year, over 100 000 girls and women living with fistula, further 9 000 cases develop annually. The condition leaves these affected women in a state of depression; suffer due to offensive smell and wetness from urinary or faecal incontinence. In Tigray, as the matter of fact, two sisters that has had fistula were observed at the same family closed in a small room for years without accessing the health facility; they would rather make use of the tradition methods. Many women may not even know that treatment and existed service for obstetric fistula. Further research to explore the problem and feasible interventions for the reduction of obstetric fistula is a priority.

The general objective is to understand the magnitude and consequences of obstetric fistula and to assess the need for an integrated approach of primary health care, emergency obstetric care and to provide community mobilization movements against obstetric fistula in Tigray, Ethiopia.
Master students in Public Health
Andinet Worku Alemu
Medical doctor
Ethiopia

Pattern and determinants of survival in adult HIV patients on antiretroviral therapy, Ethiopia

Background: - It has passed thirty years since the deadly pandemic; HIV/AIDS started changing the picture of the world. The pandemic has largely affected sub-Saharan Africa. The Antiretroviral therapy (ART) that has been started recently in many African countries through generous funding of international donors has conveyed a glimpse of hope for most. Ethiopia is one of the hardest hit countries by the pandemic. Since free ART service has started in 2005, only 33% of those in need have accessed the treatment. The early outcome of the rapid scale up service is not investigated well. The objective of the paper is to investigate the early survival outcomes of ART scale up service in Ethiopia by utilizing routine hospital data.

Methods: - All adult HIV/AIDS patients who were started on antiretroviral therapy in Shashemene and Assela Hospitals from January 1st 2006 to May 31st, 2006 were included and followed for 2 years. Data were extracted from standard ART and Pre ART registers and Follow-up forms. Data was entered on Epi-info version 3.5.1 and analyzed with both STATA 10 and Epi-info 3.5.1. Kaplan Meier curve was used to estimate survival probability and Cox proportional hazard was applied to determine predictors of mortality in the cohort. Two alternative models were used in determining predictors of mortality. Model I (real case assumption) in which only dead cases were used as events and Model II was worst scenario assumption which lost cases are considered as events.

Results: - Two hundred seventy two ART naive patients were followed for 2 years. The median age of patients was 33 years and 57% were female. Eighty five percent had CD4 < 200 cells/µl with median CD4 count of 103 cells/µl. The median survival time was 104.4 weeks. A total of 28 (10.3%) deaths were observed during 2 years period and 48 (18%) has lost from follow-up. Majority of deaths occurred in the first 4 months of treatment. In univariate analysis, the two years survival was significantly associated with clinical stage of the disease, baseline hemoglobin and CPT at or before ART initiation in both models of analysis. In addition functional status and baseline weight were found to be significantly associated with 2 years survival in model II assumption. The median CD4 count and body weight showed marked improvement in first 6 month followed by poor and stagnant change afterwards in the follow-up period.

Conclusion: - The cohort had similar mortality as compared to other settings but high rate of lost follow up. The study has shown the feasibility of free ART scale up service in Ethiopian setting by reducing mortality which was comparable with other better settings. But the high lost to follow up finding demands an urgent action in improving the underlying patient retention mechanisms and tracing of lost cases. The poor CD4 recovery and body weight improvement after 6 months of follow-up could be a clue for problems of drug adherence and possible treatment failure which has to be studied in detail and addressed accordingly. The tradition of utilizing routine data should be encouraged in our setting for urgent actions and clinical audits.
Marwan Mosleh
Bachelor in Nursing
Palestine

Awareness of anaemia among pregnant women at UNRWA clinics in Gaza strip

Background: Anaemia in pregnancy continues to be a major clinical health problem in many developing countries. It is the commonest health problem complicating refugee pregnant women in Palestine, especially, in Gaza strip. Recent studies have shown that the prevalence of anaemia is very high among pregnant women in Gaza when compared with the West Bank and neighbouring countries, with a sharp increase during 2009. Where studies showed that more than 40% of pregnant women are anaemic in Gaza strip, in spite of all efforts and preventive programs of UNRWA and MOH especially in the latest several years.

Objectives: The main objectives of this study were: 1) to assess and describe the level of awareness among refugee’s pregnant women attending UNRWA clinics for antenatal care 2) to assess if there is a significant difference between women with and those without health education sessions 3) to provide further recommendations that could be important to tackle this problem and to improve the level of awareness on anaemia 4) to develop a baseline data regarding the awareness of anaemia among pregnant women for further studies.

Methods and subjects: The study was cross-sectional, carried out among pregnant women attending UNRWA clinics for antenatal care in Gaza strip. The tool of study was structured questionnaire specially designed for this study. The questionnaires included four parts: socio-demographical data, questions of knowledge and awareness regarding anaemia, questions regarding opinions and attitudes of anaemia and questions of health education sessions regarding anaemia. A total of 164 of pregnant women were responded and participated in the survey. The study was carried out at four UNRWA clinics in Gaza strip, before conducting the study, approval was taken from UNRWA Chief Health programme and also oral consent was obtained from every woman in each clinic. In addition, the permission was taken from the head of all UNRWA clinics. After data collection, data was entered, processed and analyzed using SPSS software program version 16. Cross tabulation and Pearson Chi-square test was used to test the statistical significance in the study with significant level (p-value<0.05). Frequency distributions and proportions were also analyzed.

Results and conclusion: This is first study of its kind, was conducted and aimed to investigate the awareness of anaemia among pregnant women who are attending UNRWA clinics for antenatal care. The study has shown that a high proportion of women that participated in the survey had a general knowledge with respect to anaemia perception and concept. However, awareness of anaemia among some women was inadequate, and those women still have lack of specific information or had superficial knowledge on some issues regarding anaemia, that maybe contribute to increase the prevalence of anaemia among women, particularly, during pregnancy, such as the effect of drinking tea with meals on iron absorption and the side effects of iron pills. Highly positive opinions and attitudes were also found among women with respect to having iron pills, having sufficient diet with iron, threatening of anaemia on pregnancy and fetus health and also the importance of regular visits to antenatal clinics during pregnancy. The study found that, a high proportion of women were unsatisfied with the number of UNRWA health education sessions on anaemia during pregnancy, and many women had not attended such sessions. In addition, the study has shown that an attendance health education session seems to be increased gradually by increasing level of education. Generally, the study declined to find a significant difference in awareness about anaemia between women with and without health education sessions. As a result, this finding should imply further examinations concerning the efficiency of the health education that are provided by UNRWA clinics in Gaza today.
Finally, the study suggests that a well and clear health education sessions strategy regarding anaemia needs to be more effective.

My name is Marwan Mosleh, a Palestinian student from Gaza strip. I have been a Master student in public health programme during 2008-2010 at the department of public health and clinical medicine at Umeå university-Sweden.

Firstly, I have to say that I am so proud that I have got my degree in public health from Umeå University-Sweden. I am a recipient of global public health scholarship which means a lot to me. I think I have benefited greatly with financial aid from you.

Furthermore, the scholarship means I had a lot of supporters and I have achieved my goals so far. Getting this scholarship is a great honor for me. In addition, this scholarship means that the hard work has really paid off, especially from my family since the political situation is becoming worse each day and it affects badly the economic situation. Therefore, this scholarship was granted to me in the right time and in the very hard situation. I feel very happy that this scholarship helped me a lot to avoid difficulties during my study journey.

Really, continuing my studies would not have been possible without this scholarship. Receiving the global health scholarships helped me not only to achieve my goals but also to fulfill my dream to get my diploma from Umeå University as a respectful university among universities worldwide.

Regarding my plan, I plan to apply for PHD studies in public health since I am working now to prepare a research proposal draft for further study and research training.

Last but definitely not least, I would like to express my great thanks and sincere gratitude to the donors of global health Scholarship and all staff at Umeå University specially staff at department of public health and clinical medicine for their warm welcome, patience and their kind help during my study life.

Trisasi Lestari
Medical doctor
Indonesia

Burden of childhood TB in hospitals in Java island: Challenge for DOTS program

Background Since World Health Organization (WHO) declared tuberculosis (TB) situation in the world to be a global emergency in 1993, priority of management was given to sputum smear positive infectious patients to increase case detection and improve the treatment cure rate. Childhood TB were simply neglected by the DOTS (Direct Observed Treatment Short-course) program, because they are rarely contagious to others. Hospital plays an important part in finding TB cases. By 2005, 153 hospitals in Java Island have incorporated DOTS program in their daily activities. This paper describes the burden and types of new childhood TB cases in hospitals and to what extent childhood TB cases are captured in the DOTS program.

Methods A cross sectional study was carried out in 95 hospitals in Java Island from August 2006 to May 2007 to collect tuberculosis secondary data from the summary report of medical records from
inpatient and outpatient units; and TB registers (TB03) between 1 January and 31 December 2005. Based on the availability of data sources, 32 hospitals were selected for further descriptive analysis. Hospitals were classified into different provinces, size, ownership, and teaching status. To describe the disease pattern, TB types were classified into smear positive pulmonary TB; smear negative pulmonary TB; and extra-pulmonary TB. Total number of childhood cases registered in DOTS register was compared to total childhood TB caseload in hospitals.

**Results** In 2005, 11% of all TB cases in inpatient unit (648) and 26.6% (4173) in outpatient unit were new childhood TB cases. Distribution of cases and types of diseases varied between provinces and hospital settings. Majority of childhood TB cases (56% and 53.1%, in inpatient unit and outpatient unit respectively) were less than 5 years old. Pattern of TB types in all provinces and hospital settings were dominated by sputum smear negative cases (69% and 85.5%). Percentage of new sputum smear positive cases in children among total new sputum smear positive cases (5.2% and 15.6%) was higher than WHO estimation for Indonesia (1.1%). Extra pulmonary cases accounts for 15.4% and 6.3% of new childhood TB cases. Of these extra-pulmonary cases, majority were meningitis tuberculosis (25%, 38.5%); miliary tuberculosis (31%, 3.8%); and lymphadenopathy tuberculosis (4%, 45%). Only 1.8% of childhood TB cases in outpatient unit were registered in DOTS.

**Conclusions** Burden of childhood TB in hospitals in Java Island in 2005 was high and varied in different provinces and hospital settings. The National TB Program, with DOTS, should target childhood TB cases as an integral part of control program.

*Studying public health in Umea was a life change experience. Before I took the master of public health in Umea I was just a common research assistant, who gained knowledge and experience through learning by doing.*

*My new life started in 2007, when I received acceptance letter and scholarship support to study in Umea International School of Public Health from the Centre Party. I learn a lot, not only knowledge on public health but also the culture. I learn how Swede’s respect others, their kindness, healthy lifestyle, and how to take care of the environment. Staff at the department is just like a big family, they always welcome students with smile, and more than willing to listen and help them. They all will always be in my heart.*

*In 2009, I return to Indonesia with confident. I started my first academic work at the university. I also start writing my first manuscript based on my master thesis, has succeeded with my first research proposal application, writing several learning modules for post-graduate student, collaborated with the Ministry of Health, other NGOs, and many more. New ideas keep flowing down and I’m optimistic that my future will be bright. The Centre Party was only invested on one scholar for two years, but actually they also invested on hundreds of students I teach and thousands of people affected by research projects that I have been working on since my return.*

*I would like to say thank you very much to all teachers and staff at the Umea International School of Public Health. Special thank to the Centre Party, which has supported students from developing country like Indonesia. I hope many more promising students from developing countries will have chance to study in Umea.*
**Introduction:** Vietnam is a country in South East Asia with a high prevalence of smoking among those aged 15 years and over. The problem of tobacco smoking is not only related to smoking rates but also to the percentage of households which are polluted by having indoor tobacco-smoking people. Although the amount of research on tobacco in Vietnam has recently increased rapidly, there remains a lack of research on the hazards of second hand smoke exposure on child health. Evidence is now urgently needed by those with advocacy responsibilities as well as for society in general.

**Objective:** Measure the proportion of children 3 months through 6 years exposed to second hand smoke (SHS). To assesses the risk factors for SHS exposure among children. To determine the effects of SHS on respiratory health symptoms among children aged 3 months through to 6 years in a province in the North of Vietnam.

**Methods:** This was a cross-sectional survey of 1010 interviews with families that have children between the ages of 3 months and 6 years in Bac Giang province in the North of Vietnam, the study was conducted during June 2007 to August 2008.

**Main findings:** 49.5% of children aged more than 3 months though to 6 years of in this study area were exposed to tobacco smoke in their home. Children exposed to SHS had increased risk of respiratory symptoms. Children aged more than 3 months though to 6 years exposed to second hand smoke have a 2.5 times increased risk of fever, 3.6 times increased risk of coughing, 2.9 times increased risk attack of breathlessness, 2.9 times increased risk of wheezing, whistling, phlegm, running nose, sore nose, sneezing or red eye irritation and a 2.4 times increased risk of any symptoms compared to children not exposed to secondhand smoke. There is no evidence that location, age, sex, education, occupation and economic status of caretakers, as well as age and sex of the child confound the observed association between SHS and respiratory symptoms. The age group of the child is modifies the effect of SHS on fever symptoms. Children under 1 year have a 4-fold increased risk of getting fever when exposed to SHS than children who are not exposed. Children 1-6 years have a two-fold increased risk of getting fever when exposed to SHS compared to children who are not exposed.

**Recommendations:** The finding in this study indicates adverse health effect of SHS exposure that is so high that 100% smoke free environments in the home should be recommended. Successfully 5 eliminating exposure to tobacco smoke requires comprehensive efforts at all levels: international level, national level, regional, local level. Protecting children from SHS in the home should be a priority for all tobacco control programs and policy development. In particular, those involved in the care of children, should advocate for home smoking restriction though discussion about the effects of SHS on children as a motivation for parents who smoke to limit exposure their children’s exposure to SHS.

I owe much gratitude to The Global Health Scholarship, that really meaningful and supported so much for me belong two years 2008-2009 when I was study Master of Public Health at Umeå International School of Public. As many students from developing countries I was lucky person received scholarship, It help me achieved many successful and open the window of my life. This currently I am working for Save the children (an NGO) in Vietnam. With position is Project manager for Health and Nutrition sector. Responsibility project name: Improving Maternal and Newborn Health in Vietnam through Scaling Up the Household to Hospital Continuum of Care Approach.
Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) infection has been rapidly spreading throughout the whole world from the time the first AIDS cases were identified and reported in 1981. Sub-Saharan Africa, a home to 10% of the world’s population is the hardest hit region by the HIV/AIDS pandemic. Most people become infected during their sexually active and economically productive age period between 15 – 44 years. Antiretroviral therapy has changed the once deadly infection with HIV-1 into a chronic manageable disease. Antiretroviral therapy has been introduced to the African countries in recent years by international donors. The introduction of HAART in resource poor countries has raised the expectation that many HIV infected individuals will live longer. Malawi is one of the hardest hit countries by the HIV pandemic. Since free ART service has started in 2003 to the end of 2008, only 48% of those in need of antiretroviral therapy have accessed the treatment. However, the mortality among HIV infected individuals who are started on antiretroviral therapy is higher in poor countries as compared to developed countries.

**Aim:** to identify risk factors and causes of mortality among HIV/AIDS patients who have been receiving HAART in Zomba Central Hospital; Zomba Town, Malawi

**Methods:** A Retrospective Cohort study will be conducted. All adult HIV/AIDS patients who have been initiated on antiretroviral therapy in Zomba Central Hospital from January 1st 2006 to June 30th, 2008 will be included and will be followed retrospectively for that period of time. Data will be collected from standard patients ART registers and follow-up master cards. Mean, median and standard deviation will be calculated to see the frequency distribution of the baseline characteristics of the study subjects. Statistical tests will be one sided using p-value 0.05 as level of statistical significance and 95% confidence intervals (CI) will be calculated as a measure range of values surrounding the point estimate which has a specified probability to include the true population values and helps to determine the precision of the point estimate, p-value < 0.05 will be considered as statistically significant. Chi-square test can also be used to check whether there is a difference between mortality proportion among the different group taking one group as a reference. Incidence Rate will be calculated as a measure of occurrence of death for the reference group and comparison group taking each variable in to account. Incidence rate ratio will be used as a measure of effect and it helps to see the association between the variables in this study and mortality. Data will be entered on STATA version 10 and analyzed. Kaplan Meier curve will be used to estimate survival probability and Cox regression model will be used to identify risk factors of mortality in the cohort taking each variable in to consideration to examine if there is an association between the variables of the study and mortality as well as to deal with confounding and effect modification.
Eyerusalem Dagne
Medical doctor
Ethiopia

Role of socio-demographic factors on utilization of maternal health care services in Ethiopia

Background:
- Maternal mortality in Ethiopia is one of the highest in the world. According to the 2005 demographic and health survey the maternal mortality rate was 673/100,000. Far more many women also suffer from complications of pregnancy and delivery and maternal health care service utilization is far below the acceptable level. An effort has been made in this study to assess the effect of socio-demographic factors on utilization of maternal health care services.

Methods:
- Data was taken from the 2005 Ethiopian demographic and health survey which is a nationally representative survey of women in the 15-49 years age groups. Women who had at least one child in the three years before the survey were included in the analysis. To estimate the effect of the socio-demographic variables on maternal health service utilization two outcome variables were used which were use of antenatal care services and use of assistance during delivery by health professional. Then logistic regression technique was used to estimate models of the outcome variables. Separate models were also done for the urban and rural women since this group differ in many ways. In addition to this a probability model was done to estimate the probability of use of the services by selected variables from the logistic regression model.

Result:
- The result showed that only 30% of the women received antenatal care while 11% received assistance during delivery from health professional. Utilization of these services was very low among rural women as compared to those living in urban areas. In the logistic regression model educational status of the mother, household wealth, place of residence, birth order of the child and educational and occupational status of the husband were found to be strong indicators of utilization in the total sample of women. Antenatal care use was found to be a strong indicator of use of assistance during delivery. The effect of this indicator variables vary according to place of residence. In the urban women household wealth, sex of household head and occupation of the husband had no effect on both antenatal care and use of assistance during delivery. Birth order and sex of household head were not significantly related with antenatal care use in the rural women and education of the mother was not found to be significantly related with use of delivery assistance in the rural sample.

Conclusion:
- To increase women’s utilization of health care services and improve maternal health in Ethiopia some crucial steps should be taken on educating women and strengthening antenatal care services. Great attention should be given to the most vulnerable group of women in the country this includes those who are living in rural areas with no education and in the low economic status group.
Background: The World Health Organization (WHO) estimates that about 536,000 women of reproductive age die each year from pregnancy related complications. Nearly all of these deaths (99%) occur in the developing world. Ethiopia in one of the countries with an unacceptably high maternal mortality, 673/100000 live births, one of the highest in the world. In Ethiopia where 85% of the population lives in rural areas, availability of health services, especially maternal health care services, is extremely difficult. Overall, access for maternity care is on average 23% for rural and 52% for urban areas. Studies addressing determinants of maternity care services utilization in the country are scarce, and these studies have been mainly focused on urban areas and health centers and hospitals.

Objective: This study was aimed to explore the trends and magnitudes of antenatal, institutional delivery and skilled birth assistance utilization and to identify determinants for selection of this service in Saharti Samre district, Tigray, Ethiopia.

Method: The study combined both quantitative and qualitative methods. The quantitative study was a community-based cross-sectional survey using a structured questionnaire. Cluster sampling technique was utilized to select the study subjects who were mothers who gave birth once in the past five years prior the survey period. For the qualitative study focus group discussions (FGDs) was chosen as the tool for data collection. The participants were purposely selected from different kebeles and kushets. Four FGDs (two with men and two with women) were conducted.

Results: A total of 1113 women participated in the quantitative survey. The proportion of women who received antenatal care for their recent births was 54%. Only 4% of mothers gave birth for their recent child in the health facility and only 6% mothers were assisted by skilled birth attendants. Education, parity, family education, history of obstructed labor and ANC visit were significant predictors for the selection of delivery place. Regarding skilled assistance education and family education was found significant predictors. Similarly education and marital status were significant factors for use of ANC utilization. The FGDs identified economic constraints, transport problems, inaccessibility of health facilities, lack of decision making power, cultural and traditional practices as important predictors for seeking of maternal health care.

Conclusion: This study confirmed that the proportion of antenatal care, institutional delivery and skilled birth attendant utilization were very low. Economical, health facility related and socio-cultural factors were the most frequently identified contributors to the low maternal health care utilization. More effort should be given to educate mothers, to improve men involvement and religious leaders, to strengthen community participation, to increase political commitment and to boost accessibility to maternal health care services. Emphasis should also be given to capacity building for skilled birth attendants and HEWs. TBAs are still highly accepted by communities and therefore TBAs’ role should be reassessed and motivated.
Background: In spite of the well proven benefits of antiretroviral therapy (ART) in prolonging the life expectancy and improving the quality of life of acquired immunodeficiency syndrome (AIDS) patients, loss to ART follow-up is a problem to the success of ART programs in resource limited countries. In Ethiopia, even though ART and related medical services are being given free of charge since 2005 as part of the global ART scale-up initiatives, loss to ART follow-up has become one of the challenges facing the program. Depending on health institutional, patients’ socio-demographic and clinical parameters, different ART sites have different magnitude of prevalence and factors associated with loss to ART follow-up.

Objective: The objective of this study is to determine the prevalence and investigate the factors associated with drop out from ART follow-up at Holeta Health Center in Ethiopia.

Methods: A case-control empirical study was conducted in a retrospective cohort of ART patients at Holeta Health Center. The retrospective cohort included all AIDS patients who were ever started on ART from October 2005 to June 30, 2009. Data was extracted from the patients’ chart review. Cases were adult ART patients who were lost to follow-up in the retrospective cohort. All adult patients who were lost to follow-up for ≥3 months were included in the study. For each case, two matched controls were selected from among those in the retrospective cohort who were not lost to follow up by the time the cases were lost. Data was computerized using Excel and analyzed using STATA. The overall prevalence of drop-out from ART follow-up in the cohort and the proportions of loss to ART follow-up in the sample population for each presumed predictor variable were determined. Univariate and multivariable logistic regression analysis were used to determine the association between the presumed predictor variables and loss to ART follow-up.

Results: There were 692 adult patients in the retrospective cohort during the period. Seventy nine of these ever ART started patients were lost to follow-up for ≥3 months making the drop out prevalence 11%. A total of 237 patients (79 cases and 158 controls) were included in the sample. Fifty-six percent were aged 15-34 years. Women constituted the majority (61%). About half (49%) had no formal education. Fifty-eight percent had their residence outside the catchment area of the ART clinic. The majority of the sample had advanced stage of AIDS at the time of initiation of ART (74% had stage III/IV, 84% percent had T-lymphocyte with cluster of differentiation 4 (CD4) cell count <200/μl and 57% had baseline body weight of ≤50kg). However, 66% had good functional status. The majority (80%) were initiated on ART based on the criterion CD4 cell count <200/μl. One-third of the sample had experienced side effects from the ART treatment. The mean weight gain during follow-up for the sample was 3.5kg. Patient’s level of education, employment status, distance of patient’s residence from the ART clinic, patient’s functional status at initiation of ART, presence of treatment side effects, duration of treatment follow-up, and weight gain during follow-up were significantly associated with loss to follow-up both on univariate and multivariable logistic regression model.

Conclusion: The overall prevalence of 11% drop out from ART at the study area is similar to those figures reported for resource-poor countries. The factors found to be independently significantly associated with loss to follow-up at the study area call for stakeholders to work on employment opportunities for ART patients, to more decentralize ART clinics and to work on ways to reduce the stigma and discrimination associated with AIDS; for health professionals working at ART centers to give special attention and intensive counseling for patients who suffer from treatment side effects.
The Global Health Scholarship offered to me meant everything that enabled me complete my master of science in public health at Umeå International School of Public Health. It was all because of that scholarship that I got to manage my financial needs during my study. And now I am doing a public health job in Ethiopia. Thank you the donors and all the staff at Umeå International School of Public Health. With all my heartfelt thanks & respect.

2009

Girmay Asgedom
Medical doctor
Ethiopia
Clinical outcomes and CD4 cell response of PLWHA receiving antiretroviral treatment in 12 hospitals in Tigray region

I am Girmay Asgedom second year MPH 09/11 student from Ethiopia. I have received The Global health scholarship since last academic year. It has helped me cover my living expense and accommodation during my stay. Without the scholarship I couldn’t have managed to afford all these expenses, currently I am working on my thesis. Finally I would like to thank the Global health scholarship project for it is the main and the prime reason for my being here and attend my study.

Hanna Gebre
Master in women’s and gender studies
Ethiopia
Women’s experience of autonomy in reproductive health decision: the case of Ethiopia
Yehualashet Tadesse
Medical doctor
Ethiopia
Cervical cancer: Analysis of diagnostic and therapeutic facility in public health institutions in Addis Ababa, Ethiopia

It has been exciting to be here in Umeå with classmates from different parts of the world and teachers with diverse experience. There was a lot to learn at every moment of class room and group activities. I had a chance to learn on the quickly evolving science of global health, epidemiological research methods and academic writing. By now I feel I can contribute to the struggle to solve the challenges of the health of the public back in my home country (Ethiopia). Being here in Sweden, I had the opportunity to know the culture, the way of life and a little Svenska. Overall, my experiences helped me have a broader view of the world. All the above is possible as my stay was made comfortable through the global health scholarship. Currently I am completing my thesis and will be ready to defend by the beginning of May 2011.

Joseph Stephen Bukalasa
Bsc in Environmental Science and Management
Tanzania
The impact of indoor air pollution and social inequality on acute respiratory diseases in children in Tanzania

If I could not have a Global Health Scholarship, I don’t think if I could be where I am now. The Global Health Scholarship has helped me to solve financial problem while I was studying my master programme. The knowledge that I have obtain from Umea International School of public Health will help me to work on strategic, technical and managerial problems at local, national and international levels. Then without Global Health Scholarship I could miss these knowledge, I really appreciate Global Health Scholarship because after completion of my programme I am going to solve the current help problem in my country.

Also, the Global Health Scholarship have helped me to meet with different people from party of the world and from there my professional concerning Public Health issue has been developed because of exchange knowledge in an international atmosphere, learning from best practices in various regions of the world.

Lastly, I would like to suggest that, it will be better if the representatives from the Global Health Scholarship to visit us after completion of our study to see things that we were not able to achieve before and after completion of the Master programme we have been able to achieve and to solve some public health problem in our countries.

Currently, I am writing my thesis about ‘The impact of indoor air pollution and social inequality on acute respiratory disease in children in Tanzania’. I have decided to work on this title because of increase on the children morbidity and mortality among children from different socio economic position and as the result children from low socio economic position (poor) suffer more from acute
respiratory infections than children from high socio economic position (Rich). Also the indoor air pollution is more common to the poor families than rich families because people live in poor quality and without electricity as the results depends on the solid fuels as source of energy in the households in Tanzania.

2010

Tadesse Senay Alemu
Medical doctor
Ethiopia

Evaluating the effectiveness of PMTCT ARV Prophylaxis intervention program for HIV positive pregnant mothers and children in Oromia region, Ethiopia

I am Alemu, Tadesse Senay, a first year global public health masters student in 2010/2012 program from Ethiopia.

The scholarship means a lot to me in the first place, I was working in public health sector of Ethiopia and it was hard to practice this area without the knowledge of advanced study in public health, so my dream and interest to become public health practitioner become successful by Centre party scholarship. In the second place coming and studying in Sweden has been a great opportunity to know the culture and tradition of Swedish people and the environment as well as Northern Europe as a whole. Thirdly, the scholarship covers my monthly expense which helps me to focus in my study with full attention and having time for further study to broaden my knowledge which is an asset for my future PHD study.

I am really grateful to study my masters in one of the best and famous international public health school in the world with the help of the Global Health Scholarship at Umeå International School of Public Health which is donated by the Centre Party.
Gilbonce Betson
B.Sc Environmental health
Tanzania

Assessment of factors affecting compliance to health and safety requirements at barbershops and hairdressing salons in Ilala Municipality, Tanzania

Global Scholarship program is very useful for me and I will never forget about it. It’s through this scholarship that my dreams are becoming true. This will help to achieve my future career development, as Public Health Officer. As we all know, it’s difficult for students from poor countries like Tanzania to come and study here in Europe. It’s through this scholarship that has made it possible for me.

Also, this scholarship program is very useful in improving professional and academic skills for all beneficiaries all over the world. It’s my hope that after completion of my Masters Program I will use the acquired knowledge and skills for improving public health in my country and the world at large. Studying in Sweden will also help to increase interaction with people from different parts of the world and therefore will increase my experience on solving different public health problems. Therefore the scholarship is very useful to increase economic development of many poor countries.

So far, I am continuing with my coursework and thesis proposal writing. My proposal will base on the Occupational Health and Safety at barbershops and hairdressing salon in Ilala Municipality, Tanzania. I will go back in my home country for data collection during the summer holiday.

I strongly appreciate the contribution of Global Health Scholarship program, and therefore I recommend it to be sustainable and increase more chances for beneficiaries. Also, I suggest the scholarship should cover more compulsory areas such as thesis work and if possible transport fare. I have experienced some challenges regarding residence permit application process; therefore it will be better if the amount of scholarship should consider the amount required to be presented to the Swedish Migration Board in order to get VISA. Some students from developing countries may be impossible to top up and get transport fare from their home country, therefore they may lose this scholarship opportunity.

Lastly, I would like to say thanks for scholarship offer and all donors should be blessed forever. I appreciate their contribution and I am sure God will give them more that what they have.
Melesse Birega Waje
Medical doctor
Ethiopia

Factors influencing risk of virologic and/or immunologic failure in adult patients taking antiretroviral treatment (ART) in Ethiopia

It was a few years ago, in the early years of my career as a medical doctor, that I came to learn how the knowledge and skills in the area of Public Health are vitally important to the nation of Ethiopia. Having a firsthand experience of working in the most disadvantaged part of the state, where most of the ailments are due to simple preventable diseases, I started to aspire to have the expertise in the field of Public Health and add my own impetus towards the effort to meet countless health needs of my people. After that, I began the journey towards the realization of my dream. UISPH, having a well deserved international reputation in the field of public health and being academic home for most of the renowned public health experts in my country, it was my keen determination to join this institution and make my dream a reality. Contented enough, I am currently pursuing my master's degree at UISPH, and this would not have been possible without the financial support from the Centre Party. Anticipating the service I can deliver in my country up on completing the programme, I always remain grateful to the people of Sweden, and UISPH will continue to put its effect to the countless health care needs of my country.

Bedru Hussen Mohammed
Veterinary medicine
Ethiopia

Direct effects of climate change on health in the arctic region: systematic review

In recent years there is a significant increase in the cost of postgraduate education worldwide, to the discouragement of many current and aspiring students. To those whose financial situation jeopardizes the continuation of their education like me, the contributions of scholarships from different institutions make all the difference. The Global Health Scholarship by the Centre Party donation is one of them. I feel so honored to receive this Scholarship. I would like to take this opportunity to thank you for the award. I really enjoyed it so far and I am looking forward with great anticipation to the remaining study time. I believe that many – if not all – students from developing countries attending public health study in Umea University have financial problem. And it is gratifying to know that there is a scholarship assigned specifically to us, one that recognizes our unique circumstances. Since I have done my first master on Health System, the one I am taking now makes me more complete and confident in the field of Public Health. After finishing the classes, I made a decision to return to my country for my thesis work. I have an idea and a proposal to work on. But unfortunately, I have a doubt about its practicality. This is mainly because I can't afford to travel. I know that returning to Ethiopia to do a thesis research will be challenging – and it is. But, I also know that if I have to do something useful to my country, it has to be that way. Again, thank you for your generosity!
Advertisement for the PhD scholarships

The 2011
Global health research scholarship
for PhD studies at Epidemiology and Global Health

Through a generous donation from the Swedish Centre Party to Umeå University, the Division of Global Health, we hereby announce a call for grant applications in global health research in support of PhD students from low or middle income countries.

Eligibility
To be eligible to get the scholarship you should fulfil the following criteria

 come from a low or middle income country
 be a registered PhD student at our unit or aiming at becoming a PhD student at our unit and with an intended main tutor from the unit
 the proposed research can be placed within one of the five themes of the Centre for Global Health Research (see http://www.globalhealthresearch.net/)

What does the scholarship cover?
The scholarship covers 1 – 3 months of stay in Umeå. The amount for each month is 12 250 SEK. Further the scholarship covers the travel from the students home country and back to a maximum of 14 000 SEK.

The scholarship does not cover field costs, equipment or tutoring.

The number of times a scholarship can be awarded
The scholarship must be applied for annually. The maximum number of times a student can get the scholarship is two.

Applications should include

A formal letter, signed by you, where you announce that you apply for the scholarship. Name your main tutor (or intended main tutor).

1) A summary of the research plan (max 3 pages including references)
2) CV for PhD student
3) CV for supervisor at home institution (if applicable)

For those who received the scholarship 2010 only 1) together with a report of how the scholarship of 2010 has been used is necessary.

Applications will be assessed by an advisory board within the Division of Epidemiology and Global Health supplemented by external referees.