

Abstracts of AMS Research Projects 2008-9

Name of Student: Elise Therese FLYNN

Project title:

A Mother's Rites: a study of the factors affecting the decision to have skilled delivery care in Herbertpur, India

Research in the area of maternal health is generally conducted around the practices of antenatal and postnatal care. The decision to utilise skilled or unskilled delivery care receives much less attention, despite the fact that delivery with a skilled birth attendant has been proven to reduce maternal mortality. This study explored the factors that influence the decision to have a skilled birth attendant at delivery in rural north India. Twenty-four interviews were conducted with mothers and key informants and two group discussions were held comprising of typical decision makers in an Indian family.

The majority of women in the study setting had home deliveries, often with the assistance of a traditional birth attendant. The factors impacting on this decision were varied; however, the core reason was generally a lack of health awareness. The attitudes of the decision maker were also important, particularly their perception of the role of a hospital. The mother's participation in antenatal care correlated with an increased likelihood of skilled delivery care, as did the accessibility of the health service. Trends were noticed in the demographics of the mother, with older first time mothers and lower parity correlating with institutional delivery. Economic status generally determined which type of health service was utilised rather than acting as a barrier to accessing any.

Further research is required in this setting. There is room to explore the barriers that men face to participating in reproductive health, as well as the potential benefits of strengthening the referral system between traditional birth attendants and the hospital.

Name of Student: Victoria Giles HALL

Project title:

“Let us hope that the child gets better...”

An exploration of the health-seeking behaviour of mothers for their sick child in rural North India

Child mortality and morbidity is a major contributor to the burden of disease in the developing world. The health outcomes for children under five is largely dependent on the health-seeking behaviour of their caretakers. This study uses the Pathway to Survival Framework, which has predominantly looked at mortality of children under five, rather than morbidity, with no published studies conducted in India. Literature available for health-seeking behaviour in India is very limited. The study area was Herbertpur, Uttarakhand, a state of North India.

Using qualitative methods, the study interviewed 26 mothers of children aged under five years. Interview content consisted of the child's illness, the mother's recognition of it, what they did inside the home for their child and then if they sought care outside the home and at what providers.

Demographic data was also obtained from the mothers. The data were analysed to determine reasons for delays in seeking care at an appropriate provider and the barriers and determinants of health-seeking behaviour.

This was also the topic for a focus group discussion between health-care workers in the villages.

It was found that there is a severe lack of awareness about health, hygiene and prevention of illness, leading to extended periods of illness in the child, recurring illnesses and dubious 'recovery'. According to the health-care workers, this stems from a general lack of education within the communities. Every caretaker sought care outside the home. Recognition of illness and its seriousness was a major reason for delay, along with lack of transport, lack of money and the provision of home remedies.

Delays to recovery occurred because mothers consulted inappropriate, unqualified providers, mostly in the form of the 'local doctor.' Mothers showed a trial and error approach to health-seeking behaviour, where they would switch healers if the medicines were not working, the child was not improving or the child's condition was deteriorating.

The study findings suggest that basic health education about child illness needs to be taught within the communities and also when and where to seek health care. For proper recommendations a much larger scale study needs to be conducted.

Name of Student: Penelope Claire HEY

Project title:

Ventilator-associated pneumonia in paediatric intensive care patients in a developing settings: the diagnosis, incidence and preventive strategies

Background: Ventilator-Associated Pneumonia (VAP) is one of the most common nosocomial infections to afflict critically ill patients. It is associated with increased patient mortality and morbidity and places a significant burden on patients and health care systems alike. The purpose of this study was to measure the incidence of VAP in three intensive care units (ICUs) in a developing country, to examine preventive strategies for this infection and to assess the applicability of current diagnostic criteria for VAP in a hospital in a developing country.

Methods: A prospective cohort study was conducted to measure the incidence of VAP at the National Hospital of Paediatrics, Vietnam, for a six week period from December 2008 to January 2009. Criteria established by the Centre for Disease Control and Prevention for the diagnosis of VAP infection were used and their applicability in a developing country was assessed. Furthermore, the implementation of strategies aimed at preventing this infection was examined through observation and a questionnaire for health care professionals.

Results: 120 of patients met the inclusion criteria for this study and the incidence of VAP was measured at 25.0% or 25.8 cases per 1000 ventilator-days. Gram negative bacteria were the most common causative organisms isolated with *P.aeruginosa* and *A.baumannii* accounting for 35% and 25% of isolates respectively. VAP infection was also associated with an increased risk of mortality (OR 12.7, 95% CI 3.7-43.9). The knowledge and reported practices of health care workers in the survey was found to vary and some, but not all, of recommended preventive strategies were adhered to.

Conclusion: The incidence rate of VAP in the ICUs at the NHP was found to be comparable to other studies conducted in low-middle income countries but somewhat higher than other literature found to measure this infection in paediatric and neonatal patients. The CDC diagnostic criteria were applicable to this setting however some adaptations were required due to a lack of resources and documentation of certain signs and symptoms. Ultimately, continued education of health care workers in regards to basic infection control measures and strategies to help prevent VAP is integral in reducing the burden of this infection

Name of Student: Jane Laura KARMOUCHE

Project title:

The Curse of the Snake

Experiences of impairment secondary to leprosy infection: A Qualitative Study in the Kathmandu Valley, Nepal

Throughout history, the term 'leprosy' has evoked strong emotional responses that have transcended different cultures and religions around the world. Infection with *Mycobacterium Leprae* and the subsequent immune response causes progressive damage to peripheral nerves and often permanent functional impairment. The advent of curative multi-drug therapy brought a substantial decline in leprosy worldwide and prompted initiatives aiming to achieve global elimination.

This paper reports on data collected from fifteen in-depth interviews and two focus groups discussions with people experiencing impairment secondary to leprosy infection. This has been combined with interviews with five staff members of Anandaban hospital in the Kathmandu valley, Nepal. The project explored experiences of impairment secondary to leprosy infection and the responses to these by the largest specialist leprosy facility in Nepal - Anandaban Hospital.

The challenges resulting from post-leprosy impairment were found to be numerous. Anaesthesia and deformity to extremities resulted in frequent injury and the prospect of further permanent impairment. In addition to physical difficulties, economic, social and psychological challenges were reported. The impact of these was determined by a combination of the physical impairment, and the environment in which it was experienced.

Anandaban Hospital acknowledged the majority of the identified challenges and responded to them to varying degrees. The impact of external influences was often a barrier to appropriately addressing these challenges. Additionally, the heavy reliance of the affected population on the hospital was evident. The needs of those with post-leprosy impairment were complex and having Anandaban as virtually the sole service provider proved to be somewhat problematic.

The results of this study supported the need for the hospital to continue to provide a comprehensive range of services for leprosy-affected individuals while giving consideration to the influence of environmental factors. It also supported the need to consider the potential implications of achieving the elimination goal in Nepal. The research demonstrated that there were needs of leprosy-affected individuals which were not being addressed. With achievement of the elimination goal, there exists a risk that the affected population will be further overlooked as resources are diverted towards health issues that are viewed as higher priority.

Name of Student: Simon Chi-Hin LAU

Project title:

Online peer counsellors of Vietnam: challenges, barriers and needs

Peer to peer interaction, including peer education, takes many forms and is based on the ability of a peer to connect and influence others. Peer counselling is an example of this. In peer counselling, young counsellors are employed to interact with individual clients, aiming to build skills, raise knowledge and awareness and provide psychosocial support. Both peer education and counselling aim for lasting behaviour change, particularly among the young.

In Vietnam, the difference between traditional Confucian society and a new, western-influenced youth culture means unique challenges exist for young people. Peer counsellors are working to bridge this divide. Further, peer counsellors who use the Internet as a medium for communicating with clients are particularly innovative. While online peer counselling is considered a successful approach, there is a knowledge gap regarding these counsellors – *What do they do? What is difficult about being an online peer counsellor? What are their needs?*

This qualitative research was conducted within the CHAT project in Hanoi, and involved interviewing eight online peer counsellors about their roles, challenges and needs. Two focus group discussions explored the broader role of peer counselling and education in Vietnam.

The peer counsellors appear to be aware of the significance of their roles. Further, although they experienced difficulty with specifics like maintaining up-to-date knowledge, these are issues that would likely confront any type of adolescent counsellor. Challenges associated with working online, and working as peers seemed minimal. The results of this research are thus encouraging. However, underlying cultural values and attitudes towards controversial, taboo issues like homosexuality and premarital sex require further exploration. As the online world gains recognition as an important platform for health interventions, further research is required to provide the evidence base.

Name of Student: Emma Jane LEITINGER

Project Title:

An evaluation of Rainwater Cambodia's dengue mitigation project

Dengue Fever is a major health problem throughout Southeast Asia and there are many control strategies being trialled. RainWater Cambodia, a Non-Governmental Organisation conducted a Dengue mitigation project in S'aang district, Kandal province, a rural part of Cambodia. The project took a community-based approach involving multiple stakeholders and institutions within the community including schools and school children, healthcare centres and staff, village leaders and villagers. In order to evaluate the success of this program 2 Focus-Group Discussions (FGDs) with school children and 22 In-Depth Interviews (IDIs) were conducted. IDIs were conducted with various stakeholders: School staff, healthcare workers, village fish-breeders, villagers actively participating and villagers not yet actively participating. Results showed high levels of knowledge with all participants which could predominantly be attributed to RWC's program though there remain issues around active community participation. Overall there appear to be no major barriers to the eventual success of such a program yet there continues to be room for improvement.

Name of Student: Dorothy Qiuyue LING

Project Title:

An Exploration of the Knowledge, Attitudes and Practices of School-age Youth towards Tobacco Use in Cambodia

Despite having one of the highest rates of smoking in the world, Cambodia has little national data regarding tobacco use amongst school-age Cambodian youth. One of the few studies undertaken involving Cambodian youth in the area of tobacco use was the Global Youth Tobacco Survey (GYTS) done in 2003 by the World Health Organisation (WHO), using a questionnaire distributed to 2011 students from randomly selected schools across Cambodia.

This research project aimed to contribute and support the ongoing tobacco prevention program in Wat Koh High School in Phnom Penh, Cambodia, in the hopes that the tobacco prevention program can be as relevant and effective as possible. To do so, this research project explored the knowledge, attitudes and practices, as well as the prevalence of tobacco use amongst school-age Cambodian youth. This was done using a structured questionnaire and In-depth Interviews (IDIs) of Cambodian youth in Wat Koh High School.

The results of this project showed that participants had a high level of knowledge of tobacco and its uses. Most participants were firm in their personal stance against smoking and smoking prevalence was found to be lower than that reported in Cambodia's GYTS. The current tobacco prevention program at Wat Koh High School was successful in educating students about the harms and negative impacts associated with smoking. This research study demonstrated the importance of knowledge in influencing attitudes towards smoking and consequently, the smoking identity. In order to increase the effectiveness of the tobacco prevention program, additional relevant materials have been recommended for inclusion into the curriculum. The World Tobacco Day is also an excellent opportunity for the school to increase awareness, engage students and address important issues.

The results of this study should be treated as preliminary. Further research studies are required, particularly in the area of school-based tobacco prevention programs.

Name of Student: Hannah Kate MEYER

Project title:

Rheumatic heart disease: quality of life for patients and their families in eastern Nepal

Background: Rheumatic heart disease (RHD) remains a significant health problem in the developing world, affecting 15.6 million people worldwide, with a prevalence of 1.2/1000 in 5-16 year old schoolchildren in Nepal. RHD is largely a disease of poverty, of which overcrowding, poor nutrition, poor health-care access and limited health resources are major contributing factors. Debate surrounds the merits of cost-effective prevention versus tertiary care. This project aims to explore quality of life for RHD patients and their families, both before and after heart-valve surgery.

Objectives: 1. Add to currently available documentation about quality of life and experiences with rheumatic heart diseases; 2. Describe the personal impact of heart valve surgery upon a patient with rheumatic heart disease, analysing changes in quality of life; 3. Investigate the socioeconomic impact of rheumatic heart disease and valve surgery on the family unit.

Methods: A qualitative study design was employed, involving 22 in-depth interviews and one focus group discussion. Participants were recruited from a disability clinic in eastern Nepal, including pre-surgery RHD patients, post-heart-valve surgery RHD patients, and family members.

Results: As a disability, RHD has significant physical, mental and socioeconomic impacts upon affected patients and families, causing further poverty. Quality of life improves following heart-valve surgery.

Conclusions: RHD is a significant physical, mental and socioeconomic burden upon individuals and families. Cost-effective prevention programs are challenged by limited resources and poor access to health-care. Within a PHC system, heart-valve surgery cannot be made widely available due to costs and competing priorities; however it is the only curative option for RHD patients. Health-care programs for poor families with RHD should continue, and be scaled up if possible. Further research into RHD prevalence and quality of life, and development of comprehensive PHC policies including RHD prevention are required.

Name of Student: Jasmine Shoba PILLAI

Project title:

Nepali success stories: an exploratory study of successful participation and its associated factors in individuals affected by leprosy in Nepal

This study explores successful participation in individuals affected by leprosy, receiving support from leprosy-specific rehabilitation services in the Kathmandu Valley, Nepal. Nepal is one of few countries in which leprosy continues to be endemic. Leprosy infection has many negative effects, extending beyond physical impairment. Social stigma, both enacted and felt, has been shown to create participation restrictions in key areas of life, and can lead to social ostracism and unemployment. Trends in rehabilitation are moving away from leprosy-specific, institutional services, towards a community-based approach, aiming for full reintegration of affected individuals.

This study consisted of fifteen in-depth interviews with individuals receiving support from leprosy-specific services. Participants were screened for inclusion in the study using the *Participation Scale*. The majority of participants were experiencing few participation restrictions. Individuals were participating well in domestic, religious and work life, yet continued to experience difficulties in several areas, including interacting with non-leprosy affected people. Physical impairments and felt stigma greatly limited participation levels. Successful participation was facilitated by contextual factors, including assistive devices, support received from health-professionals, high education level and male gender. Engaging with institutional services had helped participants to achieve successful participation in critical areas and was associated with increased self-worth. However, this also correlated with high levels of felt stigma, a preference for leprosy-only interactions and possible dependency on services.

The study concludes that approaches to rehabilitation should be holistic and focus on changing community attitudes, improving access to health care and encouraging links with the community. Recommendations for further research include an evaluation of leprosy-specific services and a study of successful participation in individuals living independent of institutional support.

Name of Student: Kathryn Fiona SHEPHERD

Project title:

"Why didn't I learn about contraception in high school?" Contraceptive choices of young, unmarried women in Hanoi, Vietnam

The aim of this research was to explore the knowledge, attitudes and practices of young, Vietnamese women with regards to contraception. It was completed with the support of the Consultation of Investment in Health Promotion, an organisation based in Hanoi, Vietnam. A qualitative approach was used, with fourteen participants involved in a series of in-depth interviews and five participants undertaking a focus group discussion. A snowballing method was used to recruit the participants who were all unmarried, educated women aged 20-25. The participants were asked a series of questions focusing on contraceptive decision-making and influences affecting use. The participants raised issues such as a lack of sexual health education and focused on societal views of premarital sex. Gender issues were also discussed, and included the influence of men over women in the use of contraception, and the belief that Vietnamese society is more accepting of men seeking contraception. This study highlights the participants' belief that regardless of attitudes towards premarital sex, there should be comprehensive sexual and reproductive health education for all young Vietnamese women.

Name of Student: Rowena Jane SILCOCK

Project title:

'Struggling at every step': a qualitative study of access to health care for women with disabilities in rural Nepal

About 650 million people globally are disabled, 80% living in a developing context. Women with disabilities (WWD) are among the most neglected group in Nepal; with a double disadvantage of gender inequality and disability. Most live in a climate of poverty, especially as poverty is gender biased. WWD receive less than 20% of rehabilitation services available. Disability research tends to neglect gender and limited research focuses on WWD's disadvantage. The aim of this project is to explore the experiences of WWD in rural Nepal; especially in accessing health care and the consequences of poor access. Using qualitative methods, data collection was completed in Dharan, rural Nepal. Semi-structured in-depth interviews were completed, 21 with WWD and 2 with key informants. Field notes were compiled from observations throughout data collection. WWD were '*struggling (at) every step*' throughout their lives. Results demonstrated poor access to health care, often contributing to disability; barriers to health care were physical, financial and attitudinal in nature. WWD were heavily dependant on others, especially family and opportunities of marriage, education and employment were narrowed by disability. To reduce WWD's disadvantage a greater emphasis on a right based approach to disability and secure access to services including health care, education and employment opportunities must be prioritised. Ultimately greater research is needed in this area to develop a cohesive understanding of WWD and their disadvantage.

Name of Student: Leah WATTS

Project title:

Mental illness is like any other illness: A qualitative study investigating the integration of mental health into primary health care.

Integrating mental health into primary health care (PHC), a recommendation of the World Health Organization, involves allowing for diagnosis and treatment of people with mental illness alongside treatment of general health problems, and ensuring primary health care workers have the range of mental health skills necessary to promote mental health, and provide comprehensive care to people with mental illness in the community.

This study aimed to enhance knowledge and understanding of the integration of mental health into PHC. The objectives were: 1. to describe in detail a case study of the integration of mental health into PHC; 2. to identify the barriers to and facilitators of effective integration of mental health in to PHC; 3. to enhance understanding of the impact of accessing mental health care at the PHC level on the lives of program participants.

This was a qualitative study undertaken in Doddaballapur taluk, Bangalore rural district, India, in partnership with two NGOs, BasicNeeds and Grameena Abyudaya Seva Samsthe (GASS). Data collection involved 11 semi-structured key informant interviews and two focus group discussions with people recovered from mental illness.

This study described how a community based organization (GASS), integrated their mental health program into the government PHC system. Adequate provision of resources such as psychotropic medications, willingness of PHC staff to embrace mental health care as part of their role, and positive collaboration between all those involved were the main facilitators of integration. People with mental illness reported positive changes in their lives after accessing integrated mental health care, including a decrease in their symptoms and improved self-perceptions and social and familial relationships.

The key recommendations arising from this study have the potential to increase collaboration between GASS and the PHC providers in Doddaballapur taluk, to allow for more holistic care of people with mental illness.