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Exploring Nepali Health Personnel Experiences of Collaboration with Short-Term Mobile Medical Teams in Gorkha, Nepal.

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ABSTRACT

Introduction: Rural and remote areas of Nepal frequently host short-term medical teams responding both to disasters and chronic health needs. Collaboration between visiting medical teams and Host Health Personnel (HHP) has been identified as an important foundation of quality, effective, and sustainable health care for host communities. Published research on collaborative efforts in the planning, implementation, and evaluation of the outcomes of these missions is minimal. Particularly absent is the perspective of HHP on the extent and methods of collaboration.

Methods: To explore the experiences of collaboration of HHP with visiting mobile medical teams in a rural region of Nepal this project used qualitative semi structured interviews and analysis through the lens of Critical Social Theory. NVivo© by QSR International was used to organise the interviews into themes to assist analysis.

Results: Few teams engaged in good collaboration with HHP throughout their mission. Interpersonal skills of key leaders were highlighted by HHP as foundational for collaboration, resulting in three major themes; Presence: immersion in the context of health needs and openness to learning and change; Dignifying: pertaining to respect, reciprocal arrangements, and sensitivity to social status and organisational position; and Engaging: the initiation of discussions, objective development, and engagement in the offering, denying, and rejecting of services.

Conclusion: Despite ongoing calls for improved collaboration between hosts and visiting medical professionals there is still a lack of collaboration. This can lead to relationship breakdown between hosts and visiting teams with consequences for patient care. Medical teams responding to disasters and engaged in specialist medical services need to ensure team leadership has the interpersonal skills required for collaboration and sufficient organisational flexibility to share decision making with HHP.

THESIS DECLARATION

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Leighton Bruce Filmer 30th September 2019

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KEY TERMS, ACRONYMS, AND ABBREVIATIONS

Camp	short-term medical outreach service
CINAHL	Cumulative Index of Nursing and Allied Health Literature for EBSCO Industries.
Collaboration	a true partnership, where the power on both sides is valued by both, with recognition and acceptance of separate and combined practice spheres of activity and responsibility, mutual safeguarding of the legitimate interests of each party, and a commonality of goals that is recognized by each party.
Cooperation	working together but without mutually agreed goals
Coordination	delivering care independently within mutually agreed boundaries
CR	Critical Realism
CST	Critical Social Theory
DHO	District Health Office
EBSCO	Literature search engine of EBSCO Industries
EMT	Emergency Medical Team
FCHV	Female Community Health Volunteer
FMT	Foreign Medical Team
GoN	Government of Nepal
HHP	Host Health Personnel
HIC	Higher Income Country
HREC	Human Research Ethics Committee
ICRC	International Committee of the Red Cross
I-EMT	International Emergency Medical Team
IMR	Infant Mortality Rate (deaths/1000 live births)
INF	International Nepal Fellowship
INGO	International Non Government Organisation
LIC	Low Income Country
LMIC	Lower-Middle Income Country
MHU	Mobile Health Unit
MMT	Mobile Medical Team
MoH	Ministry of Health
MSF	Medicins Sans Frontieres
MST	Medical Service Trips
NGO	Non-Government Organisation
NHRC	Nepal Health Research Council
Nvivo	program by QSR International for storing, organising, and categorising information.
OCHA	Office for the Coordination of Humanitarian Affairs
OPD	Out-Patients Department
OT	Operating Theatre
PHASE Nepal	Practical Help Achieving Self Empowerment Nepal – An NGO
PHC	Primary Health Centre
PRISMA	an evidence-based minimum set of items for reporting in systematic reviews and meta-analyses.
Pubmed	public medical literature search engine of the National Centre for Biotechnology Information
SCOPUS	literature search engine of Elsevier publishers
SPHERE	project to develop a humanitarian charter and minimum standards in humanitarian response.
SSI	Semi-Structured Interview
STMM	Short-term Medical Mission
Sustainability	advancing equity and justice, and maintaining capacity, through resilient and durable social, political, and economic institutions
TU	Tribhuvan University
UMIC	Upper Middle-Income Country
UN	United Nations
USG	Ultrasonography
WHO	World Health Organisation

CHAPTER 1 - INTRODUCTION

Rural and remote areas of Nepal frequently host medical teams deploying for short periods of time as private volunteers or on government missions. Collaboration between visiting medical teams and host health personnel (HHP) is an important foundation of quality, effective, and sustainable health care for the host community. Published research on collaborative efforts in the planning, implementation, and evaluation of the outcomes of these missions is minimal. Particularly absent is the perspective of HHP on the extent and methods of collaboration, and the longer-term legacy of collaboration on the local health services.

This project explored the perspectives of HHP in a rural region of Nepal on the extent and impact of collaborative activities with mobile medical teams, including foreign and Nepali teams.

In this introduction the context of the Nepal health system and characteristics of short term medical teams are described, as well as concepts around collaboration that led to the development of the aims of the study."

Mobile Medical Teams

Every year there are some medical, nursing, and allied health personnel who participate in short-term Mobile Medical teams (MMT) in Low Income Countries and Lower-Middle Income Counties (LIC/LMIC) around the world. These contributions to global health can originate from government agencies, private foundations, the corporate sector, or are sometimes voluntary. They may be

national teams mobilising from health centres in cities to rural and remote regions, or sourced from High and Upper-Middle Income Countries (HIC/UMIC). These teams visit LIC/LMIC regions and perform anything from primary health care to specialised surgery services. Examples include: 1) The provision of specialist services otherwise unavailable in country, such as cranio-facial reconstruction [1] or paediatric cardiac surgery, [2] 2) Humanitarian responses to a surge in health needs due to a disaster [3-5] or disease epidemic, [6] and 3) Teams who provide medical care to under-resourced communities due to poverty or other socio-cultural barriers to health care. [7]

Global health aid, that is, activities aimed at improving equity in health worldwide, consumes a large amount of resources. Between 1990 and 2007 official expenditure by governments, philanthropic donations and NGO's on development assistance for health rose from USD 5.6 billion to USD 21.8 billion [8] and by 2017 Global Health aid was calculated to have reached USD 26.4 billion. [9] The amounts spent on MMT is difficult to quantify. In 2007 a conservative estimate on expenditure by MMTs originating just from the USA in by Maki et al. [10] was $250 million per year. Caldron et al. in 2016 estimated composite expenditure (including lost income as well as expenditure) by physicians from the USA alone on Short Term Medical Missions (STMM) at USD 3.7 billion. [11] These personal expenses borne by MMT's are largely by small enterprises and volunteers and not captured in official estimates by organisations like the Organisation for Economic Cooperation and Development (OECD).

Regardless of the shortcomings of the literature, Martiniuk, [12] Sykes, [13] Caldron, [11] and Roche [14] all assert in their literature reviews that MMT participation is increasing. There is also an increasing interest in MMT evidenced by accelerating numbers of articles being published. [15] Ketheeswaran [15] cautions against drawing

too many conclusions regarding Short-term Medical Missions (STMMs) from published literature as she found significant variations between what was reported in published peer-reviewed literature and grey media, such as YouTube, regarding the size, length of duration, and activities of missions. An additional finding of interest by Laleman et al. [16] is that converging anecdotal information from NGO's suggest longer term expatriate health personnel numbers in Africa are declining.

Increasing expenditure on health aid in development, combined with larger numbers of short-term volunteers and a declining long-term expatriate workforce support the notion that MMTs are a growing method of health service delivery.

This trend towards larger numbers of short-term MMTs is intersecting with an expanding gap globally between the development of health workers, particularly surgeons (which is largely static), and the growing demands for their services due to global population growth and the extension of life expectancies. [17, 18] With globalisation facilitating connections between HICs and LMICs, and between cities and regions, and with poor health care access continuing in many locations around the world, MMT participation is likely to expand and MMTs will remain significant players in the global health landscape for some time to come.

MMT may be conceptualised as a form of short-term vertical programming. While published literature does not generally include disaster response teams or STMM as a form of vertical programming, they share many characteristics. Vertical programmes may be defined as being directed, supervised, and executed, by a specialised service targeting a single or limited number of diseases or health issues. [19, 20]

Multiple authors have raised concerns that the benefits of MMT are overestimated while harms are under-estimated. [21-25] Criticisms of these teams include that they inadequately engage with the local populations, fail to meet host community

needs, inadequately involve HHP who will continue to provide health care after the MMT has left, and provide care disconnected from the permanent health infrastructure. While the studies by Decamp [21] and Berry [22] focus on Short-term Medical Missions which are typically volunteer, philanthropic missions, there are also questions about the effectiveness and benefits of humanitarian missions. [26, 27]

Following the 2010 Haiti earthquake multiple teams and individuals flocked to the nation to provide medical care. While much of the medical aid was necessary and appreciated, there were many problems with poor quality care and insufficient coordination. [26] The lack of standardised capacity, competency, and familiarity with international emergency response standards by the responding Foreign Medical Teams (FMT) in both the Haiti earthquake and the Pakistan floods of 2010 resulted in a World Health Organisation (WHO) initiative for the classification and standardisation of FMT. [5] This resulted in the publication "Classification and minimum standards for foreign medical teams in sudden onset disasters" by the WHO. In recognition that many teams are mobilised internally and not foreign, these teams are now referred to as Emergency Medical Teams (EMT), and if foreign occasionally International Emergency Medical Team (I-EMT).

Aid and development activities have been under scrutiny for some time with accusations of ineffectiveness and neo-colonialism driving the move towards more equal and synergistic relationships. [28] Authors such as Wilson [29], Rozier [30], and Kligerman [26] identify the importance of working closely with local health personnel and leadership in order to reduce harms done and improve the outcome and experience of MMT. However genuine collaborations are often lacking in practice, with criticisms that plans for collaboration fail to materialise, leaving local staff excluded or forced to accept the ‘help’ on offer. [31] In his letter to the

editor in response to Wilson, [29] Loh [32] called collaboration a “Global Health 'rule of engagement'” and a key factor in turning MMT efforts into effective interventions, along with principles of service, sustainability, professionalism, and safety.

Additional criticisms come from the nature of MMT addressing clinical issues without reference to the social structures of political, environmental, cultural, and economic conditions that perpetuate ill health. By turning poverty, scarcity, and poor health into medical problems they may contribute to the underlying structures that inhibit movement towards sustained health. [25] While most of these criticisms are targeting MMTs in non-disaster contexts, it is equally relevant in disaster response as the human impacts of disasters are highly correlated with poverty, magnifying the existing disparities in determinants of health. [33]

From Development to Disaster

In 2010 I moved my family from Australia to Nepal in order to volunteer as a Nursing Advisor in the Surkhet Leprosy and Disability Referral Centre. Located in the Mid-Western District of Nepal the referral centre is run by the International Nepal Fellowship (INF). I worked alongside the local staff looking to improve processes and procedures, and slowly gained an understanding of how the health system in Nepal functioned. I encountered visiting teams and specialists and had opportunities to join MMTs, known in Nepal as 'camps'. This time provided a number of insights into both the need for and possibilities of MMTs, but also some potential pitfalls. Through these experiences as a longer-term volunteer in clinical settings, observing the challenges of collaboration, my interest in the experiences and process of collaboration at the clinical level has grown.

Also during this time INF began to get more involved in disaster response by partnering with the Nepal Red Cross Society in 2014 to respond to flooding in the

Mid-Western Region and then again responding to the 2015 Gorkha earthquake. I observed that some humanitarian agencies did not seem seem to be engaging with government personnel at the community level. I also observed a large mobile hospital that had been erected but appeared to be underutilised indicating miscommunication and unfulfilled expectations. These observations raised questions on how collaboration is developed and implemented in disaster response.

While many people talk about collaboration as being important, I began to wonder what they meant by the phrase? And how do they experience its implementation? A particular sub-section of this is how MMTs and HHP on short-term missions can collaborate well with the many additional challenges to planning, communication, and relationship building encountered in such ventures.

Collaboration

The WHO describes collaboration in health as occurring when “multiple health workers provide comprehensive services by working together synergistically along with patients, their families, carers and communities to deliver the highest quality of care across settings.” [34(p13)] Professionally diverse teams must work together to complement and supplement critical knowledge and skills in order to strengthen health systems and deliver quality care to patients. [35, 36] Good collaborative practices are increasingly recognised as beneficial for patient satisfaction, reduced medical errors, reduced hospital stays, and increased health worker satisfaction. [37]

Collaboration is key to sustainable, capacity building projects [38] but is also relevant in disaster response. The WHO policy "Classification and Minimum Standards for Foreign Medical Teams (FMTs) in Sudden Onset Disasters" places collaboration with national health systems as a guiding principle for providing ethically

acceptable care. [5] This document states that Foreign Medical Teams in Sudden Onset Disaster must…“ commit to be integrated in a coordinated response under the national health emergency management authorities, and collaborate with the national health system, their fellow FMTs, the cluster and the international humanitarian response community." [5(p18)]

Various understandings of collaboration exist, with the term often used interchangeably for teamwork and team processes such as cooperation or compromise. [39] The 2009 study by Croker et al. [40] into the complexities of collaboration in rehabilitation teams found meanings of collaboration ranged from simply ‘working together’ through to a “collective action orientated toward a common goal, in a spirit of harmony and trust”.[(p32)] Some authors posit that collaboration requires egalitarian team structures [39, 41] where power is based on knowledge and expertise rather than roles or functions. While hierarchical structures may be in place, collaboration occurs where there is recognition and respect for each participants' unique expertise in health care delivery, such as doctors and nurses contributing to decision making around patient care in an Intensive Care Unit. [42] It is worth noting that collaboration differs from coordination, which occurs when practitioners deliver care independently within mutually agreed boundaries, and cooperation, which occurs when people work together but without necessarily having mutually agreed goals. [37]

A helpful framework by Henneman [39] regarding conflict resolution describes collaboration as when a person is both assertive and cooperative, while at the opposite extreme is avoidance where a person is unassertive and uncooperative. Accommodation and compromise fall between these two extremes and may be used successfully in some settings [39] but understanding how they differ from

collaboration is important for this research project. This framework is represented in figure 1 below.

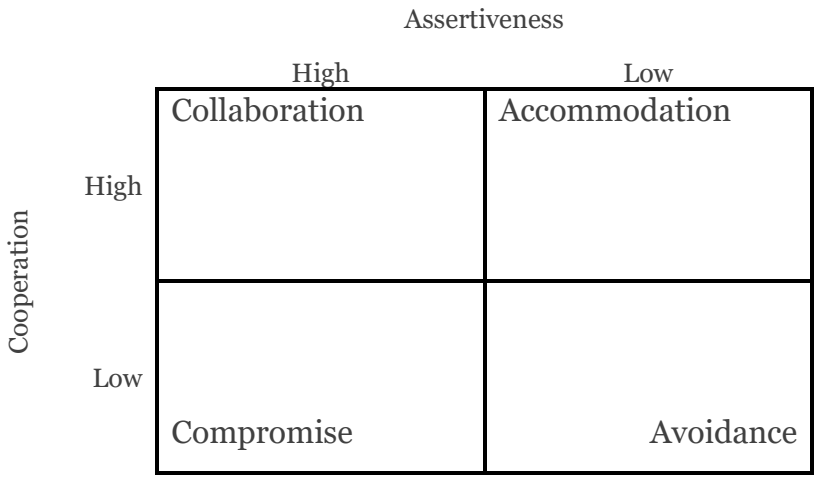


Figure 1 The Assertiveness-Cooperation framework in conflict resolution by Henneman et al. (1995)[39]

One definition of collaboration that summarises the key aspects required is from the American Nurses Association: Nursing's Social Policy Statement (2010) that states that collaboration is:

> "a true partnership, valuing expertise, power, and respect on all sides, and recognising and accepting separate and combined spheres of activity and responsibility. Collaboration includes mutual safe guarding of the legitimate interests of each party and a commonality of goals that is recognised by all parties." [43 (p7)]

Collaboration in health care is a complex inter-professional and interpersonal process that requires trust, mutual respect and good communication in order to come to mutual agreement regarding objectives, planning, execution, and the evaluation of success. With MMTs crossing national and cultural boundaries collaboration needs to occur interculturally and inter-organisationally in addition

to the interpersonal and inter-professional aspects of working together that characterise health care provision under more normal circumstances.

Nepal Health Systems and Mobile Medical Teams

Nepal is a nation with a population of 28.4 million (2016)[44] that was described by its founding father King Prithvi Narayan Shah in the 16th century as "a Yam between two boulders" [45 (p10)] with India to the south and China to the north. This defensive position yielded policies of neutrality and isolationism which succeeded in maintaining Nepali independence from British, Chinese, and Indian colonial interests but also contributed to stifled education, economic, and health development. Nepal ranks at 149 (as of 2019 [46]) on the Human Development Index with many Nepalis continuing to suffer from the effects of poor sanitation, poor hygiene, and poor access to safe drinking water. [47]

Traditional Ayurvedic and Shamanistic health practices continued to be the main health system for the nation until the end of the autocratic feudalistic Rana period (1846-1951 AD).[48, 49] The Rana regime had instituted several allopathic as well as ayurvedic hospitals but these were focussed in the Kathmandu valley and access to basic health care was limited for the general population. Remote regions were especially neglected. [25, 49] A survey in 1954, only three years after the end of the Rana regime, noted a national infant mortality rate (IMR) of 250/1000 live births and a life expectancy for males of 27.1 years and for females 28.5 years. [44]

Since the end of the Rana regime in 1951 a massive effort to provide both general and specialised health care to the Nepali population has been undertaken by the Ministry of Health through the Government of Nepal public health service, the creation of a private health system, and significant investments by aid agencies, donors and Christian missions. [49] Yet despite these efforts, and great gains made,

Nepali health care remains deficient in many areas with a National Infant Mortality Rate of 33/1000 live births (IMR in mountainous regions of 73/1000) [44] and a life expectancy of 69 years for males and 72.2 years for females. [46] In comparison Australia which ranks third on the Human Development Index has an IMR of 3.1 and a life expectancy at birth of 81.2 years for males and 85 years for females. [46]

The expansion of health services to the Nepali population has been hampered by difficult topography (Nepal has low lying flat lands, but is dominated by steep hills, and in the north the high mountains of the Himalayan Mountain Range) with a dispersed population on a background of educational and economic deprivation, a 10 year civil war ending in 2006, and centralised power structures in a nation of diverse cultural groups and aspirations. [25]

Nepal has drawn MMTs due to the combination of attractive tourism locations, a susceptibility to natural disasters, poor access to modern health care by many communities, a high prevalence of conditions not seen in HIC, and an appreciative populace. As well as international health personnel visiting Nepal, participation in MMTs by Nepali health personnel is highly valued as a learning experience and to provide care to communities where health-care remains a scarce and valued commodity. [25]

Following a massive 7.8 Richter scale earthquake in Nepal on the 25th April 2015 there were 8962 deaths, 22302 injuries, and a significant amount of damage to health infrastructure. [50] The Nepalese Ministry of Health, Army, Nepal Police, and Armed Police forces were the first organised responders to this disaster, soon followed by regional teams from Bhutan and India, then Bangladesh, China and Pakistan. [51] By the end of the disaster, in addition to the medical teams from Nepal, 137 foreign teams from 36 countries had registered for the response, of

whom 12% were military and 18% were civilian government agencies. [51] 20% of the EMTs had full field hospitals and medical staff were the predominant profession with 42% of EMT members being doctors, followed by allied health 23%, nurses 18%, and logistics and administrative personnel 16%. [50] This major earthquake, that received global attention, was not the only disaster Nepal has experienced. From the year 1900 to 2005 over 13000 disaster events have been recorded with a total of 7,400,000 human casualties. [52] Nepal is a disaster-prone nation with ongoing deficits in health care provision which will continue to require support from external actors, such as MMTs, to meet the health aspirations of its people.

There have been some significant changes in government policy over the last 3 years which cover the period for inclusion in this study. After the influx of MMT following the April 2015 earthquake the government of Nepal introduced additional processes for visiting health professionals to get visas and professional registration. The additional processes added time required for visas and registration and has severely limited the ability of international health workers to conduct clinical activities, especially in short term MMT. For this study this resulted in a trend of participants discussing their experiences with international MMT in the post-disaster period while more recent experiences were likely to be with government run health camps.

Research Problem

The importance of collaboration in health care is well documented with efforts ongoing globally to improve interprofessional collaboration, especially among medical, nursing, and allied health staff in HIC hospitals. [53] Within relatively monocultural contexts the practice of interprofessional and interorganisational collaboration continues to challenge health practitioners and educators due to the complexity of factors involved. [54, 55] Organizational, team, professional and

individual characteristics are all recognised as influencing interprofessional teamwork and collaboration. [54] HHP face additional barriers in collaborating with MMTs, such as cultural, communication, and institutional differences, frequently in a context of limited time, which may limit the effectiveness and cultural or clinical safety of their project. Following disaster, the pressure to act quickly to save lives in a chaotic environment may also challenge collaboration, although periods of crisis can encourage professionals to work together in more cohesive and collaborative ways. [55] The process of collaboration in the HHP/MMT context has received increased academic attention but is still under-represented in published literature. Particularly lacking are the experiences and opinions of HHP regarding the collaborative process in planning, implementing, and evaluating MMT. Recommendations currently found in the literature for improving the experience of MMT are largely from HIC MMT participant experiences, opinions, and perspectives.

Purpose of the study

The purpose of this study is to explore the process of collaboration by MMT in clinical activities from a LMIC perspective. Aid and development activities have been under scrutiny for some time with accusations of ineffectiveness and neo-colonialism driving the move to more equal and synergistic relationships. [28]

Tools developed for measuring collaboration in the health workforce have focussed on nurse-doctor relationships in units such as the ICU often using questionnaires and Likert-type scales. [56] Research on inter-professional collaboration has also tended to concentrate on stable teams rather that the ephemeral relationships that characterise MMT. [40] The applicability of these tools to international, inter-professional collaboration in the MMT setting of Nepal is not known.

This study aims to describe and elucidate the experiences and opinions of HHP in Nepal regarding the collaborative process between visiting medical teams on short-term deployments such as Short-term Medical Missions (STMM), government run health camps, Emergency Medical Teams (EMT), and Foreign Medical Teams (FMT), collectively referred to as Mobile Medical Teams (MMTs) and HHP in government run facilities. The findings of this research are expected to add to the knowledge base underpinning the advice being given to MMT planners, participants, and hosts, and identify further areas for study in the field of international and inter-professional clinical collaborations.

Aim of the study

This qualitative research explores the extent of collaborative relationships and activities between HHP and MMTs conducting missions in Nepal from the experiences and perspectives of a LMIC health personnel cohort with the research objectives of:

1 - Examining the extent to which MMTs practice collaboration, and whether these collaborative efforts are appropriate in the Nepali context.

2 - Exploring collaborative activities in relation to planning and setting MMT objectives, the provision of clinical care, and the evaluation of the MMT outcomes.

3 - Identifying and describing barriers and enablers to collaborative efforts within the context of Nepal.

Research Paradigm

Collaboration is a process grounded in personal experience of interpersonal relationships of mutual respect and egalitarian relationships that are often in conflict with society's layers of power and privilege. [41, 57] The research approach

comes from the paradigm of critical social theory. Critical Social Theory (CST) asserts that domination occurs within social contexts of privilege, [58] and provides the framework to examine the phenomena of collaboration to achieve the research aim.

Inter-professional and inter-cultural interactions may be subject to multiple layers of power and privilege due to disparities of wealth, education, gender, and in the sub-continent, caste. Collaboration requires mutual respect and egalitarian team relationships, thus conducting and analysing interviews from a CST perspective will assist in highlighting barriers to collaboration. In CST, participants are not mere informants, as they engage in a process of change through describing their experiences and contributing their perspectives to the research project.

Outline of the thesis content

In chapter 2 I provide the literature review, which gives an overview of the issues that HHP raise in regard to MMT and particularly highlights the dearth of studies into clinical collaboration by MMT and the importance of this concept to the hosts.
In chapter 3 I review the epistemological, ontological and methodological basis for the study and analysis being conducted. The strengths and weaknesses of using CST in this setting are raised and analysed.
In chapter 4 I describe the methods used in this study, how they relate to the hermeneutical positions taken, and the process of using semi-structured interviews to collect data regarding the topic of collaboration.

In chapter 5 the interview data findings are presented and analysed.

In chapter 6 the place of collaboration as a foundational ethic within the practice of MMTs is confirmed and practical advice from the perspective of Nepali health

workers is elaborated. The limitations of this study are raised and recommendations for future research are made.

In chapter 7 a summary of the findings and the conclusions, and their relevance to the practice of MMTs is given.

Conclusion

This chapter has introduced the context of the study outlining the increasing number of MMTs in LIC-LMIC, particularly regarding Nepal, and the importance of, and challenges in conducting collaboration with HHP. The aims, questions, and objectives of this study have been outlined. The methodology of CST was raised as a suitable conceptualisation to explore the phenomena of collaboration through the experiences of the HHP.

The next chapter will present a review of the literature, which gives an overview of issues that have been raised regarding collaboration between HHP and MMTs.

CHAPTER 2 – LITERATURE REVIEW

Introduction to the literature review

This chapter discusses literature around the question: What is the experience of HHP of collaboration with short-term MMTs?

Much of the literature regarding partnerships and collaboration in Global Health and MMT has focussed on the management level; how donors and governing bodies view and apply theory, or alternatively see collaboration and partnership as empty rhetoric. [28, 59-65] The body of literature on clinical aspects of MMT regarding their recruitment, preparation, deployment, leadership, ethics, cultural sensitivity, standards of care, and debriefing is growing but still limited in size and scope.

For this study on collaboration at clinical levels by MMT a literature review was conducted using a PRISMA [66] framework to explore current understandings and experiences of collaboration between HHP and MMT. This literature review found that most of the literature published on MMT is by MMT personnel themselves, leading to potential bias, with a minority of papers describing or elaborating on collaboration at the clinical level in any detail. There is minimal literature published from the perspective of the HHP. Where host perspectives have been sought, the importance and desirability of collaboration in the planning and implementation of missions is confirmed. In recent years there has been a significant increase in publications relating to collaboration but there are still gaps in the literature with deeper analysis of the barriers and enablers to interprofessional, intercultural, and inter organisational collaboration between HHP and MMTs.

Defining the terms

In conducting the literature review it was found that there are many terms and definitions for visiting medical personnel often used inconsistently. For example the limits applied to 'short-term' duration varied with periods lasting from days to two months [67] and from months to two years. [68] For the purpose of this study teams being on location less than 6 months were considered 'short-term'.

Medical teams are referred to by a variety of terms such as 'short-term Medical Service Trips' (MSTs),[13, 38] 'Short-Term Medical Missions'(STMM),[22, 30] 'missions,' [22, 57, 69] 'medical missions,' [23, 26, 41] 'Mobile Health Units' (MHU), [70] 'Short-Term Missions'(STM) [22, 28, 71], 'voluntourism', [22, 57, 67] 'health camps' [22] 'medical brigades', [64, 67] 'volunteer trips', [22, 23] and 'humanitarian assistance'. [68] Generally in the literature Short-term Medical Missions (STMM) seems to be the preferred term for medical staff taking time off from practice in their home country to provide care to 'the poor' without pay or recompense. [11] These STMM are often separated in the literature from compensated full time practices by NGO's such as Medicins Sans Frontieres (MSF), military, and other government programs that were more often referred to as 'Emergency Medical Teams'(EMT), 'missions', 'relief', 'expeditions', 'medical rescue teams', 'Foreign Medical Teams' (FMT), and 'humanitarian' activities. [5, 11, 72] The terms 'Emergency Medical Teams' and 'Foreign Medical Teams' are restricted to registered teams with the WHO for humanitarian responses. Within Nepal the government frequently organises medical outreach services using centrally sourced personnel to visit remote regions that are called 'medical camps' or just 'camps'. These may also be cross-cultural experiences due to potential language and culture differences between the cities and remote regions.

In this document I use the term ‘Mobile Medical Team’(MMT) to encompass medical (including nursing, paramedical and allied health) individuals or groups providing health care (paid or unpaid) in a location away from their normal residence for a duration of less than 6 months in both post-disaster and non-disaster contexts. Global Health educational experiences such as student placements or teams focussed on educational or research activities rather than clinical activities were not included in this review.

As the issues faced by short-term medical teams in collaborating with HHP are likely to be the same regardless of the remuneration package provided to them this study does not separate volunteer or professional short-term teams. All medical teams, national or international, providing temporary clinical medical and nursing care in a cross-cultural and cross-institutional setting for a period of less than 6 month were termed MMTs for the purpose of this study. The term MMT itself is not without challenge as this term has also been used for teams deployed to provide on-site medical care in the event of a major incident in nations such as the United Kingdom. [73]

The definition of collaboration in health care is complicated by contesting views and a range of definitions by organisations and health literature. Common to the definitions are a focus on interactions and a recognition of the context of the team while divergences related to the conception of collaborative process (eg decision-making and leadership versus collective action) and desired outcomes. [40] For this study a broad definition by the American Nurses Association in Nursing: A Social Policy Statement [43 (p7)] has been adopted whereby collaboration is “a true partnership, valuing expertise, power, and respect on all sides, and recognising and accepting separate and combined spheres of activity and responsibility. Collaboration includes mutual safe guarding of the legitimate interests of each

party and a commonality of goals that is recognised by all parties." A list of key terms, abbreviations and acronyms can be found at the beginning of this document.

Search Method

This literature review was conducted using published peer-reviewed literature and grey literature where citation trails revealed relevant documents.

The initial search on PubMed (see table 1) returned 2987 titles, Scopus 963 titles (table 2), and through EBSCO host 213 titles (table 3). When combined, duplicates removed, limited to English publications, and publications since 2004, a total of 3189 titles remained. Literature was limited to 2004 as this was the year in which the earthquake off the coast of Bandah Aceh devasted the coasts of Indonesia, Thailand and Sri Lanka and significant changes to humanitarian assistance were made following reviews into the international response to this disaster. Titles that were exclusively about collaboration in education and research were excluded. Clinical activities from dental, pharmacological, and other allied health programmes were included.

These 3189 titles were scanned for potential relevance to issues of collaboration and 175 titles identified for further reading. An additional 15 titles from citation trails were added for a total of 190 titles to be screened via their abstracts. The abstracts from these 190 titles were then reviewed for inclusion in the literature review based on their content. A PRISMA [66] flow diagram (figure 2) describes this process for selecting articles for analysis.

Partnership[tw] OR ethic*[tw] OR Interprofessional Relations[mh] OR cooperative behavior[mh] OR Community-Institutional Relations[mh] OR Organization and Administration[mh] OR harmon*[tw] OR particip*[tw] OR cooperat*[tw] OR collab*[tw]
Health personnel[mh] OR nurse*[tw] OR doctor*[tw] OR physician*[tw] OR surgeon*[tw] OR staff[tw] Or provider*[tw] OR paramedical[tw] OR health care professional*[tw] OR development worker*[tw] OR dentist[tw] OR occupational therapist[tw] OR physiotherapist[tw]
medical mission*[tw] OR trans-national care[tw] OR humanitarian[tw] OR NGO*[tw] OR Medical humanitarianism[tw] OR global health[tw] OR international mission*[tw] OR STMM[tw] OR Short-term[tw] OR Short-term[tw] OR cross-cultural[tw] OR emergency medical team[tw] OR foreign medical team[tw] OR EMT[tw] OR FMT[tw]
Attitude of health personnel[mh] OR Perception*[tw] OR impression*[tw] OR perspective*[tw] OR preference*[tw] OR attitude*[tw]

Table 1 Pubmed search terms

(medical W/15 mobile OR disaster OR humanitarian OR medical W/15 mission OR foreign W/15 medical) AND (collaborat* OR cooperat* OR reciproca*) AND (perspective* OR perception* OR impression* OR attitude* OR experienc*) AND (“health personnel“ OR staff OR paramedical OR doctor* OR nurse* OR surgeon* OR physician* OR pro vider* OR mission*)

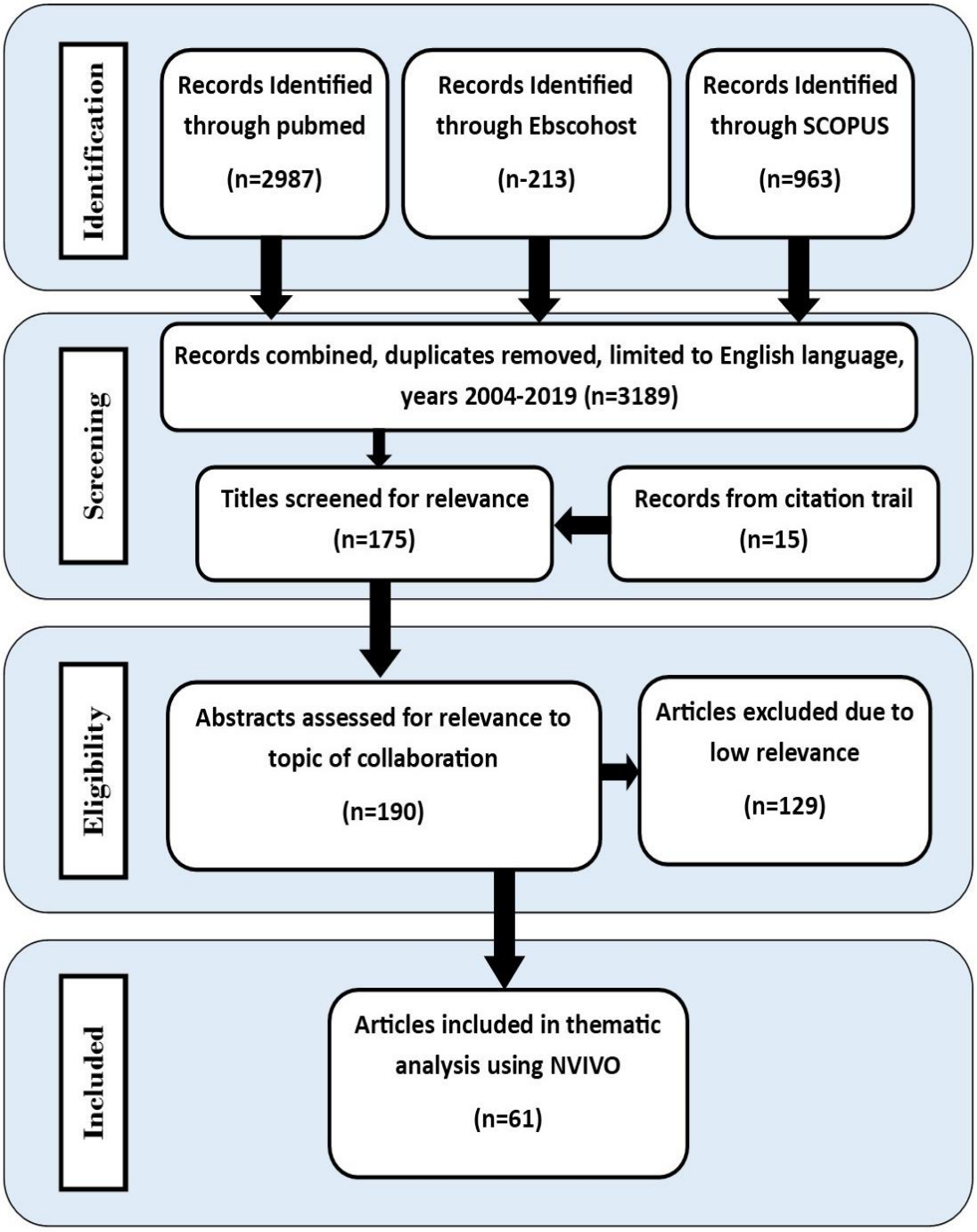
Table 2 SCOPUS search terms

(Experience* OR perspective* OR perception* OR impression* OR attitude*) AND (medical N15 (mobile OR mission OR team) OR Disaster OR humanitarian OR “short-term”) AND (“Health Personnel“ OR staff OR paramedical OR doctor* OR nurse* OR surgeon* OR physician* OR provider* OR mission* OR “health care professional*” OR “development worker*”) AND (collaborat* OR cooperat* OR participat* OR Coodinat*) AND (host* OR local* OR recipient*)

Table 3 EBSCOHOST search terms using CINAHL

Figure 2 PRISMA process for literature review

PRISMA © 2009 Flow Diagram



The remaining 190 papers were organised into categories based on the abstract indicating the papers included the perspectives of HHP, or was a review paper or perspective from the visiting MMTs. The majority of papers (129) were excluded from the review as the abstracts indicated they did not include aspects of collaboration, or were regarding pure educational trips, were letters to the editor, conference abstracts, or did not include short-term teams (<6 months). The abstracts of 17 papers indicated they addressed in some way the perspectives of HHP. The abstracts of 44 papers indicated they were reviews, policies, and recommendations that did not overtly include HHP participants in a meaningful way, but still referenced collaboration. A summary of the division of papers is in table 4 below.

	Perspective of host health personnel	Perspective of visiting mobile medical team members and reviews.	Excluded due to irrelevance to short-term HHP-MMT collaboration, conference abstract, letter to editor.
Number of papers	17	44	129

Table 4 – Division of papers from database search

The 61 papers combined from HHP and MMT perspectives and reviews were uploaded into NVivo 11©[1] to explore interprofessional and intercultural collaboration between MMT and HHP and identify themes. Statements describing or directly addressing collaborative activities between HHP and MMT were highlighted as databits which were then gathered into themes. Few papers significantly addressed interpersonal and interprofessional experiences of collaboration between MMT and HHP. Of the papers addressing HHP perspectives only 4 documents had 5 or more databits on this aspect of MMT, while among the 44 papers from MMT perspectives, policies, or reviews only 5 documents had 5 or more databits. 15 articles, almost a quarter of the papers

[1] Software by QSR international (https://www.qsrinternational.com/)

included in analysis, had only 1 databit regarding collaboration, and this was frequently a recommendation for improved collaboration. The large number of papers with few databits highlights that while many authors raise collaboration and promote it as a core requirement of MMT/HHP participation, it is rarely described in detail in the literature. Most papers with significant discussions regarding the process and practice of collaboration at the clinical level were from the field of international surgical missions to LMIC. [74-76]

Themes in the literature

Among the 61 articles organised in NVIVO 11 a number of themes regarding collaboration emerged as authors described and discussed collaboration. These are discussed below in order of frequency.

Relationships

The most commonly raised theme regarding HHP and MMT collaboration was relationships. These relationships largely developed as MMT and HHP staff worked in close proximity with each other and were the basis for transference of medical/surgical knowledge. [77] Certainly working shoulder to shoulder was valued as team members developed shared understandings to construct mutually agreed plans to address problems. [2, 64] In some circumstances it was essential that MMT work alongside HHP in order to overcome the language, culture, and practical barriers to direct patient care. [78] Different teams had different models of integration with some creating mixed teams of surgical, anaesthetic, and nursing staff [79] and others dividing areas of work such as a Korean Team managing outpatients (OPD) and emergency care while the host Filipino team managed inpatients and surgery. [80] For teams that were self sufficient with field or floating hospitals, collaboration occurred as teams coordinated with local community

leadership for logistics and other facilities for managing referrals, [81] successfully included local staff into their field hospitals, [3] or joined the local staff in using their facility. [79] One benefit noted for integrated teams was that after the MMT had left the HHP who had participated were familiar with the cases which improved post-operative care. [77]

Respect was a repeated theme where the development of good relationships could be inhibited by attitudes of arrogance or elitism expressed by the MMT, whereas working in coordination with local health care providers reflected acknowledgement of the local providers competence. [23] The importance of collaboration at the clinical level was highlighted by one of Green's [23] respondents who stated “that short-term medical volunteer work that is not coordinated with a long-term presence is the worst kind of care". [23 (p8)] In one paper in the Malawi context local medical staff experienced more egalitarian relationships with visiting medical staff than they experienced with local faculty, fostering positive experiences with visiting medical personnel. [82] In Nicaragua nurses who felt on the margins of mobile missions were disappointed by the lack of engagement and were more negative regarding the program. [67] Respect for local cultural practices and medical capabilities was important as well, even when at odds with Western perceptions of health. [76, 83] Sometimes these relationships were of trainer-trainee where depending on the skill of the trainee additional responsibilities and surgical tasks could be done under supervision. [84] Care needed to be taken when discussing cases so that changes were suggested diplomatically to avoid ‘loss of face’ of local medical staff in front of the patient, other medical staff, and nurses. [85]

One key difference between post-disaster MMT and non-disaster MMT was regarding the development of long-term relationships between institutions and key members that facilitated collaboration. Organisations that had ongoing

relationships with repeated visits and constant communication had stronger relationships, better knowledge transfer, and better follow up of patients. [57, 74] The inclusion of team members familiar with local staff and clinical situation assists in the development of trust and harmony between teams. [86] Creating partnerships with existing NGO's who understand the local context and can assist in developing and maintaining relationships was also considered beneficial, [76] but not all NGO's necessarily collaborate well with national policies and governing structures. [87] While it was usually in the non-disaster related context that these longer term relationships could develop, these existing relationships may potentially be accessed during a response to more acute scenarios. [69]

Planning and Programming

Collaboration on planning for MMT was assisted by familiarity with the local health context and established relationships with local contacts. [31, 86] As Bauer 2017 notes this can have the effect of clustering MMT in popular areas and depriving poorer communities of choice. [31] Concerningly, Chapin 2010 found that only 53% of the local organisations STMM collaborated with were health organisations, indicating significant detachment from contextualised sustainable health care. [38] STMM conducting their activities in isolation from national health plans and government health services, and possibly not registering their activities with relevant health bodies is not only ethically highly questionable but a severe limiter to collaboration. [22]

Competing interests by stakeholders (donors, local government, HHP, communities) can all have an impact on site selection as well as other factors thus careful selection of collaborating partners is required. [88] Partners who clearly articulate their goals, clarify expectations, and build strong relationships are more successful in their collaborative efforts. [88] For disaster response teams the location

of medical relief was usually coordinated from a central health office, disaster response operations centre, or logistical management headquarters. [3] Parmar found that generally collaboration was better at the local level than at the interagency level. [89]

The role of local health bodies in coordinating the activities of externally funded activities such as MMT becomes increasingly important when such activities proliferate, eg after a disaster, resulting in overlap, fragmentation and gaps in service due to multiple agencies working in isolation. [68] Where services aren't coordinated significant friction can arise between various providers. [26] Within the disaster response community the United Nations (UN) Office for the Coordination of Humanitarian Affairs (OCHA) led cluster system aims to provide the framework for government and non-government agencies to coordinate their activities. In small localised disasters that may also attract MMT but not trigger a UN OCHA response an alternative, but similar system may need to be implemented. A number of different frameworks to improve aid effectiveness, efficiency and equity have been proposed and warrant further examination and trial in real world scenarios. [68]

A concern raised by authors and by respondents to surveys and qualitative interviews was the need for visiting teams to enhance local health service provision, [38, 68] even through service delivery, not development, was often the objective of the MMT. [30] This is exemplified in the research by Rozier [30] that while only 25% of STMM view building health capacity as a main objective of their mission, 70% of the interviewed HHP saw capacity building as more important than direct service provision. Sustainable capacity building exercises require long term mentoring relationships that build leadership and clinical skills rather than short-term workshops and hit and run clinics. [57, 68] Sustainability is a key concern

for HHP and has been described by Koehn et al.[90 (p622)] as "advancing equity and justice…and maintaining capacity, through resilient and durable social, political, and economic institutions".

A common problem identified with MMT was the difficulty of providing post-operative care and appropriate referrals, especially for disaster response teams. [91] This included ongoing surgical follow-up as well as communication from the MMT with local health providers regarding diagnoses made, treatment given and recommendations for further management. [22, 77, 92] Various MMT were accused of providing insufficient systems for follow up and staying on location too briefly. [25, 67] Collaborating with local and regional health facilities for referral and follow up was a significant investment for MMT [22, 23, 81] and the availability of facilities and partnerships should determine which surgeries might be unsuitable. [87] Roche [87] found that despite the desire by some NGO's to improve collaboration with national hospitals some were restricted in their collaborations with NGO's by established protocols, or by how the Ministry of Health financial systems compensated national hospital's work, and by the surgeons views on the potential impact on their private practices.

Challenges to Collaboration

Multiple challenges to collaboration were discussed or experienced in the literature. One study by Bauer [31 (p5)] found that MMT were "frequently insensitive, arrogant, disrespectful, undervaluing local knowledge, and behaving superiorly". This is likely to have a significantly negative effect on collaboration with HHP. [93] Local HHP may also feel frustrated by the time taken from their own workload to orientate and support MMT, hindering collaborative discussions. [25] As well as basic language and cultural barriers to collaboration with HHP, MMT struggle to

understand and respect local beliefs regarding health, and sometimes the practices adopted by HHP to manage these. [31, 76, 94] Where expatriate volunteers came for short assignments and a need for achievement in a limited time frame they may be seen to have insufficient technical skills or knowledge of the local health context combined with an undervaluation of local staff knowledge. This can result in poor implementation of innovation. [16] The importance of respect both from the visitors towards HHP knowledge and cultural context and of demonstrated competence to inspire respect and trust from the hosts is evident as an important enabler of collaborative behaviour.

Another issue where collaboration was necessary, but potentially difficult to apply, was in regard to consent for surgical procedures. While western practices prioritise patient autonomy and informed consent, how can this be applied where the culture supports paternalistic physician decision making and cultural understandings of health and well-being are significantly different? [95] The involvement of host staff in decision making and obtaining consent was an important collaborative issue in one teams response to the 2015 earthquake in Nepal. [3]

The short duration of MMT programmes made collaboration difficult as it takes time to understand each other's capacities. [69] The pressure to do as much as possible in the short time given can result in 'task orientated' team members pushing on to get things done and putting relationships and collaboration to the side. [57]

Collaboration was also challenged where local staff were absent, unreliable, or unqualified, and where the local leadership structures were complex, changing, and muddled. [96] This is more likely in complex humanitarian scenarios where mandated partners may have very different agendas to the MMT. Other barriers to

collaboration included reluctance to participate with military teams and frequent personnel turnover. [69]

General activities of collaboration

As discussed under 'planning and programming' many teams collaborated with local authorities or contacts on logistics and selecting the site for their mission. Another activity where collaboration was described or recommended was collaboration in financing to ensure both donor requirements and local needs are met, while avoiding the creation of dependency through the removal of local authority responsibilities to their own health personnel and communities. [31] As well as donor financing, collaboration by MMT with HHP on financial contributions from patients was suggested, though frequently rejected. [23] Bauer [31] also recommended collaboration in data collection in order to work towards outcomes relevant to HHP. In education MMT are likely to invest in training that may not be well received, or is difficult to apply in the hosts context, if the MMT fail to work with HHP on setting the learning objectives. [57, 78, 82, 83]

Disaster response vs mainstream medical aid

Despite disaster response often being separated in the literature from mainstream medical aid the literature confirmed that many aspects of collaboration remained the same and multiple examples were given. [3, 80, 97]. The difference lies in the time frame available for dialogue and consultation. [91] Collaboration remains an important foundation of safe and effective health care in disaster response despite the additional challenges created by the need for a rapid response.

Conclusion

This literature review highlights the positive or negative impact that MMTs can have, and that good collaboration between HHP and the MMT is viewed as a key

factor in providing safe, effective, and sustainable care. Lacking in the literature was focussed research on the extent to which collaboration, rather than simply cooperation or coordination occur, and a deeper examination of the barriers to collaboration. Concrete examples of genuine collaboration were given, but were limited and spread among numerous publications. How collaborative relationships can be rapidly facilitated in a post-disaster humanitarian response where injections of service delivery at short notice are required was notably absent from the literature. This literature review has demonstrated a paucity of knowledge regarding the differences and similarities between post-disaster and poverty-triggered MMT in regard to the extent, perceived value, and impact of collaboration, as well as what barriers and facilitators of collaboration exist in short-term, cross-cultural medical missions.

This literature review also found that most of the literature published on MMTs is by MMT personnel themselves, leading to potential bias, with a minority of papers describing or elaborating on collaboration at the clinical level in any detail. There is minimal literature published from the perspective of the HHP. Where host perspectives have been sought, the importance and desirability of collaboration in the planning and conduction of missions is confirmed. In the last few years there has been a significant increase in publications relating to collaboration but there are still gaps in the literature with deeper analysis of the barriers and enablers to interprofessional, intercultural, and inter organisational collaboration between HHP and MMTs.

The next chapter sets out the methodology of CST that was the theoretical underpinning for the study.

CHAPTER 3 – METHODOLOGY

This chapter presents the epistemological, ontological and methodological basis for the study and analysis of collaborative practice by MMTs in Nepal. The strengths and weaknesses of using Critical Realism (CR) and CST in this setting are raised and analysed.

Theoretical assumptions of the study

This study approached the topic from the postpositivist ontological position utilising CR. CR acknowledges the existence of reality outside of the experience of the observer that can be explored by science. Unlike positivism however CR recognises that the complexity of social dimensions of human experience cannot be distilled into fixed empirical 'cause and effect' categories that can lead to deterministic positions. Such positions have been accused of undermining the free-will of people and dismissing the effects they themselves exert on the context in which they are placed. [98] The ever changing social structures and contexts in which research takes place (even the process of research in social sciences effects the structures and participants being studied) and the fallibility of the researchers themselves limit the application of findings.

The findings of CR are explanatory, not predictive, and can be considered 'useful' for suggesting policy changes but are not authoritative laws necessarily applicable outside of the context in time and space in which they were generated. CR assists in understanding the patterns of when and why the traits of the individual interact in particular ways with the social and physical environment in which the studied phenomena are found. This is particularly valuable in designing effective health policies where complex interactions between institutions, the public, and health

professionals occur. [99] CR is therefore a fitting theoretical basis for exploring collaboration as a personally experienced phenomenon with complex personal, societal and institutional elements. However the limitation is that the findings from a largely homogenous cohort of Nepali health professionals in one district become diminishingly representative of Nepali health professionals across the nation and to health professionals as distance in time and place and culture increase.

Collaboration requires a disciplined approach to planning and implementation of a programme but is experienced as a personal and subjective phenomenon that is highly complex and contextualised. [40] The assessment of collaboration therefore provides significant challenges in obtaining meaningful data that is relevant beyond the immediate professional group that has been studied. [54]

CST asserts that domination occurs within social contexts of privilege. Inter-professional and intercultural interactions may be subject to multiple layers of power and privilege due to disparities of wealth, education, gender, and in the sub-continent, caste. Foundational to the concept of collaboration is mutual respect and egalitarianism, that participants are able to voice their ideas, concerns, and solutions to the team. [41, 57, 58] CST was originally developed out of Critical Theory by Habermas to explore social life and analyse it for the political purpose of overcoming social oppression. [100] CST has become especially useful in professions of practice science, such as nursing, where medical theoretical knowledge is utilised along with social and moral mandates. [101] It is therefore appropriate to conduct and analyse this project from the paradigm of CST.

Just as nursing is charged with "enacting knowledge in practice towards a greater social good" [101 (p38)] in complex social, moral and theoretical mandates, MMTs are similarly engaged as their activities encompass not just the medical sciences but

have social and moral impacts potentially amplified through the meanings applied to their activities in the various cultural contexts in which they operate. The basic tenets of CST as summarized by Browne [101 (p39)] are:

a) That there is no ahistorical, value-free knowledge that can be known outside of human consciousness.
b) All knowledge is fundamentally mediated by social and historical power relations.
c) All social order entails some form of domination or power.
d) Language is central to the creation of knowledge and formation of meaning.
e) Mainstream research generally maintains and reproduces systems of race, class, and gender oppression.
f) Facts can never be separated from the domain of values or forms of ideological inscriptions.
g) By explaining and critiquing the social order CST serves as a catalyst for enlightenment, empowerment, emancipation and social transformation
h) Critically-oriented knowledge should offer social or cultural critiques with a view to transforming normative foundations that maintain the status quo.

CST has emancipatory interest for the purpose of alleviating oppression. Importantly the theory must link problems with the power levels of society. [102] In the conduct of the research participants should feel empowered to propose their opinions and experiences, both within the research environment, but also into future MMT involvement.

The method chosen for this study was face to face interviews that were analysed for themes in keeping with the paradigm of CST and the findings and their dissemination should likewise empower hosts to participate in collaborative

actions as well as encourage visitors to include them in their concept of the mission.

A weakness of CST is that it tends to homogenize and unify groups as the oppressed collective in order to facilitate movement to emancipation. This focus on shared social realities can erase the diversative forms of experience, identities and aspirations. [101] Thus CST potentially generates general forms of knowledge at the expense of diverse, individual and subjective understandings. [101]

Axiology

In keeping with the ontology of post positivism that assumes that bias in research is inevitable the axiological biases of the researcher also needs to be examined. As an outsider to the group being interviewed, i.e. Nepali health professionals, the researcher needs to be cognisant of the impact on the participants by virtue of the researchers own privilege, personal bias, and engagement in the research process.

Nepal is a lower income country with a dispersed population where it is difficult to meet the health needs of the population. During the 2016 Nepal Demographic and Health survey 11% of households reported greater than one hour travel time to the closest government health facility. [44] HIC models such as the Royal Flying Doctors Service/Angel Flight in Australia which bring remote patients in to hospitals where the required medical care is available, are not practical in some disaster scenarios or when the remote population living more than a days travel from tertiary medical care numbers in the hundreds of thousands of people. Under such settings MMTs can be an important supplement to the government health system. There is considerable criticism of the MMT approach, with many dangers and pitfalls for the practitioners involved. Nevertheless, in this context, bringing medical teams to the people, as is conducted by health camps, STMMs, medical

missions, EMTs and the like, become arguably a more efficient and less burdensome delivery of medicine. The underlying assumption held by the researcher is that there is a place for MMTs in the delivery of health care to the dispersed Nepali population so long as standards of care and processes for both visiting teams and recipient health systems ensure Nepali people are availed of safe, affordable and enduring health care and that the risks associated with this model are mitigated.

A further axiological position is that although the study of MMTs such as EMTs in post-disaster scenarios is frequently separated in the literature from other non-disaster MMTs such as STMMs/MSTs/camps, the contention of the researcher is that the fundamental requirements of communities remain the same. Kirsch and Siddiqui et al. [103] state that "There have been many calls for 'accountability' and engaging the 'end-user' or 'community' in humanitarian response, but efforts have been limited and few specific tools have been developed to meet these goals. This is even truer in the acute phase of an emergency response than in later reconstruction and recovery periods." While disasters that mobilise professional international medical response teams provide additional challenges in time-frames, they share essentially the same characteristics of 'slow-burning' disasters in poverty affected areas of inadequate infrastructure, inefficient or chaotic bureaucracy, a requirement to collaborate with HHP, and a shortfall in the local health service ability to meet the health needs of the community. Many aspects of disaster-response and non-disaster related MMTs should be studied together to benefit from learnings from both the development, and the disaster response professional communities.

Of critical importance to this study is the ability of the researcher to establish good rapport and trust with the participants in order to elicit useful data. As a middle-

aged caucasian male conducting research regarding health care practitioners in Nepal there are inevitably variations in worldview, experience, and potentially power that can affect communication. These may hinder the development of a relationship to facilitate disclosure as well as effecting the design and analysis of the data. In conducting such research, it is reasonable to assert that a cultural insider conducting the research would be preferential in order to avoid many of the issues regarding language, culture, and power. However, as with the provision of health care, we need to provide the best service possible with the resources currently available, while working towards a more sustainable, equitable future. In addition, while outsiders will miss some of the subtleties in communication and have blind spots due to the paradigms in which they exist, equally they can also bring questions and perspectives that may not occur to researchers more aligned within the participants' paradigm.

The purpose of this study is to seek perspectives from the hosts' paradigm that are underrepresented in the literature. Within CST it is important that researchers do not speak for the participants; care must be taken that in the data collection, analysis, and discussion that it is the voice of the participants that is amplified.

Conclusion

Critical Realism is a fitting theoretical basis for exploring collaboration as a personally experienced phenomenon with personal, societal and institutional elements. CST is particularly concerned with power and as good collaboration requires egalitarian relationships CST is particularly suited to the exploration of the phenomenon and should empower hosts to participate in collaborative actions as well as encourage visitors to include them in their concept of their mission. The next chapter will describe the methods used in this study and how the theories outlined in this chapter are implemented into the study design.

CHAPTER 4 – METHODS

Introduction

In the previous chapters the purpose and underlying methodology have been discussed. This chapter extends into the methods by which the aims of the study were achieved using the paradigms of Critical Realism (CR) and Critical Social Theory (CST).

Semi-structured Interviews

Given the underlying ontological and epistemological position a research method was required that was able to extract the lived experience of host personnel in regards to the topic of collaboration, but was free enough to pursue new ideas or knowledge that the participant may raise. Semi-Structured Interviews (SSI's) of a descriptive/interpretive typology were considered to be the best method to extract participants' reflections and perspectives regarding collaboration. This type of interview may confirm the initial framing of the researcher or give rise to new themes and perspectives that expand the knowledge base of the topic. [104] Face-to-face interviews allow non-verbal communication to be observed, which is especially relevant when speaking in languages in which you are proficient but not fluent. Face to face interviews also facilitate prompts to go deeper into a topic or to recognise when a topic is becoming uncomfortable for the participant. A further advantage of the SSI process is that it places the participant as the knowledgeable informant, aligning well with the goal of CST to alleviate repression. Weaknesses of face-to-face SSI's include unwanted influence by the presence of the interviewer such as avoidance of socially undesirable responses and the increased cost of meeting.

An alternative method considered was the focus group discussion as focus groups are particularly suited to exploratory research in seeking trends, themes, and flagging whether perceptions and experiences are common or uncommon. A challenge in conducting a focus group in this setting is that most of the participants would be known to each other and may be in unequal power relationships in work or social settings. This may place restraint on revelations and an unwillingness to be critical or vulnerable in sharing knowledge. Individual interviews in a private and more confidential setting allow an in-depth discussion where criticisms of MMTs or host personnel are more likely to be revealed without the self-censorship impact of a focus group. Individual interviews, however, lose the energy and encouragement of the focus group process that can also drive the development of new themes.

In order to increase the safety and comfort of the participants they were offered the opportunity to bring along a third party as chaperone. In practice, the participants often chose as chaperone other staff members who were also participants. In this way the semi-structured interviews were frequently conducted as small focus groups. Relevant amendments to the ethical submission were made to accommodate these changes.

Participants and recruitment.

A major challenge in qualitative research is the selection and recruitment of participants. Ethical standards for research in Australia demand that participants volunteer for research without coercion or influence. The results of this is that participants who are interested in the research often have a personal agenda that can greatly influence the data that they provide. In the context of MMTs in Nepal this is likely to be a significant caveat for the research. In Nepal participating in an MMT to remote areas is considered a good experience, a good service to the

community, and placement on a funded team is highly valued. Many medical staff and some nursing staff participate regularly as MMT members and therefor these staff are more likely to be motivated to volunteer for the study and potentially bring a positive bias in the hope of broadening their opportunities for further involvement.

A second challenge is that Nepal is a highly relational culture where personal contacts and discussions are very important and documentation such as posters and information sheets do not carry much value. Recruitment via posters alone was unlikely to be successful. Ethical restrictions constrained targeted or face-to-face recruitment of staff by the researcher. As a hierarchical society generally, and especially within the medical profession, an endorsement by the medical superintendent for the study will carry a lot of weight but potentially infringes on staff rights to be free from coercion. Success in recruitment required an insider who could assist in promoting the information session for prospective participants. Ideally such an insider would not be involved in the medical field or hold a position of authority within the government administration, avoiding any coercive elements.

In selecting a region from which to recruit participants several criteria were raised; a location accessible to the researcher that was likely to have had a high number of MMT visits, where the NGO with which the researcher is affiliated has no active medical work, but where personal contacts were available who could act as an insider to promote the information sessions for recruitment.

The district of Gorkha was chosen for this research due to being badly affected by the 2015 earthquake which drew many international medical teams to the area. As a consequence of increased exposure via these teams or the media, further involvement of MMTs is likely to have occurred in the subsequent years. The site is

accessible from Pokhara where the main researcher currently resides but there are no personal or organisational connections to Gorkha health services which could induce bias. Through a network of contacts an insider with a neutral power status was found who could act as an insider to promote the research and also act as cultural guide during the interviews. On discussion with the District Health Office (DHO) of Gorkha three locations were chosen from which to recruit participants; the District Hospital in Gorkha Bazaar and two Health Clinics located in more remote locations (names with-held to protect participant identities).

Medical, paramedical, and nursing staff in leadership positions in these government facilities were invited to participate in the study. Experience of working with, or in the vicinity of, an MMT since April 2015 was an inclusion criterion. This experience did not have to be in the Gorkha region or be restricted to international teams. Potential participants were to be invited to an information session where the study was described and if interested a subsequent meeting would be arranged for the interview. In reality, once the cultural mediator had introduced the researcher to the facility leadership, the leadership frequently organised staff for interview. These meetings with the staff were considered 'information sessions' and after the staff had been briefed regarding the research and advised of the voluntary nature, consent was obtained if they still wanted to proceed with the interview.

Sample size

In qualitative research design deciding how many participants (*N*) to include in the study provides a number of problems. Unlike in quantitative research, where power calculations can be used to assist in designing a study to prove or disprove a theorem, there are no equivalent guides in qualitative studies. [105] A frequently invoked concept is that of 'saturation', where participants are recruited until no

new data is being gleaned. Criticism of this approach is that this process, derived from the Grounded Theory work of Glaser and Strauss, [106] is frequently used in other research processes without adequate explanation of how it will function in a differing methodology or explaining sufficiently how saturation was assessed. This results in claims of saturation that are somewhat opaque with low confidence in the research process and therefore the findings. A widely understood principle is that *N* should be sufficiently large and varied to elucidate the aims of the study. Saturation and a sufficient *N* may be assessable at the end of the study but provide no guidance to the design. [105] A good researcher with the right participant selection process may be able to elucidate the aims of the study with a single interview where a novice researcher with poor interview techniques will be unable to elucidate the aims of the study with a much higher *N*. As a result, the determination of *N* in the study design largely come down to the researcher's own experience of previous studies using similar methodology, or to pragmatic considerations of time and other resources.

Malterud and Seirsma [105] have proposed a concept of *information power* to assist in study design where the higher the power, the lower the *N* required. They suggest examination of five areas of the study can help assess the information power of the study and assist in decision making regarding *N*. These areas are; the study aim, sample specificity, use of established theory, quality of dialogue, and analysis strategy. These are illustrated in Figure 4 below. A study with a broad aim, with participants having limited specificity of knowledge or experiences regarding the study aims, that is exploratory rather than targeted with regard to established theory, that has low quality interview dialogue, and analytic process looking to compare cases, describe norms, deviations, and variations will have a low information power and thus require a higher *N* to create meaningful data.

Alternatively a study with a specific aim, with participants who are experienced and knowledgeable in the topic, that follows on from previous studies providing a strong theoretical background to the study, with experienced researchers and high quality interviewing that is focussed on that individuals narrative as a cases study has a much stronger information power and will be able to achieve the research

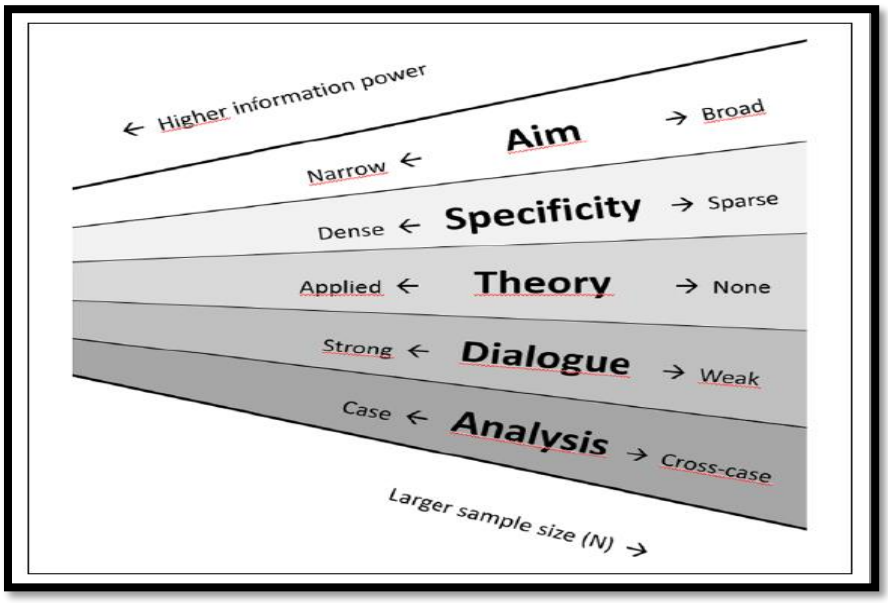


Figure 4 Malterud and Seirsma (2015) Information Power

aims with a much lower *N*.

This study has a broad aim as an exploratory project, with participants who, while they may be experienced in working with MMTs, may be recalling events from up to three years prior. There is a variety of participants in that a minimum of three medical, nursing and paramedical staff were to be recruited, reducing the specificity of the data and increasing the variety of experiences. This study is exploratory due to the weak theoretical base within the literature, weakening the information power. It is being conducted by a student towards a master's degree with limited experience in interviewing techniques, so the information power here is an unknown quality. The interview is being conducted via the researcher's or participant's second, or potentially third or fourth, language (English or Nepali) which is likely to weaken the quality of the interview. Although this is a study

design that allows for in depth interviewing and dialogue analysis for each participant to capture a variety of views on the experience of collaboration, in keeping with the objectives of the study, a cross-case thematic analysis will need to be conducted to look for themes that are broadly shared. The study overall has a weaker information power, trending towards requiring a larger (*N*).

Limiting the sample size is the need to analyse hour-long interviews. As interview lengths and sample sizes increase thematic analysis and the identification of relevant patterns becomes exponentially more difficult. Based on the experience of the research supervisors, a goal of 12 participants was initially set with a predicted maximum of 15. An advantage of qualitative interview research is that during the research process the information power can be assessed following the initial interviews and the *N* required to meet the research goals can, with appropriate ethical approvals, be adjusted from the assumptive model to the discovered realities.

For this research a total of 15 interviews were conducted with six medical, three paramedical, and six nursing participants. Two of the medical interviews needed to be excluded from the data for the study as the participants' recent experience was of education and training teams, not clinically active teams. Although the inclusion criteria were explained to these two medical staff, they were keen to share their stories. However, it became clear during the interviews that their MMT experiences occurred while they were medical students and thus the interviews were ended and their data not included in the analysis.

Addressing culture

In the chapter on methodology the challenge of engaging in CST research across language, cultural, and power gaps was raised. These limitations are addressed below with the actions taken to minimise their impacts on the quality of the relationship and the data collected.

Language, Culture, and Meaning.

An obvious challenge to conducting cross-cultural research is the language and cultural divide. While most of the participants had good English, having studied for their medical/nursing qualifications in English, their vocabulary to describe their experience was limited. Equally, having worked in Nepal for over 5 years the researcher has good Nepali communication skills but conducting the interview in Nepali elicited responses that contained new vocabulary and were difficult to understand. This made exploring new concepts or themes difficult. In order to make the participants more comfortable in conversation the interview was offered in Nepali and English and frequently moved between languages based on the participant's comfort. Conducting the interview in Nepali also increased the power and confidence of the participants as they have the communication advantage, whereas the interview in English may confirm notions of superiority of English-speaking peoples.

Language only describes the most superficial layer of culture and other aspects of culture may also heavily influence the interviews. These may include protocols for meeting and greeting and establishing a rapport which include gender, age, and other social status related variations. In order to minimise the effects of these on the interview the assistance of a cultural guide was sought who offered advice on culturally safe and appropriate conduct and was available for translation during

the interview. However once participants were introduced to the researcher, all declined the involvement of the translator and preferred to proceed without the cultural guide present.

An additional challenge for this research was vocabulary for extracting the desired information around collaboration. In English there are subtle differences between the words collaboration, cooperation, and coordination, which can lead to highly targeted sentences when those meanings are understood and shared. For discussions in Nepali multiple words were raised by Nepali translators to describe collaboration. 'Sahayoga' (सहयोग) meaning assistance, 'Sanglagnata' (संलग्नता) meaning working together closely, and 'Sahabhagita' (सहभागिता) meaning participation, were all offered as translations of collaboration. None of these words capture the essence of collaboration, although Sanglagnata is the closest with a meaning that is to work together like in marriage. Unfortunately, this word is not common, and most participants did not know it's meaning. Participant responses during the interview indicated that they understood the questions to be regarding cooperation. Understanding of the context and broader descriptions of the activities were required by the researcher to derive whether collaboration had in fact occurred.

Transcription and translation.

The interviews were recorded in MP3 format (discussed in detail later). Interviews conducted in English were transcribed by the interviewer while interviews conducted in Nepalese required translation. Identifiers such as names, job titles, and locations were removed from the Nepali MP3 digital audio files before being sent for translation and transcription. The translators also signed confidentiality agreements in case some identifiers slipped past this removal process. The translation and transcription were done from Nepali to English by one translator

then given to a second translator for verification and correction. The translators were not familiar with medical terminology which was not generally an issue as the relevant topic, i.e. issues around collaboration, is relational rather than clinical.

Extracting meaning from translated texts has challenges as the text itself, in trying to hold as close as possible to the meaning of the speaker, can be difficult to read in the researcher's language. As Nes, Abma et al. [107] state “Because interpretation and understanding meanings are central in qualitative research and text is the ‘vehicle’ with which meaning is ultimately transferred to the reader, language differences generate additional challenges that might hinder the transfer of meaning and might result in loss of meaning and thus loss of the validity of the qualitative study.” These authors go on to state that “Translation of quotes poses specific challenges, because it may be difficult to translate concepts for which specific, culturally-bound words were used by the participants.” And “Using more words than in the original quote, however, changes the voice of the participant.” Thus the process of translation itself changes the voice of the participant, and these changes need to be minimal to preserve the integrity of the data, while producing data that is functional.

In this study the analysis of the data was conducted using the interview transcripts as given by the translators. These transcripts used a very direct translation from Nepali to English which was sometimes difficult to read. The researcher as a Nepali speaker (as a second language) was usually able to extract meaning but occasionally, for clarification, returned to the mp3 audio file of the interview. This was done to avoid changing the voice of the participant in the analysis of the interviews. However, because the audience needs to be considered when choosing between the use of literal word-for-word translations or translation for readability,

quotations from the participants in this document have been modified for readability, keeping them as close as possible to the original translation, and with the researcher's interpretation of the original quote.

Power gaps

There are potential power differences both between the researcher and Nepali staff. These may arise due to gender, age, education, and ethnicity. Nepali people have historically given preferential treatment to lighter skinned persons who tended to rank higher socially in the caste system. Enforcing the caste system is no longer legal in Nepal and yet it is still influential in assumptions made about a person's place in society. Nepal does not have a history of colonialism, which can both exacerbate the power gap due to skin colour and increase resentment, but the whiteness of the researcher may still engender some level of deference. Attention to seating patterns and cultural expressions of hospitality from the researcher may have assisted in allaying this power gap. It is also worth noting that the participants in this study are medical, senior nursing, and paramedical staff. They are highly regarded in society and well educated thus the power gap due to education was minimal, and in the case of medical staff, weighted to the participants. Females in Nepali society have traditionally been excluded from positions of power and there may be a power gap there. It is hoped that my own history as a registered nurse may have assisted with rapport development. Participants were invited to bring along a companion to the interview to increase comfort and reduce any power differential. Two female participants were happy to conduct the interview in their office on their own, one female participant requested a companion, and the other 6 female participants conducted their interviews along with other participants.

The social status and power of the cultural advisor also needs to be taken into account in the study design as they are an active participant in the research process. Finding a person with neutral status who is educated enough to be a competent translator and cultural guide is easier when working with educated professionals rather than marginalised groups, but still needs to be addressed. The guide needed to be from outside the government or health infrastructure so as not to have any authority position regarding the participants and ideally from outside Gorkha to avoid additional socio-cultural connections which could change the dynamics of the interviews. The guide who assisted in the research is a team leader for a Nepali NGO involved in the reconstruction effort after the Gorkha 2015 earthquake who originates from Pokhara. As a high-caste male there was the potential for a power gap with lower caste female participants, but the effect of this should be minimal due to the recruitment of educated professionals who are in positions of leadership. Ultimately however, in the interviews his services were declined.

Ethics and Permissions.

Ethical approval was first sought from the University of Adelaide Human Research Ethics Committee (HREC) which was obtained on the 8 March 2018 under the approval number H-2018-043.

Cross-cultural, cross-national, cross-institutional research involves negotiating multiple layers of bureaucracy that results in lengthy delays in being able to collect data in Nepal. These processes cannot be avoided without breaching legal, ethical or moral boundaries. On commencing this project, it appeared relatively straightforward to obtain the documentation required for a research visa for Nepal. However, bureaucracy in Nepal, as in many nations, is frequently difficult to negotiate with unclear processes and restrictions. Unknown to this researcher

or the University of Kathmandu supervisors that partnered in the research, the national University of Nepal (Tribhuvan University, TU) had an exclusive contract with the government for international research. Letters from the Kathmandu University were not acceptable as documentation towards a research visa and submission to TU was required. Getting confirmation of this process took one month followed by another month for TU to process the application, allocate its own supervisor, and provide the required paperwork.

Following this approval an application needed to be made to the Nepal Health Research Council (NHRC). In order to submit this application a number of steps needed to be completed including the translation of forms into Nepali (consent forms, participant information forms, question guide, and recruitment posters), the obtaining of a research visa, and permission from the Gorkha DHO to conduct my research. Further delays were due to the ethical reviewer from the NHRC being unfamiliar with the qualitative methods being used in this study.

Obtaining all the relevant documents and permissions required a significant investment in time, during which the researcher suffered a traumatic hand injury further delaying progress. NHRC approval to conduct the research was finally obtained 10 September 2018 under reference number 533. The time frame for obtaining permissions for collecting data took nine months, six months longer than the three months that had been planned, significantly extending the time and costs of the study.

These bureaucratic processes have highlighted to the researcher some of the challenges and complexities that not only researchers but MMT participants are likely to find themselves in. Collaboration requires a level of mutual understanding on the goals and objectives of the mission, but differing worldviews and

unfamiliarity on both sides regarding the required processes and procedures may make even the lower goal of cooperation appear unattainable at times.

For this study the main ethical concerns were maintaining confidentiality of the respondents, ensuring autonomy of the participants, and ensuring that the goals of CST, such as of empowerment, are met throughout the research process. For the respondents identify to be confidential the locations of the smaller health posts were withheld from public documents. Gorkha is a largely rural province with a population of 279069 (2016 Gorkha District Health Report). It has two hospitals, the government hospital in Gorkha Bazaar and an NGO run hospital in Amp Pipal; three Primary Health Centres (PHC) and ten Health clinics. There are only eight doctors in the Gorkha district according to PHASE Nepal (http://phasenepal.org/). Thus, even with careful scrubbing of identifiers from transcripts it could still be possible to identify respondents if a health centre was named. For example, if a doctor at a named PHC responded, they could easily be identified, due to being the only doctor at that health facility at that time.

An additional ethical challenge was posed by the way health facility leadership engaged with participant recruitment. In conducting this study, it was found that the planned study method needed to be modified. Once permission from the Gorkha DHO to interview HHP was obtained meetings were arranged with the health post In-Charge officer (the most senior position in the health facility) in order to arrange an information session. According to the research plan an information session would be held and from there potential participants would be able to approach the researcher. In reality the hierarchical structure of health facility leadership made this process unworkable. On meeting the facility In-Charge, an important courtesy to gain permission to recruit staff, the facility in-charge would then identify staff that were potential recruits. These staff would

then be met by the researcher, the project explained, and consent gained. From a CST framework this process posed a challenge. By insisting on a process developed in another context I would be undermining the leadership and authority being exhibited by HHP leaders, but by simply going ahead and interviewing the staff being suggested I could be limiting their autonomy to choose. To ensure ethical integrity and in-line with the chosen research methodology the researcher took these arranged meetings as mini-information sessions and emphasised the voluntary nature of participation before obtaining consent. This minimised the potential for undermining HHP leadership as well as ensuring that HHP participants felt autonomy, reducing the risk of coercion. Some additional staff also volunteered for interview, but due to not meeting all the requirements for the study, their data was not included. This process also highlighted how collaboration in research is essential; to have understanding not only of bureaucratic processes but social structures and what constitutes respectful conduct. While ethical standards must be maintained, the process by which these standards are upheld may potentially vary in different contexts. Ultimately all staff were happy to participate and be able to share their perspectives, although two staff did appear uncomfortable at times. The two staff who seemed somewhat uncomfortable were also happy to share their perspectives but were concerned about time restraints which may have impacted on the flow of information. In addition, these staff members had some language difficulties with the researcher which only became apparent during translation.

Quality of the data.

While it is difficult to know exactly what affect the changes in recruitment, interview styles, and the absence of the cultural guide, may have had on the interviews and the breadth, depth, and quality of the data collected some changes can be assumed, and some are known. For example, all the participants were comfortable with the researcher conducting the interview in Nepali and saw no need for the cultural guide, however in the process of translation and transcription, the transcriber noted that in some questions the researcher had made grammatical errors that changed the subject of the question from the MMT to the participant. This was recognised by most participants as an error and they answered the intended question, but two participants responded with themselves as the subject, and thus possibly some new information was lost. The challenge of conducting the interview in the second language for the interviewer is also likely to have restricted the interview from digging deeper on some subjects as not all the responses were immediately well understood in order to ask relevant follow-up questions.

It is possible that with the cultural guide and translator present that the interviewer may have been able to pursue some themes more deeply, however, equally, their presence could have made the participants more reluctant to make disclosures. Conducting the interviews as small focus groups likely broadened the content of the interviews and reinforced the commonality of experiences, but potentially at the cost of depth. The two most data rich interviews were conducted between the researcher and a single participant.

Most of the interviews were conducted in common rooms of the workplace that were mostly quiet but were occasionally interrupted. During one interview the participant appeared uncomfortable sharing about some of the challenges of

working with MMT while other staff conducted a conversation at the other end of the room. This was however a rare event. Most staff appeared entirely at ease, apart from two nurses, interviewed together, who were concerned that the interview would run into a scheduled staff in-service. Their interview was a little rushed as a result but still yielded relevant data.

In conducting the SSI interviews the participants often raised topics prior to the questions being asked. The list of questions became a list of topics to be discussed. If conversation slowed or needed to be redirected the questions acted as a checklist of what topics had been covered, and a prompt for remaining topics.

Despite these limitations, during analysis of the interviews, 244 separate databits (relevant quotes) were obtained and organised into 60 nodes (primary themes), at an average of four databits per node. This indicates a level of data saturation as on average each node was discussed by one or more participants four times.

Data Collection, Storage and Use.

After consent was obtained the interviews were recorded into digital audio files (MP3) using an Olympus WS-852 digital voice recorder. The audio files were de-identified by removing names, locations, specific job titles, and other identifying markers using Magix © Movie Studio Platinum creative software. The de-identified MP3 was then sent to a translating service for transcription and translation into English. The demographic data collected was de-identified, coded, and attached to the transcribed file in order to conduct some analysis whether some themes were more strongly aligned with gender, age, or profession. Enough identifying makers were retained to be able to remove the data if the participant decided to withdraw from the study. If they indicated that they wished to receive a copy of the findings contact details were also retained. Data relating to this study such as interviews,

demographic data, transcripts and translations will be kept for 5 years on secure servers at the University of Adelaide then deleted from the server. Paper copies were destroyed.

The transcribed interviews, now coded, de-identified and in English were then subjected to an inductive thematic analysis.

Process of analysis

In order to manage the data collected the transcripts were uploaded into NVivo software by QSR International. No analytical functions of NVivo were used, however the software provided a means to easily sort and group the databits. Paragraphs and sentences regarding HHP and MMT activities in working together towards their goals however broadly described were collected into nodes, called databits, and from these, themes were created. An inductive method was used to read through the transcripts and generate the databits without reference to previous models of collaboration. In recognition that collaboration is a complex interpersonal experience that is difficult to evaluate and measure, and that the models held by the researcher may be inadequate for describing the participant's lived experience, care was taken to be open to experiences that transcended any model.

CST demands that social, bureaucratic, institutional, and cultural barriers also be examined for their roles in obstructing the progression of egalitarian values and empowerment of vulnerable peoples. Quinn and Spreitzer [108] distilled empowerment in business down to four characteristics: self-determination, meaning, competence and impact. Transcripts were analysed with a heightened awareness for themes indicating HHP had felt empowered or disempowered either though self-determination (autonomy in decisions and not being micro-managed),

meaning (feeling engaged with the objectives of the MMT), competence (that they felt the tasks they were allocated were appropriate and performable), and impact (being able to engage the team in decision making, and share ideas). Being unable to voice opinions, show initiative, being treated poorly and unjustly, or disregarded indicated disempowerment. Alternatively, autonomy in decision making, being professionally supported, and socially and professionally included indicated empowerment. In conducting the inductive analysis, where themes that indicated power differences were observed, patterns were looked for with other participants based on age, gender, and profession.

Analysis of the interviews

In total 247 databits were placed into nodes within the Nvivo software. Some databits were placed into multiple nodes such as this quote:

> “And they had several meetings here with the hospital, with the registration office, police office, and other office staff as well. They asked me whether the waste collected in that medical camp could be handed over to the hospital to manage. And I told them "we don’t have definitive waste management even though we are a hospital, so no." And they said “no, that is our rule. The local hospital has to manage that waste!” “ (Participant A)

This paragraph was placed into multiple nodes – ‘Inflexible MMT’, ‘Multi-organisational planning’, and ‘Respect for HHP leadership’.

This initial coding into nodes created the primary themes that were then gathered into related theme groups to form sub-themes. These groups or sub-themes were further organised into major themes. The three major themes to emerge from the data were Presence, Dignifying, and Engaging. These are discussed in more detail further below.

Using the example above, one primary theme from this quote, ‘Multi-organisational planning’, was gathered with other primary themes from other quotes to create the sub-theme 'Leadership role of HHP'. This sub-theme was then further grouped with other sub-themes; 'Negotiating through differences’, 'Prejudice and power gaps’, and ‘Longer term impacts’, to form the major theme of ‘Dignifying’. This is represented in figure 3.

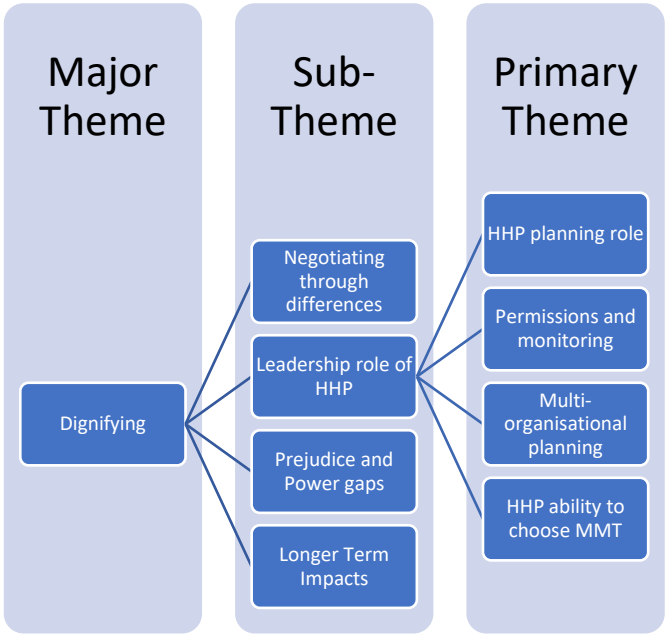


Figure 3 Hierarchy tree for ‘Dignifying’ example

This process was followed for all the primary themes resulting in 11 sub-themes and three major themes. The grouping of the 'primary themes' into categories of 'sub-themes' and then 'sub-themes' into 'major themes' provides one lens by which to view the interviews and aid analysis. The strength of this method is to view different participant perspectives on a single topic together. It also helps to assess which themes, ideas, words or phrases are important to the cohort based on frequency of appearance. In keeping with an explorative process as much as possible the coding was conducted in an open-minded manner, without regard to preconceived ideas, structures, and theories. A weakness of this method of coding for the development of themes is the risk of losing some of the context and depth

of feeling that comes from the flow of discussion. To avoid the loss of this information a second method of reviewing and analysing the data was conducted.

The second method of reviewing the interviews was a careful, individual reading and re-reading for overall impressions regarding collaboration, such as the participant's sentiment toward MMT, and what was most passionately expressed. Reading through the interview transcripts revealed additional matters regarding collaboration that were not clearly exposed via the thematic analysis that warrant comment. Often these sentiments were present in the databits but had not been prominent enough to generate primary themes. Where these issues were identified representative quotes, or databits, were placed within the thematic analysis to give adequate weighting and inclusion for analysis and discussion. Some additional matters arising did not fit within the existing themes and are discussed separately. The themes were also presented and discussed with the research supervisors as they evolved to ensure trustworthiness of the data.

Conclusion

Face to face semi-structured interviews through the lens of CST were chosen as the best method to elucidate the aims of the study. Challenges occurred due to conducting the interviews across language and cultural barriers, but steps were taken to minimise the negative impacts of power differences on the participant's ability to share their experiences with the researcher. The interviews were translated and transcribed to English and then NVivo software was used to facilitate the extraction and organisation of data. Text relating to collaboration was extracted and organised into primary themes, sub-themes, and then major themes. These are now discussed in the next chapter.

CHAPTER 5 - ANALYSIS OF THE INTERVIEWS

Introduction

This chapter presents the findings of the interviews and displays the themes arising out of the coding. Coding in Nvivo resulted in 244 databits being obtained from the interviews and placed into 60 primary themes, sometimes in multiple primary themes. These primary themes were then sorted into sub-themes and major themes. Both positive and negative experiences by the participants were grouped together in the primary themes.

The process of sorting the sub-themes into groups and final major themes was challenged by the inter-linked, mutually dependent nature of many of these collaborative processes. Sub-themes were initially grouped into pairs and then expanded and re-grouped as the themes began to emerge. Table 5 provides a quick overview of where the participant's concerns and interests lay as displayed by the number of databits associated with that theme.

MAJOR THEMES	**SUB THEMES**
PRESENCE: Immersion in the context of health needs. Openness to learning and change. (126 databits total).	Working Together (72 databits)
	Relationship Development (38)
	Responsive Communication (16)
DIGNIFYING Respect, reciprocal arrangements, and sensitivity to social status and organisational position. (79 databits total)	Negotiating Through Differences (32)
	Leadership Role of HHP (23)
	Longer Term Impacts (14)
	Prejudice and Power Gaps (10)
ENGAGING The process of collaboration requiring initiation of discussions, objective development, and engagement in offering, denying, and rejecting of services. (39 databits total)	Mutually Shared Objectives (20)
	Jointly Developed Plans and Procedures (19)

Table 5 Major Themes and Sub-Themes and their databit counts.

These themes are now discussed. Quotes are given to link the findings of this study to the voice of the participants.

Themes arising

Presence

The first major theme is 'Presence: Immersion in the context of health needs and openness to learning and change'. It relates to understanding the local community's priorities in health, and how the local health services meet those needs, through keen observation and questioning of staff and community members on location. It involves understanding cultural, professional, and economic constraints of the local health service and community, and in addition, being willing to explore and adapt practices explicit in the home environment to the current context. This major theme developed out of sub-themes relating to cooperative relationships, but it became clear that the concept tying the sub-themes together was the concern of the HHP that MMTs understand the local context. The sub theme of communication was not so much related to language issues, although some of these issues featured, but rather to responsive communication such as feedback, briefings, and pre-mission communications.

The sub themes related to 'Presence' were 'Working Together', 'Relationship Development', and 'Responsive Communication' of which working together was by far a dominant concern as evidenced by the high number of databits (78) relating to the sub-theme.

Working Together

This sub-theme was expressed by the experience of this participant:

> "We did all our work together. We incorporated their sterilization staff into our own staff, making one team. Working with them showed us some

> weakness in our sterilization and we were able to improve the quality of our work. They were experts who have responded to many disasters while this was our first experience. We learnt a lot from them." (Participant F)[2]

The HHP placed a high value on being co-located with the MMT in the clinical activities where they could assist in translation and logistical support, provide their clinical services, be exposed to the skills and experience of the MMT, and build the relationship necessary for collaboration. This participant recounted how the plan had been that they would be integrated with MMT:

> "It had been decided that we would would together in one place, in harmony. They set up their tent across the field from the hospital and made space for us to work with them there. "We'll help you and you'll help us" they said. So at first the plan was to work together in harmony." (Participant J)

However quite quickly the workload was divided with HHP managing outpatients while the MMT staff managed the emergencies and theatre. The presence of the expatriates dramatically increased community attendance at the outpatient department, but the emergency and theatre case load remained low. This created resentment from the HHP towards the MMT, as this participant explains.

> "At that time one hundred and fifty to two hundred patients a day presented to outpatients expecting to see expatriate doctors. But this team refused to see the patients. They said, "we'll not see the OPD patients, we'll only see

[2] The quotes in this document have been modified slightly for readability from the direct translation used in the analysis. Care has been taken to hold as closely as possible to the direct translation.

> emergency cases". So they did not see the OPD patients at all and we were extremely over-loaded." (Participant J)

Relationship Development

The next highest referenced sub-theme within 'Presence' was relationship development, pertaining to the process of building and maintaining relationships and the effect of relationships on collaboration. Participants referred to the approachability and friendliness of the team, professional rapport, and the impact of co-location during clinical activities, but also when off-duty. Good personal relationships were vital for collaboration, to share information and resources towards a better clinical outcome. Often this good personal relationship was between two key leaders, one from the MMT and one HHP, who were able to communicate freely and work together to resolve issues.

> "The MMT leader was looking for an older experienced person to coordinate with. He was very good. He used to get up early in the morning, take a shower, and come straight to my house to wake me up. Every morning we would to go to where the pipe was broken, or the wires broken, and we sorted out everything. We worked together a lot, dealing with everything. His team leadership was excellent and it made it very easy for us all to work together". (Participant F)

The development of collaborative relationships was improved by shared experiences, like travelling together to the site and sharing breaks together, as these participants highlight:

> "…if we haven't been familiar before …while travelling we become close, then we can discuss the problem." (Participant O)

> "The relationship between the teams was cooperative with good coordination. Their public relations, their interactions with us was good……. We had snacks, lunch together. Our work was also done together." (Participant N)

MMTs who had experience in Nepal and who had previously been involved were able to provide support at short notice, due to established relationships, and contextual understanding.

> "They have come here before and they know our scenario. They have provided the same kind of equipment two years ago and it was appreciated by the hospital…. Because they have been here previously they understand these things." (Participant A)

Responsive Communication

The third sub-theme for 'Presence' was 'Responsive Communication'. Communication issues occasionally arose due to language and translation challenges but more frequently were due to inadequate time given to communication both in the planning period and during activities. An additional communication challenge was a lack of engagement where issues were verbalised but there was an inadequate response or explanation, indicating the MMT had not fully grasped, or did not respect, what they had been told. Good collaboration was evident where time was made for communication, such as morning or evening debriefings with combined MMT and HHP leadership, and where leadership was responsive to what was being communicated. Time and language alone were insufficient for collaborative communication.

> "In many cases, with a lot of these issues they already had their own fixed plan so they didn't actually want to listen to us. So we had several hours of

> meetings and I asked them "actually why are you meeting with us? If you want these things to be done in this way then you can write and give me a list!" What can we do? Lots of these things are just wasting my time." (Participant A)

Participants also referred to their frequent roles as translators and the dependence of MMT members on them for this. However MMTs sometimes brought their own translators who were not always experienced with medical practice and terminology. Two participants made the following comments regarding translation:

> "Without collaboration, that foreign team, they can do nothing! They cannot communicate with other people; they don't know anyone except us. It is like some kind of compulsion for them to collaborate in each and every step." (Participant C)

> "The MMT could not understand the problem. They had brought one Nepalese translator who could speak their language, but he was a non-medical person. I felt that their translator wasn't able to help them understand." (Participant F)

Dignifying

The next major theme was 'Dignifying: Respect, reciprocal arrangements, and sensitivity to social status and organisational position.' This related to how HHP and MMTs engaged with different forms of knowledge, showed respect in relationships, and managed different leadership roles and styles. This major theme is particularly relevant in a CST paradigm where sensitivity to bias that might restrict participants' opportunity to express their ideas and expertise might exist.

The sub-themes for dignifying were 'Negotiating Through Difference', 'Leadership Roles of HHP', 'Longer Term Impacts', and 'Prejudice and Power Gaps'.

Negotiating Through Differences

'Negotiating Through Difference' included formal and informal exchanges of information and education, from the planning stage through to evaluation. Exposure to different ideas or clinical practice occurred as MMT and HHP worked alongside each other and also through formal training sessions. The information and education included logistical, cultural, and clinical subjects.

> "During planning for the camp I had a discussion about resistance patterns and commonly used antibiotics in our settings." (Participant B)

> "I also had to explain about accommodation, behaviours, morals, and norms of behaviour here." (Participant F)

Some teams were not able to accept the advice of the HHP which resulted in a breakdown of teamwork. In one situation the HHP respondents said they tried to resolve this conflict and give clinical advice about matters regarding post-partum care but it was unsuccessful. HHP began to withhold communication from the MMT, setting up a relationship of competition.

> "We arranged the meetings again and again, advising them 'You need to do it this way because this is a mountainous area.' But they did not listen to us and without letting them know we handled two or three delivery cases [long laughing]. They did not know." (Participant K)

Showing respect for HHP viewpoints and including them in care was important for maintaining collaboration in maternity services.

> "At first the plan was that we would work together; that we would stay over there at the tent and work together there. But later they stopped us from

> coming over from the hospital and employed two local staff instead." (Participant K)

The MMT separated their work from the HHP unlike the earlier agreement and recruited additional staff who were not as experienced. They only called the HHP midwives when there were problems.

> "They had recruited two local nurses. But those two nurses didn't know anything. They only called us for assistance after labour had already been prolonged and by then they needed a caesarean operation." (Participant K)

The participant suspected the inexperience of the recruited nurses was responsible for a delayed caesarean section.

> "There was a case where the baby had a fast heartbeat and the mother had very high blood pressure but the nurses there didn't realise the problem until later. We think that if that case had been with us in the hospital it would have been safer for her." (Participant K)

Frequently the MMT were seen as well-equipped disaster response experts valued for their ability to provide immediate clinical support and demonstrate good disaster response. This provided informal learning opportunities as HHP were exposed to different procedures and practices. One participant shared about a large disaster response team he had encountered:

> "Their team was large with 72 people, including security guards, cooks, everyone! So, at that time while we were in serious need of some help, they arrived with everything. They brought their own operating theatre, doctors, scrubs, medicine, everything on their own. So, it was very relieving for us... They arrived at 10 am and by 2 pm they were operating. We could learn a lot from them about the emergency situation and how to be prepared. We

> worked alongside them and they were letting us know everything, like, how to do these things in a rush." (Participant B)

As well as the opportunity to work alongside and learn from practical experience, formal education sessions and workshops where the workload permitted such activities was appreciated,

> "… also the radiologist taught a session on ultrasound for our medical officers for two hours in here. And that was also fruitful." (Participant A)

> "If another team comes we will work together, they need to share their medical ideas, and also we need to share with them. If we work like that it will be good." (Participant K)

Participants recognised that education was not the main objective of these activities and that the setting often made training difficult:

> "In the camps the numbers of patients are quite high and the facilities rough so it is hard to do teaching and learning. But that doesn't mean you can or can't learn." (Participant B)

Even among the MMT regarded as good partners and collaborators significant disagreements could occur. Not all sources of tension could be foreseen and planned for when teams are operating out of their normal context. For example, one highly regarded MMT had ultrasound capacity and offered this service in anticipation of approximately four patients. This offer was gladly received. The sonographer was shocked however to see a queue of almost 40 people quickly form. He had not understood that ultrasound is a high demand product that health services frequently offer as a funding source as well as clinical tool. This participant discussed how in offering sonography services the sonographer had inadvertently volunteered to raise funds for the health service.

> “We had given the bill to almost forty people. The patients were standing in line outside the room waiting for their ultrasound (USG). “I won't do it”, he said, getting angry. “I’m doing the USG and you are earning money?”. Outside the patients are also getting angry. Because he didn't speak Nepali he couldn't communicate to the people and let them know what the issue was. He told them “I’m sorry”. Sometimes these kinds of incidents can happen. We don’t know their behaviour and also they do not know about our community behaviour. They are used to only doing a few USG. Here if we had the facilities, we could easily do 100 people or more! But we managed that situation. The older experienced people talked and we helped them to understand our way and we understood their way. We listened to each other and came to know the differences between their understanding and our understanding. Expatriates are used to doing very good quality USG for lower numbers of patients and are not used to the high numbers of ultrasounds that we are used to here. There will be no good result when we get nervous and angry with each other, but we can manage these things together.” (Participant F)

Fortunately, this team's leadership had a very good relationship with HHP leadership and were able to manage the situation and learn from the experience. Without collaborative dialogue stemming from mutual respect these sorts of events can break relationships and prematurely end missions. This participant also shared a situation when the relationships became fractured:

> "We did two or three surgeries together with them. But then we sent them away forcefully. We didn’t let them stay. I told them that they could not stay because they couldn’t work well with us. They got angry a lot. They came into our workplace and made a lot of demands." (Participant F)

HHP wanted MMTs to respect local leadership and follow local norms of care.

> “We had worked with different teams for two days observing which team would work well with us. How did they work and behave, how did they receive and treat the patients? If they had to do an amputation whether they asked, and how they asked. How they responded to our advice was important. This team said, 'You’re the leader. You tell us how it is done here, and we’ll do it according to what you say', so we joined with them.” (Participant F)

Leadership Role of HHP

Also within the major theme of ‘Dignifying’ was sub-theme 'Leadership Role of HHP'. At times this role was formal, such as when the leadership was engaged by the DHO or other administrative authorities to work with the MMT. At other times this was informal, where the MMT recognised the expertise of HHP and sought their advice and assistance in multiple areas – logistical, clinical, and cultural. One participant gave this example where he appreciated being asked about Nepali culture:

> “He asked about all kinds of things like smoking, ways of speaking, hugging, kissing, in all these how do you behave in Nepali culture? All of these things are general knowledge for us, but he had asked, and accordingly I told him what our norms of behaviour are here." (Participant F)

HHP leadership in central locations were generally able to exercise more authority in choosing or rejecting potential partners while remote HHP indicated that they had less power in these matters.

Remote:

> "From the district office there comes the order 'Go! One of you from the health post go and help them'." (Participant G)

Central:

> “They had come to our place to help us. They are here to help but if they don’t listen to us then we cannot accept them. They need to ask us 'What do you need? How can our treatment services assist you?' That's what we want." (Participant F)

However even in central locations at times there was feeling that MMTs could be imposed on them.

> “In a disaster the MMT already have permission from the central level or Ministry of Health so while they are here they have permission to do basic treatment…and actually they are quite liberal to do almost everything. They don’t have any restrictions. If you were to restrict them or limit them in their work you could be in trouble, so we have to let them do anything." (Participant B)

Teams that did not engage well with leadership were poorly regarded. Sometimes the MMT seemed to ignore the wishes of HHP leaders and initiate actions that were unwanted and demonstrated complete disregard for host autonomy:

> “And they came, and they just started painting the office room near the OPD counter! I said what are you doing? They said, 'Yeah we are painting your office a bright colour'. And I said, 'Actually this is not needed. That was not the support I want from you'. They just brought the can inside and they started painting without cleaning or proper preparation.” (Participant A)

Longer Term Impacts

Also placed into the major theme of 'Dignifying' was the sub-theme of 'Longer Term Impacts'. Participants raised this directly in regard to capacity building through training and equipment provision, partially covered under the sub-theme of "Negotiating Through Difference", but also indirectly as they discussed how the presence of MMT impacted the health seeking behaviour of the community. This impact could be positive, such as Nepali HHP working collaboratively within an MMT building new links with recipient communities. The impact could also be negative as poorly coordinated camps could emphasise the gap in services offered by an MMT and local health services and potentially undermine HHP.

One study participant shared how through their participation in MMT work in remote areas they were able to build links to community members and educate new populations on the services provided by the health post:

> "Many of these camps are held far away from our health centre, so people who don't visit frequently our centre come. And we give the communities information about our health centre; 'We are providing this and that health services'. We have then found that these people from remote areas start coming to the health centre for regular services." (Participant O)

Many communities expressed a preference for the medical care given by MMTs which was evidenced by the presence of MMTs dramatically increasing the numbers of outpatients attending services. Without adequate planning and communication to the community, crowding could occur, and could result in lost productivity in the community if people had to wait a long time for services. This crowding also made it difficult to reach the targeted patients. This occurred in a mother and child health camp as these participants' in one interview explained:

> "The people were so crowded and cramped" (Participant G)

> “Oh! So that they were humming like bees! So they do not follow instructions!” (Participant H)
>
> “Elderly people, children and pregnant mothers are all there…” (Participant I)
>
> “All are there. Eye patients, stomach pain patients, and cardiology patients are there.” (Participant G)

While both Nepali and Expatriate MMT experienced crowding, the draw of expatriate personnel was greater. Some study participants felt frustration that local patients valued medical care from expatriates more highly than from Nepali staff as was shared by this participant:

> “If there is a foreigner, the community's expectations are higher. They will be happy to see the foreigners even though they are not doctors, or staff nurses, or anything. Even if they are just medical students they will be expecting more and they will be happy to receive medicine from them. So even though we are doctors they will not see us as medical professionals. There is a big difference in how the community sees us.” (Participant B)

Participants in this study did not explain where this high value being placed on MMT care had originated. While there are likely to be a number of factors, such as the presence of specialists in an MMT, a contributing element may be that the perceptions of the community towards HHP and MMT-services has been impacted by previous levels of collaboration between them. That is, where MMT and HHP have worked closely and collaboratively the community might ascribe success and failures equally to both, but when services are poorly collaborative HHP are disproportionately blamed for failure. This is indicated by the following statements:

> "...many people blamed the hospital for the problems, but the team had not given the hospital enough time to plan for the event..." (Participant A)
>
> "...because if there is a complication in a surgical case and the community is angry then what can we do? The MMT can leave but where we shall go? " (Participant F)

One participant described the desire to work closely with the MMT in order to better share both the responsibility but also the consequences as a means to increasing ownership by all members:

> "Because we had experienced the community blaming the hospital or expatriates for different things, we decided we shouldn't work alone but work closely together. This helps us to feel that the work is ours and take up the responsibility and also the consequences, whether good or bad. It also increases your awareness when you have taken responsibility." (Participant F)

Thus collaboration can affect patient care through the impact on team member buy-in, and also by impacting on community sentient towards their local health providers. Poor collaboration may contribute to reduced confidence of the community in their local health care provision and result in altered health-seeking behaviour of the community in the longer term.

Prejudice and Power Gaps

This bias from the community leads into the final sub-theme for the major theme 'Dignifying' – 'Prejudice and Power Gaps'. In the spirit of CRT this study intended to be sensitive to elements of prejudice or discrimination on the basis of age, gender, religion, nationality, or race. This was not a large theme in the participants' responses with only 10 databits. As already mentioned, many staff

were sensitive to bias from the communities that they serve. This participant explained how health workers were seen by the community:

> “The perception of the local community is that the foreigners are much better than the local health workers. They don't know their qualifications or what their objective might be, they know nothing about them, but the expectation is that they will get more from the foreigner". (Participant C)

Staff also felt discrimination from MMT members who did not recognise their authority and give due respect. Sometimes the impression that they were being disrespected was very strong as one participant shared:

> “We need teams with people who will follow our instructions. Some of the teams were not like that. They didn't care or couldn't be bothered to listen to us.” (Participant F)

At other times this lack of respect for HHP was expressed more subtly, for example by segregation during break times or not being invited to spend time together after-hours, as this participant disclosed:

> “We used to see patients together from 10am in the morning to 5-6pm in the evening. After that they used to go and have a fun time together, but they did not even invite us to join them. And we had a talk about this, that at this camp we need to work together and stay together. But it kept happening and we felt sad. After staying together, and working so hard together it would be good to stay together and share the fun together, wouldn't it? They did work hard, and so did we. They have come from abroad to help us, and that is good thing that we appreciate. We have been sitting alongside them seeing many patients, doing a lot of work. But we felt

> bias towards us in their behaviour and it made us feel very bad." (Participant J)

Another barrier to collaboration was professional hierarchies, especially within the medical profession. Participants felt that the lack of specialist staff among the HHP restricted opportunities for collaboration:

> "We don't have consultants or specialists in our hospital. If there were consultants, specialists, they could collaborate together and discuss the conditions of the patients." (Participant B)

The highly qualified MMT members, who were often specialists, were professionally intimidating to some HHP, which combined with HHP undervaluing their own experience and knowledge to inhibit communication and collaboration.

The final databit within 'Dignifying' is regarding interactions with military medical teams. One medical officer felt that it was difficult to collaborate with military leadership:

> "So then they were army and it was not wise to discuss the issue too much, and especially to argue. Their manager has security, three to four security [personnel] with guns, with him all the time." (Participant A)

Other HHP had positive experiences with military teams from different nationalities but this quote demonstrates the potential intimidation of military personnel that can undermine collaboration.

Engaging

The third and smallest major theme was 'Engaging: The process of collaboration requiring initiation of discussions, objective development, and engagement in

offering, denying, and rejecting of services.' This is associated with the assertive processes of collaboration: putting forward ideas, plans, and objectives for discussion.

The two sub-themes relating to this were 'Mutually Shared Objectives' with 20 databits and 'Jointly Developed Plans and Procedures' with 18.

Mutually Shared Objectives

Regarding objectives four issues arose from the interviews – assumed objectives, emerging objectives, unfulfilled objectives, and hidden objectives.

Firstly, in the post-disaster period objectives were rarely discussed, and HHP assumed that the objectives of the MMT would be lifesaving rescue.

> "During the disaster and emergency period whatever the objectives had been, or whoever you are, if you know medicine then you are to supposed to treat and no one is there to obstruct you…." (Participant B)

> "After the earthquake in the emergency situation their purpose was to provide treatment to the injured people." (Participant J)

However this did not always seem to be the case with one participant sharing about a surgical MMT that he had witnessed post earthquake:

> "Their motives were not completely regarding surgery but seemed to be about other things. So I think that is why their concentration was reduced towards the patients." (Participant F)

This participant did not disclose what he thought their other motives might have been for this surgical team, but it was clear to him that they were distracted from this task by other objectives.

Secondly, as time from the earthquake increased other objectives emerged that had not been a part of the initial agreements. While participant J had been very appreciative of the medical support in the days immediately after the disaster where the objectives of rescue medical care was shared, over a few weeks the objective of securing equipment for providing permanent services developed.

> “When we were about to leave the shared facility, we told them "leave your equipment for us." They had already left one or two oxygen concentrators. We said leave the X-ray so we can continue to provide services. But they did not leave it and we had also asked for the USG, but they didn’t give that to us either.” (Participant J)

The HHP were disappointed that the MMT did not engage with this particular objective, i.e. increasing their access to specific equipment on a permanent basis.

Thirdly, HHP were disappointed when stated objectives were unfulfilled. HHP desired reliable MMT partners to work with and valued teams that were clear in what they could offer and who followed through on promises made. However as this participant mentions there were times when the MMT did not follow through with what they had understood to have been offered:

> “They said 'We will also support your hospital' and I was happy… they said 'What type of support do you need?” and I said 'We need a bigger generator” and they came, … they took pictures of my current generator. Then when they came again a bit later I asked 'Where is the generator? what happened with that?' and they said 'No we cannot give you a generator!'” (Participant A)

Finally, unspoken objectives and motives also created a problem for HHP. In addition to the participant talking about the post-disaster surgical team quoted

above another participant commented regarding a situation where a Nepali doctor was assisting in a medical camp in a remote area. The international nurse who had organised this outreach service was placing substantial pressure on the doctor to give intra-articular corticosteroids to the knee. Initially this was confusing to the doctor but later he realised that the nurse had another project that she was working on that required community support:

> "For them to be involved in her project she had to make all of them happy. She was already aware that…… all of them are insisting on knee injections because some people or some medical camp has already taught them that if you get a knee injection it will be easier for you to work." (Participant C)

This nurse through previous visits to the area knew the value the community placed on knee injections, and in order to win their support for her other project was seeking to meet this need. But by neglecting to disclose to the doctor this objective she had placed him in a very difficult position.

Another form of unspoken objectives was the political objectives of MMTs of Nepali origin.

> "Nowadays we have been in the local system receiving Nepali MMT. Every time there is a camp our politician also comes. Making the politicians understand what we are doing is difficult." (Participant O)

The HHP understood the politicians are joining the MMTs to be educated regarding health issues in the community as well as gain positive political exposure. Some elected representatives arrange medical camps without coordinating with the local health service as providing a scarce resource such as medical care has an impact on elections. One participant was very critical of these politically motivated medical camps:

> "They collect all the people, those who need to be examined and those who don't, and it makes a big crowd with no chance to select those who actually need medical care. The politicians think there is no need to include the local health service." (Participant G)

The presence of powerful people or groups with an objective of seeing a large and happy crowd for political purposes may also place additional pressure on clinicians who need to be rationalising care or providing difficult counselling and advice. The politician's presence could potentially change the dynamics of care.

Not all of the experiences of HHP regarding the development and expression of objectives were negative. Sometimes the HHP made radical changes to the objectives and plan of the MMT, and the MMT accepted those changes. One MMT with an objective of providing surgical services was convinced to assist with screening in a remote area as one participant shared:

> “I actually made a plan to do an outreach camp and they approved that plan and made some adjustments according to their budget. So I had made a big plan and according to their budget limit they cut a few things and then it was approved by their committee and it was final.” (Participant A)

However, generally, objectives, with a few exceptions, were not collaboratively developed, were rarely discussed in detail, and were assumed to be compatible. When it was discovered that the objectives were not compatible it was a source of friction. More attention was given to collaborating on planning, which is the second sub-theme of ‘Engaging’.

Jointly Developed Plans and Procedures

All the participants had been involved in logistical discussions with MMTs regarding their activities. In the post-earthquake context with professional

International Emergency Medical Teams (I-EMTs) this was often working with them to decide on location, and occasionally accommodation as they were frequently self-sustained units.

> “The municipal office recommended the local school as the location for the field hospital, so we went with the MMT to do surveillance of the site. Then we met with the school committee, had a meeting, and a discussion was held. And the school gave the place.” (Participant J)

Immediately post-disaster the busyness and chaos made it difficult for some HHP to consider planning and objective setting:

> “Somehow we don’t have time and we didn't even think it was necessary to think about planning, we were too busy to plan!” (Participant B)

After the disaster response phase, as other teams came in with a wider variety of objectives, more time was given to planning and HHP were more involved as one participant shared.

> “We sat together and we kept on checking our lists of equipment, working out everything. We discussed and she improvised and updated the list then she again provided it to me asking 'Anything you want to change or want to remove or want to add?' She provided the list to me three times and then at last we concluded with one list.” (Participant B)

All the HHP appreciated having time to do planning well in advance of the event, and preferably face to face.

> “Writing in email doesn’t work without sitting down together and having a talk together. First we must provide a lot of information about the situation and what is needed and then the MMT can come with their plan."
> (Participant F)

HHP were often mediating between the MMT and the host community. Inadequate time for consultation and communication with community residents and volunteer health workers significantly impacted the ability of HHP to collaborate with the incoming MMTs regardless of whether they were international or Nepali in origin.

> "Many teams don't worry about the volunteers, but they are essential for translating from the patients' own language into Nepali, and for organising the patients to be seen… which patients are going to be seen? Dental? Prolapse patients? We need to prepare the patient lists so people don't waste time standing in queues. The rest can go to work and the patients who are to be seen can get a proper check-up. …But we need 10-15 days warning. …We got notice today that a camp is coming tomorrow. We are not ready! Who do we send from our clinic?… They don't tell us anything so we don't have a good relationship with that team."

Finally, formal plans and policies were considered good where they had been developed at the HHP facilities and would continue to be followed:

> "…in our hospital also for triage, the rescue team, there is a specific plan and we will conduct ourselves according to that plan. The MMT will come with their specific objectives, but we'll continue with the same objectives and plan from the hospital." (Participant B)

However policies and plans could also be negative as HHP experienced MMT using plans that were inappropriate to the context and also as an excuse to avoid responding to requests or suggestions.

> "…they had their own fixed plan so they actually didn't want to listen to us."(Participant A)

> "So for the foreigners if they make a big plan without seeing the real scenario then when they come here they will be lost and their treatment will be less successful than their expectation." (Participant A)

Other Matters Arising

Reading and re-reading through the interviews where participants' comments are placed into broader context gave some information additional weight that might have been lost in the NVivo databit organising process. Most of the information that became more prominent from this reading fitted within the themes that had already risen through the NVivo process from one or more participants, but occasionally new matters did arise. These included the impact time has had on the nature of MMT's due to evolving health needs and government policies, and the overall sentiments of the participants to the experiences of collaboration with specific MMT's.

Immediately following the 25th April 2015 earthquake numerous MMT were active in Nepal, including in the Gorkha District where this study was conducted. Participants indicated that following that post-earthquake response period there has been a significant decline in foreign medical teams. One participant noted the difficulty for teams to get medical registration in more recent times.

> "I told them that if you are treating patients then you have to have proper registration… but the registration process is quite lengthy so they didn't do that." (Participant A)

As a result there was a pattern of sharing about I-EMT and disaster response in the post-earthquake period of around 6 months and then increasingly about Nepal government run camps, with a few exceptions, following that. These restrictions on foreign medical registration by the government had some positive impacts,

such as forcing expatriate medical personnel to collaborate closely with HHP. Unable to see patients without medical registration the MMT needed to embed HHP into their team for clinical activities and support them with education, mentoring, administrative, and financial backing to achieve their aims. It has however also reduced the flow of specialist medical services to these underserved areas.

The general sentiment of the participants was very positive towards the contributions of MMTs, especially following the earthquake. To have experienced and proficient teams supporting them in such a time of crisis was greatly appreciated. Some MMTs disappointed the HHP participants with their attitude towards them and lack of proficiency, but overall the experience was positive. Participants expressed appreciation for the support provided in the immediate aftermath of the earthquake by teams that were cooperative and competent, even when they were not very collaborative. But this appreciation quickly declined as the immediate life-saving crisis period of the first couple of weeks passed. If the MMT failed to collaborate and engage with the evolving situation, as discussed above under the 'Mutually Shared Objectives' sub-theme section, this led to feelings of disappointment. The most positive experiences were reserved for the teams that collaborated well with good engagement and sharing of responsibility between senior MMT members and HHP throughout the duration of the mission.

Conclusion

Despite the challenges of cross-cultural, international, and multi-institutional research this explorative study has generated data that expands our understanding of how HHP view and experience collaboration with MMTs.

Good collaboration required time for communication as well as requiring interpersonal skills from key leaders to facilitate the collaborative partnership.

The inductive analysis process has generated three major themes relating to the interpersonal skills that are the foundations of collaboration; PRESENCE; Immersion in the context of health needs, and openness to learning and change. DIGNIFYING; Respect, reciprocal arrangements, and sensitivity to social status and organisational position, and ENGAGING; The process of collaboration requiring initiation of discussions, objective development, and engagement in offering, denying, and rejecting of services.

It was clear that not all MMT engaged in good collaboration, and that even when a desire for collaboration was expressed there was difficulty in implementing it. Collaboration was seen as an important factor for HHP in the assessment of MMT activities, but in a crisis HHP were satisfied by competent teams who were cooperative. However, HHP quickly became dissatisfied with the MMT as the crisis eased unless a good collaborative relationship had been established.

The next chapter discusses the findings of this study and their significance to our understanding of collaboration between HHP and MMTs.

CHAPTER 6 – DISCUSSION

Review of the problem

Collaboration in health care is recognised by multiple organisations as foundational for safe and effective health care [14, 30] and is a guiding principle for EMT responding to humanitarian disasters. [5] How collaboration is experienced and valued by HHP who receive medical teams on short term placements due to disaster or chronic deficiencies in health care is not well known. This study used the qualitative methods of SSI under the paradigm of CST to explore collaboration from the perspective of HHP in Nepal.

Major findings and their significance to clinical practice

In the design of this project the three areas of interest were the extent that collaboration was occurring, an examination of the type of collaborative efforts, and the barriers and enablers of collaboration, all from the perspective of the HHP. These are addressed below. An additional question posed that cut across the questions was regarding the impact of collaboration; was it viewed as significant by HHP, and was there evidence of any difference between the outcomes of teams that were poor collaborators and teams that were good collaborators. Also of interest was similarities and differences between existing models of collaboration based on permanent teams, such as inter-professional intensive care teams and rehabilitation teams, and the novel themes that emerged from this research.

The extent of collaboration

Participants reported knowledge of teams coming and conducting clinical activities with minimal engagement with them, especially in more remote regions.

This occurred both in the immediate post-disaster period but also in the years following, with both inter- and intra-national teams implicated. While Parmar [65] has found that the SPHERE project [109] has driven significant improvement in collaborative behaviour in humanitarian responses through the development of standards to improve coordination, effectiveness, and efficiency, it is evident these initiatives have failed to reach all medical teams likely to respond in a crisis, as well as non-disaster MMTs.

All the participants had experienced teams that collaborated in some meaningful ways, most commonly on logistical matters. Most teams however failed to collaborate significantly in other matters and teams that were good at collaborating throughout their mission were rare. Thus it can be concluded that at the clinical level few MMTs comprehensively collaborated with HHP in Gorkha during their missions even though there was significant benefit to integrating HHP into the service delivery structure.

Types of collaborative efforts

There were many opportunities for collaboration throughout the mission cycle from developing mission objectives through to mission evaluation.

Setting mission objectives

Few teams appeared to collaborate with HHP on setting objectives. In the disaster response phase, most teams arrived and offered services with an assumed objective of life-saving rescue. This was confirmed by most teams' activities, but some MMT activities did not match this assumed objective. A small number of teams, arriving after the initial disaster response phase had concluded, engaged with HHP in objective setting. Sometimes this only occurred after the HHP leadership informed the MMT that the services they planned to run were inappropriate, initiating the negotiation of new objectives.

Clear verbalisation and collaboration on objectives prior to committing to activities is an important first step in building confidence in the relationship. This need not be time consuming if objectives are in fact mutually shared. If objectives are not mutually shared than any time invested into collaboratively developing the mission objectives may significantly reduce future problems developing over the course of the mission.

Another problem for both HHP and MMTs was unstated or hidden objectives. Sometimes these developed over time after the initial rescue phase was finishing and the objectives that had been agreed on no longer fitted the circumstances, or because the initial objectives may not have been optimal in the first place. Regular revision of the mission, including the objectives, may prevent this source of frustration and team disunity.

HHP suspected at times that there were hidden objectives unknown to them that guided the behaviour of the MMT. It is inevitable that HHP and MMT will approach a mission with multiple objectives ranging from service provision to the public through to personal development, political, diplomatic, religious, or donor-centric objectives. It is essential that HHP and MMT participants engage in critical reflection on the objectives that they hold, prioritise those objectives, and identify which will be the key guides to decision making. These objectives should be raised for discussion and agreed upon between HHP and the MMT. Failure to honestly disclose objectives could lead to doubt of the partners' motives, significantly undermining a foundation of collaboration – trust. [55]

Collaboration in planning

Planning, especially around logistics such as pharmaceutical management, was the area where HHP were most likely to collaborate with MMTs. Smaller teams, and those not in disaster response, were more likely to collaborate on medication lists

and stock levels. Larger teams active immediately post-disaster were more likely to bring their own stock in order to be independently functional and logistical collaboration mostly occurred around choosing a location. While HHP and MMTs often worked together to solve logistical challenges such as transport, supplies, utilities, and accommodation, at times the HHP seemed to be co-opted to facilitate the MMT with little evidence of collaboration. While this was a recognition of the expertise, knowledge, and authority of the HHP in these areas it could be viewed as somewhat neo-colonial if objectives were not mutually shared or if responsibility and authority in other areas of the mission were not held by HHP.

Many aspects of planning occurred at higher levels of the health bureaucracy, where District or National Health Offices had given permission for the MMT to be active. Some HHP felt that these decisions could not be challenged but expressed the opinion that consultation with staff on location should always occur regarding time, location, the type of service, and the level of involvement of HHP expected. Frequently, for government-run camps, HHP felt that they were given inadequate time to prepare the community for the MMT.

It is likely that MMT collaborated with HHP on logistical issues more than other issues as this is where MMT recognise most acutely their lack of contextual knowledge and understood and respected property rights. To elaborate; MMT collaborate on the locations to set up their facilities both because they need local knowledge about water and electricity supplies, and access for supplies and patients, but also because they understand the need for consent to use property. These recognitions of the hosts' spheres of responsibility come easier to HIC MMT participants than other areas where collaboration could occur. As one participant had stated, “It is a kind of compulsion to collaborate as they don’t know the people or the language. They can do nothing without us!”

Policies and Procedures

The existence of pre-existing plans and procedures provides both benefits and challenges for collaboration. One participant referred to hospital disaster plans as helpful in humanitarian scenarios as they provide 'non-negotiable' procedures to be followed by both HHP and MMTs and possibly enhance the mutuality of the relationship. However multiple participants also referred to MMT inflexibility and a presumed adherence to policy as a significant barrier to collaboration. MMTs that were unable to respond to requests or accept advice due to their organisational procedures were perceived as difficult to work with.

Differences in clinical standards, if not quickly addressed, also contributed to a breakdown in relationship and termination of the mission.

Over the last decade a lot of effort has gone into producing minimum standards for EMTs. This study raises the issue that while EMTs need to meet the minimum standards of professionalism and equipment outlined by the WHO's EMT Initiative, and be able to operate independently, within this framework flexibility is required for true collaboration. For example, one team that responded to the 2015 earthquake, in a different location to this study, had a protocol that required three physicians to provide consent for life-saving procedures when patients were unable to consent themselves. In Nepal two physicians can provide consent. [3] In response to this challenge the MMT concluded that the 'more rigorous rule' should be applied. However, in the interest of showing respect for HHP and their knowledge of the context in which they live and work, it could be contended that the default position should be to adopt the rules of the host community; this is also what the community and the HHP are familiar with and used to working with. If these host rules and standards are not acceptable to the MMT then negotiation and collaboration to an acceptable position for both HHP and MMT should be

attempted. This is not to suggest a return to ad-hoc processes that characterised the pre-EMT initiative, but if there is to be true collaboration then host preferences should be respected and not simply overridden by EMT protocols.

Collaboration in clinical activities

HHP appreciated plans that involved them at the clinical level as clinicians, not just providing logistics and translation services.

Where collaboration with clinical activities occurred the participants expressed a lot of satisfaction with the MMT, but where HHP felt excluded or unsupported there was disappointment. For one team the difficulty of getting professional registration for foreign personnel forced them to rely on Nepali clinicians while the MMT personnel took on education and financial supporting roles. This was viewed as a positive mission with good outcomes by the HHP. HHP also found satisfaction in being involved in logistical planning, recognising the value of their knowledge in these areas. However at times they undervalued their own knowledge in clinical and ethical areas and were therefor reluctant to initiate clinical input.

In another interview the participants stated that a military medical team did not engage the HHP in objective setting, planning or logistics, but despite this the HHP had a positive view of their service. This is partly explained by the inclusion of the HHP in the military field hospital clinical activities. They worked alongside the military personnel in the field hospital providing medical care while their own facility had functionally collapsed. The military team was also only there for a short period during the most acute phase of the post-earthquake medical response – a period of crisis where the assumed objectives of live-saving medical care were most likely to be aligned.

Evaluation and reviews

In the area of mission evaluation the participants discussed two areas. Firstly there was appreciation of regular reviewing activities where HHP and MMT members could be briefed together on progress and also raise problems. While this was probably very challenging across language barriers the teams that conducted this type of exercise were viewed very positively. Secondly, only one group of participants discussed the presence of any formal or informal evaluations of either the clinical outcomes or a final review of the mission. Reports generated by the teams for dissemination to the Ministry of Health and other supervising agencies were not discussed when evaluation was raised. These reports were required by central government. [50] While these statistical reports may be important for governmental oversight and reporting on activities they did not feature in the participant interviews.

Multiple participants however expressed a desire to receive feedback from MMTs at the conclusion on the mission. They saw this as a valuable opportunity for them to learn and to feed back to the MMT improvements for future missions. There was no time allocated by any international teams for this process. One Nepali NGO was reported to have sent staff back following a camp to evaluate the outcomes. Clearly the area of evaluation of MMTs needs improvement and there are opportunities for HHP and MMTs to collaborate on the type of data available for evaluation, who can have access, and how it might be used to maximise learning opportunities and improve service provision.

Barriers and enablers of collaboration

The third area of interest was barriers and enablers of collaboration.

While this study did not collect data on the teams and their characteristics, the HHP narratives displayed that even professional disaster response teams and

leadership failed on many occasions to collaborate significantly with HHP in their response to the Gorkha earthquake. This is despite EMT in a different part of the country reporting in an evaluation post-2015 earthquake that it was easier to deliver services when taking support from local personnel. [50]

Only one team was discussed that exhibited excellent collaboration throughout the mission, and this team was spoken of with great respect and affection by the participants. This team was not without its challenges but when looking at their conduct in view of the definition of collaboration by the American Nurses Association in Nursing they successfully entered into a "a true partnership, valuing expertise, power, and respect on all sides, and recognising and accepting separate and combined spheres of activity and responsibility. Collaboration includes mutual safe guarding of the legitimate interests of each party and a commonality of goals that is recognised by all parties." [43 (p7)] When difficulties arose due to divergences of goals and a breakdown in communication about spheres of practice and responsibility, they were able to resolve those issues and continue in partnership. Other teams were also spoken of in high regard for their professionalism and medical contributions and ability to coordinate care with HHP in a difficult period, but none collaborated to the same extent or were viewed with such respect.

Interpersonal skills in collaboration

The major finding from the data is that interpersonal connection was vital for good collaborative relationships. HHP felt that there was generally a professional rapport between medical staff that helped build understanding and cooperation, but the relationships that were genuinely collaborative involved HHP and MMT leaders who were friendly, approachable, assertive and respectful. The

interpersonal skills of HHP and MMT leadership were foundational for the three major themes of collaboration that emerged; Presence, Dignifying, and Engaging.

These major themes are focussed on relational aspects rather than institutional or organisational processes of collaboration, unlike the findings of Mickan et al. [37] that found clear guidelines and policies facilitated collaboration, although not in the MMT setting. The specific interpersonal activities described by the participants draw from the personal attributes of MMT members, indicating the core concern of HHP regarding collaboration is the ability to form personal bonds with MMT members. There are multiple potential reasons for this, including Nepali cultural characteristics that can emphasise relationships over structures and is tolerant of the uncertainty which can arise in the absence of set procedures and policies. [110] This is in addition to the difficulties of developing the norms, protocols, and processes to formalize collaboration between HHP and MMTs in a context of time and communication constraints, and thus collaboration relied more heavily on interpersonal capacities. The absence of mutually designed procedures places greater dependency on the capacity of the key leaders to quickly form a bond and connect on an interpersonal level to enable interprofessional collaborative practice. Lack of clarification regarding policies and procedures in interorganisational collaboration may increase confusion and potentially lead to power struggles. [55] This may have occurred with one team that was viewed as demanding and difficult to work with and was asked to leave by HHP.

Collaboration champions

Being physically located together in shared work and social times, having a curious and open mind, and engaging in reflective learning of the context enhanced collaboration. The best collaborating MMT had key leaders, not necessarily the highest ranking, form close bonds with at least one HHP leader through which

differences were resolved. This finding is consistent with the review of inter-professional primary care teams by Mulvale et al. 2016 [111] that found team champions or facilitators, especially in larger teams, can help focus collaborative efforts.

HHP found the high staff turnover of some MMTs made the creation of these collaborative relationships difficult, as the collaboration champion from the MMT moved away and was replaced. This is consistent with the review of collaborative practice in a global health setting by Mickan et al. [37] that staff turnover and new members were a barrier to collaboration.

Responsive communication

The first key to communication was being face to face. Communication via email or phone was considered inadequate for planning any mission if the MMT was new to the context. Physically being there to see the context and discuss issues with the HHP was important. However, communication required more than the sharing of information. Being responsive to requests and advice and working to understand the context was important to HHP.

MMTs who sidelined the HHP, had opaque objectives, were unresponsive to recommendations and requests, and worked in isolation struggled to develop collaborative relationships and often left the HHP feeling dissatisfied with their service. This is consistent with Karam et al. [55 (p75)] who found that communication that is "minimal, unidirectional, and unsustainable are linked to lower levels of collaboration."

While MMTs may not have the expertise or resources to respond to every request and need of the HHP, having empathy and understanding, and making a genuine attempt to engage the issue rather than avoiding it via reference to policies was important. Many post-disaster medical teams are focussed on surgical care,

however host community concerns about chronic health issues do not necessarily reduce because of disaster. [112]

Following the Gorkha 2015 earthquake the I-EMT response was quicker than in previous disasters with 11 teams active within the first 72 hrs of the disaster. [50] This was unusually rapid. [112, 113] Yet despite this quick response teams still found that demand for chronic and non-trauma related medical needs was greater than earthquake related trauma. [114] Two teams reported only 19% and 26% of their patients had earthquake related medical needs despite their teams being focussed on trauma care. [51] This is partly due to a remarkable set of circumstances that resulted in a comparatively low death and injury toll despite the widespread and significant damage in the Nepal earthquake, yet this finding that chronic disease remains prominent after disaster is consistent with previous disasters as well. [3, 97] This is not to diminish the role of surgical teams responding to earthquake disasters [115, 116] but to highlight that community needs and expectations can differ significantly from that of the MMT, and this needs to be addressed through collaborative communication.

Disaster response MMT run the risk of exposure to the hazards of vertical programming through inadequate collaboration, such as over-staying if a narrow objective (eg trauma surgery) is no longer in high demand and yet the team does not respond to the needs of the community, which may be chronic or communicable disease.

The objectives of vertical programmes with limited engagement with the perceived needs and requests of the local community and health workers can have significant and disastrous results. During MSF response to the Ebola outbreaks in the Democratic Republic of the Congo there have been attacks on Ebola treatment centres. This is occurring in a region with a history of violence, but the attacks on

treatment centres may partially be due to inadequate engagement with the local community. Restoring trust towards the Ebola response will require workers and responders to "listen to the needs of communities, restore people's choice when it comes to managing their health, and involve the community in every aspect of the Ebola response". [117, 118]

A lack of empathy may also be displayed in MMTs during off duty times. HHP viewed MMT personnel very poorly if they were seen to be engaging in boisterous 'fun' such as 'cheers' over an after-duty beer, which indicated to HHP a lack of empathy for the suffering of their community. Coping mechanisms for MMTs in stressful environments may need to be modified to preserve a respectful relationship for collaborative relationships to occur.

It is worth noting that in the context of the response to the 2015 Gorkha earthquake, while infrastructure damage was severe, impacts on personnel were more limited and leadership structures remained in place. This is very different to disasters where host personnel were more negatively affected and unable to function, or where there is a complex humanitarian scenario with risks of violence due to deeply entrenched community divisions. In such contexts collaboration may be nearly impossible or involve greater risk of political involvement in the conflict. Participants related how one of the MMTs, highly experienced in complex humanitarian disasters, had been difficult to collaborate with due to rigid procedures and protocols.

Mutual Respect

Mutual respect as a key component of collaboration was evident. Respect for HHP was shown when MMTs gave due recognition to the social and organisational roles of the HHP. This was evidenced by accepting HHP advice and by acknowledging that the MMT were there to assist the HHP in providing services to the

community, not that the HHP were there to support the MMT. It was displayed by requesting information on cultural practices to avoid offence, and by discussing clinical information, such as prescribing practices, referral options, or surgical decision making, with HHP. Teams that did not acknowledge and respect the place of the HHP in the community and were dismissive of their advice quickly shut down opportunities for collaboration.

HHP were sensitive to 'bias', i.e. racial, cultural, or gender-based discrimination. This could develop subtly when care was not taken to include HHP in activities, such as not co-locating with the team in travel, work, or in off-duty times to build relationships. More overt displays of bias also occurred by using exclusive language in the presence of HHP, making demands without regard to HHP needs, and disregarding or ignoring direct advice or instruction.

HHP were appreciative of MMTs that made suggestions and organised time to discuss issues (if they were also receptive to HHP ideas) as it showed respect for their authority and responsibilities. Equally it was evident that senior and medical HHP were more confident to initiate difficult discussions with MMT than junior staff, who were often the leadership of remote regions. Initiating discussions can be awkward across cultural, language, organisational, educational, professional, and national divides but MMT and HHP leaders who sensitively but robustly raised issues on objectives, planning, execution, and evaluation greatly increased the collaborative potential of the mission. Good collaboration requires either a level of assertiveness that some HHP staff struggled to exhibit in their relationships with MMTs, or additional effort on the part of the MMT leadership to ensure HHP perspectives are included.

In general, highly collaborating teams were respectful of HHP leadership and placed themselves within the sphere of influence and responsibility of the local

health service rather than being purely responsible to higher authorities such as regional, national, or international agencies. While some teams struggled with communication due to language barriers, if key leaders were able to communicate well either in English or Nepali this was sufficient to set the expectations and address challenges that arose. Key MMT leaders who frequently requested guidance on logistical, clinical, and cultural matters, initiated reviews and debriefing, and who were willing to adjust programming according to advice received were appreciated and invited to engage in greater ways.

Power gaps

As discussed above Nepali HHP were sensitive to bias, or discrimination from MMTs through exclusion or lack of respect for their position in society and the health care structure. Such discriminatory attitudes are one expression of power gaps where for whatever reason the MMT did not give the HHP the respect due their position. These discriminatory expressions are potentially caused or amplified by additional power gaps based on ethnicity, gender, education, professional ranks, and age.

Centrally located and senior HHP were more likely to engage in discussions around objectives and be more comfortable in collaborating, or in rejecting teams that were not compatible with HHP procedures and objectives. Remote and junior clinicians were more likely to be accommodating with lower levels of assertiveness. There are a number of factors that possibly affect this discrepancy, such as central services being closer to the district administrative office to get administrative support in decision making, or that central services have higher qualified medical officers in positions of leadership, or possibly that remote health services have more concerns about ‘scarcity’ and are, as a result, willing to accept less than optimal services as ‘anything is better than nothing’. Remote areas were more

likely to be female-led and managed by less senior medical personnel or paramedical staff. Sensitivity to these issues under CST was a foundational paradigm for this study. Which of these factors, if any, were responsible for this effect was not evident from the data. Questions intended to extract more information about power gaps and discriminatory practice tended to be answered with structural issues about time and communication challenges, reflecting where the major concerns of the participants were. While issues about power gaps were most commonly raised by participants in the context of setting objectives and planning, the impact is likely to be in all aspects of the mission.

Where there are significant differences in power additional attention needs to be given to encourage input from HHP leaders to ensure their contextual knowledge is applied. This was evident where HHP specifically raised their reluctance to assert knowledge when engaging with senior MMT leadership. HHP Medical officers felt incapable of collaboration with visiting surgeons and consultants. Collaboration requires egalitarian team relationships with recognition of each other's spheres of knowledge, activity, and responsibility, even though the team structure may be hierarchical. Some HHP participants indicated that they undervalued their own spheres of knowledge and responsibility while protecting MMT interests. Potentially they were overestimating the ability of MMT surgeons and specialists to make decisions in this medical, environmental, and cultural context. This power gap between the HHP medical staff and MMT specialists undermined the confidence of HHP staff to assert their knowledge. While HHP may not be always able to engage in the technical matters regarding surgery or other specialist knowledge, they have a lot to offer patient care regarding ethical matters such as consent and cultural sensitivities, as well as post-operative recovery, referral, and rehabilitation of the patient.

Cultural sensitivity and communication

Regarding cultural differences between MMT and HHP, communication difficulties were a concern, especially for foreign teams who also spoke English as a second language. Having MMT members who spoke Nepali was advantageous but not essential if English was proficient, as most HHP leadership had good English-speaking skills. Pre-existing cultural understanding for the Nepali context was not raised as very important, but cultural sensitivity was. That is, HHP did not expect MMT to arrive with good cultural understanding, but they did expect that they would accept and incorporate cultural advice that was given. Failure to enquire about cultural appropriate attire or activities, and failure to implement advice given was viewed poorly, seen as highly disrespectful, and contributed to teams being asked to leave.

Host Health Personnel views on coordination

Participants often described coordination when sharing their experiences during the interview. Overall the interviewees were positive about their experiences with the MMTs that they discussed and felt that the assistance given in providing specialist and general services at times of demand were greatly appreciated, especially when the teams functioned under the authority and direction of the local health services. In the rescue phase post-disaster autonomous units able to function independently yet integrate well with existing staff and systems were valued. In one case where the local health service was completely overwhelmed by disaster the HHP saw their role as assisting the large, experienced, and organised MMT.

Outside of disaster response the Nepali staff indicated a significant desire to work well and closely with the MMT for the benefit of their community and expressed flexibility in order to accommodate the visiting team's needs. There was a general

desire for more time and better communication prior to any event to help coordinate the appropriate health workers, such as female volunteer health workers, and to mobilise the targeted community and thus avoid the massive disruption and overcrowding that frequently occurs. Greater collaboration with more input from HHP in the planning and running of the mission was desired.

Thus, for Nepali HHP during a time of crisis, teams that were experienced, well managed, and coordinated well with local health services were appreciated, even if collaboration was limited. Coordination was the key marker for being able to provide effective services. However, if the crisis was easing, which happened rapidly following the 2015 earthquake, teams that failed to collaborate in the changing context quickly began to have a breakdown in relationships resulting in poor communication, mistrust, competition, and the coordination of services was no longer possible.

The impact of collaboration.

This study found three potential impacts from collaboration or the lack thereof. The first impact was that collaborative practice was protective against medical errors either through increased awareness of contextual issues or through enhanced relationships that facilitated the sharing of essential information. Discharge plans that do not take into account the realities of life in remote mountainous regions, such as the distances patients must walk to get home, or demands placed on patients to be productive on arrival, may subject the patient to additional risk after discharge. For inpatients, early signs of deterioration may not be communicated to those best placed to respond if a collaborative relationship based on trust has not been established.

The second impact of collaboration was that highly collaborative relationships facilitated the sharing of knowledge. The potential for learning by HHP to improve their service delivery was enhanced by collaboration.

The third potential longer-term impact that was alluded to but not directly addressed was that collaboration with MMTs potentially increased the status of HHP among the community. If MMTs worked closely with and demonstrated respect for HHP and their practice then the community confidence in their local health service would improve. This could result in more efficient and safer health-seeking behaviours by the community if they are more confident to approach HHP earlier for health services rather than waiting until the community members condition has deteriorated. Citrin [25 (p9)] recounts the sad story of a family in another region of Nepal delaying care for their child with diarrhoea, treatable with oral rehydration solution from the local health clinic they bypassed, because they wanted the child seen by foreign medical personnel. MMT services that are held separately from HHP services due to poor coordination and collaboration reinforce messages undermining what local services can safely provide, while building unreal expectations of what MMTs can provide.

Development of a model

There are no known models that describe clinical collaboration in the field of MMT - expeditionary care, STMM, or Emergency Medical Teams available for comparing and contrasting the findings of this study. Models of clinical collaboration designed for rehabilitation or for primary health care teams in the west describe stable, largely monocultural, interprofessional and inter-organisational teams.

A model created for permanent, stable, rehabilitation teams by Croker et al. [54] characterised three 'Reviewing Dimensions' of collaboration that describe personal qualities effecting collaboration. These three 'Reviewing Dimensions' Reflexivity, Reciprocity, and Responsiveness correspond to the three major themes that this study identified, Presence, Dignifying, and Engaging. The major themes and their similarities to corresponding 'Reviewing Dimensions' in the Croker [40] model can be seen table 6 below.

Major Themes	PRESENCE	DIGNIFYING	ENGAGING
Description of the themes	Immersion in the context of health needs. Openness to learning and change	Respect, reciprocal arrangements, and sensitivity to social status and organisational position.	The process of collaboration requiring initiation of discussions, objective development, and engagement in offering, denying, and rejecting of services
Reviewing Dimensions Crocker et al. 2012)	REFLEXIVITY	RECIPROCITY	RESPONSIVENESS
Features of the dimensions	Involving critical reflection and development of self in relation to others	Enabling mutuality of rehabilitation roles	Facilitating situationally appropriate and contextually relevant adjustments

Table 6 Comparison of Major Themes and Croker et al. 2012 Reviewing Dimensions of Collaboration.

The theme ‘Presence’ corresponded with Croker's 'Reviewing Dimension' of 'Reflexivity' where critical reflection and development occurring in a new and different context can lead to better understanding of the health needs. 'Reciprocity' was an essential component in ‘Dignifying’ and can only develop where respect is evident. Sensitivity to status is embedded heavily in many cultures, including host, team, and medical cultures. Awareness of its potential importance may prompt questions about impacts on HHP status by engaging, or not engaging, in certain activities. Finally, in ‘Responsiveness’ the key word is ‘facilitating’ which

corresponds to the theme ‘Engaging’, where the importance of verbalising questions, seeking clarification, requesting assistance, or stating policy were important for collaboration. HHP appreciated MMT who initiated discussions and frequently asked questions. Among the participants it was evident that they varied in their confidence to speak up and offer unsolicited advice or challenge aspects of MMT attitudes and activities, but assertiveness is a key component of a healthy collaborative relationship.

In the Croker et al. [40] study these three 'Reviewing Dimensions' were seen as personal attributes necessary in varying degrees for aspects of collaboration, whereas in this study these personal attributes emerged as the major features that enable collaboration. The consistency of the themes arising from this study with the 'Reviewing Elements' of the Croker et al. [40] model for collaboration, despite the radical differences in context, increase confidence in this study's findings and provide an avenue for future studies. They also show some alignment in principles of collaboration between the very different contexts of HHP/MMT and permanent multidisciplinary rehabilitation teams.

This study highlights the intersection between collaborative models designed in the West for rehabilitation and primary care teams and HHP experiences regarding interpersonal characteristics required for collaboration, despite the significant contextual differences. This dominance of interpersonal characteristics however contrasts with the study by Mickan et al. [37] which found clear policy and procedural guidance from institutions prominent in promoting collaborative processes. This is likely to be due to the short term nature of MMTs that doesn't allow the teams to collaboratively develop procedures but instead relies on leaderships ability to manage issues as they arise.

Limitations

This study was explorative and qualitative with a small cohort of participants. As a consequence, the findings are broad, non-specific, and limited to the Gorkha region of Nepal. The applicability of these findings to other contexts cannot be established.

It is also limited to the perspectives of HHP and does not take into consideration the perspectives of patients or the MMT service providers. MMTs operate under humanitarian principles of humanity, neutrality, impartiality, and independence, which may conflict with HHP principles. Collaboration is a complex interpersonal phenomenon and while the aim of this research was to elevate the perspective of the hosts, without the MMT view of the events our understanding of the phenomena is weakened. It is also limited in that broader topics that impact on collaborative relationships such as differences in philosophy of healthcare, such as ethics of care versus ethics of justice, or perceptions of quality of care were not within the scope of this study.

While care has been taken to preserve the meaning of the original interviews that were given in Nepali, translation risks subtle changes occurring during the process. The process of organising the data and coding in order to facilitate analysis and generate themes is also subject to the researcher's own bias, understandings, and experiences. While these can be acknowledged and minimised, it is impossible to completely eliminate researcher bias.

Additionally, due to the interviewer's weakness in Nepali language and interviewing techniques there was occasionally limited follow up on information given by the participants. Thus, additional potentially significant information was not gathered. In reviewing the interview transcripts it was evident that more in-

depth discussions on the participants' feelings of bias and the causes of that, or on the decision making around ethical issues such as consent of minors for surgery could have been taken, but the opportunity was missed.

Recommendations

One of the findings of this study was a mis-match between community, HHP, and MMT expectations of service provision. In the discipline of disaster response there is movement towards standardised teams that meet WHO I-EMT criteria in order to avoid repeating the chaotic responses to the 2010 Haiti and 2004 Aceh disasters. If these standards become known among senior HHP in recipient nations, such as Nepal, they will assist in managing expectations of these MMTs. These standards however, rigidly applied, can inhibit the development of collaborative relationships if host preferences cannot be accommodated. Guidance on how leadership, resources, and responsibilities can be shared between HHP and MMTs to form a true collaborative partnership in disaster response is needed. The humanitarian principles of neutrality and independence must not become a barrier to collaboration through excessive application.

In the non-disaster context there is more time available for collaborative mission development. However, unless the MMT has pre-existing relationships and contextual knowledge then planning a mission with HHP remotely via phone or email is unlikely to be adequate. Face to face collaboration in mission development is preferred by HHP. This takes significant investments of additional time and money, and needs to taken into account when MMT planners are first conceptualising their mission.

In the event of a disaster it is less likely that there are established relationships between MMT leaders and HHP leaders. In this circumstance, team facilitators

and collaboration champions could potentially be sourced through NGOs or INGOs who have good working relationships in place with HHP, understand local health legislation, language and culture, but also good understandings of, and connections to, HIC medical ethics and processes. Additionally, given the challenges in creating the kind of relationships necessary for good collaboration pre-existing networks and relationships are valuable. These could be promoted through sponsorships for HHP leaders to attend national, regional, and international conferences where MMT leaders are also in attendance.

The development and validation of a model of collaboration to enhance MMT efforts to effectively work with HHP at the clinical level for short-term, inter-organisational and inter-cultural engagements would be timely. Such a model would provide a theoretical framework that supports collaboration training alongside cultural awareness training for both MMT participants but also for hosts.

Another finding of this study was the bias of community members against HHP, with preferential and sometimes unhelpful health-seeking behaviours when MMT are present. Further studies into the origins of these attitudes and how to address them, including the potential benefit of improved collaboration between MMT and HHP is warranted.

This study focussed on the HHP experiences and perspectives of collaboration with a number of different MMTs. A similar study that analysed collaboration focussing on a particular team and included both the MMT and HHP perspectives on the same event would be beneficial to understanding the phenomenon.

One MMT that was experienced in working in complex humanitarian disasters had limited collaboration. This raises the question of whether experiences and procedures gained from complex humanitarian contexts potentially undermine the

confidence of MMTs to collaborate with Nepali HHP. Did previous experience of political pressures lead to strict policy and procedure development which inhibited collaborative potential?

The next chapter concludes this paper with a summary of the findings of this study and implications for MMTs, including STMM, MST, and EMT practice.

Chapter 7 – CONCLUSIONS

This exploratory study exposes the gap between calls for collaboration from multiple authorities and the reality of practice by the majority of MMTs that have been active in Gorkha, Nepal. While HHP were generally appreciative of the medical assistance and services to the community provided by MMTs, good collaboration was associated with higher perceptions of mission success. In the acute post-disaster phase when the HHP were in crisis they were often satisfied with cooperation when the MMT was competent, self-contained, and respectful. This phase was very short and if MMTs failed to quickly engage in collaboration they not only impacted the success and satisfaction of the mission, but potentially had longer term impacts on the status of HHP in the community. This has a negative impact on the health-seeking behaviour of the community.

The personal qualities of the MMT and HHP leadership, such as being friendly, respectful, and approachable, and their ability to successfully act as team facilitators and champions of collaboration, underpins the relationship required for good collaboration. The data analysis of this study led to three major themes of collaboration around relational aspects rather than institutional or organisational processes. The first theme was ‘Presence: Immersion in the context of health needs and openness to learning and change’ which relates to understanding the local community's priorities in health and how the health service meets those needs through keen observation and the questioning of staff and community members on location.

The next major theme was ‘Dignifying: Respect, reciprocal arrangements, and sensitivity to social status and organisational position.’ This related to how HHP and MMTs engaged with different forms of knowledge, showed respect in relationships, and managed different leadership roles and styles.

The third major theme was ‘Engaging: The process of collaboration requiring initiation of discussions, objective development, and engagement in offering, denying, and rejecting of services’ which is associated with the assertive processes of collaboration, putting forward ideas, plans, and objectives for discussion.

These interpersonal activities indicate the core concern of HHP regarding collaboration is the ability to form personal bonds with MMT members.

This study found that among the factors that affect collaboration, formal conditions, social conditions, and team structure conditions [111], for Nepali HHP the social conditions including personal characteristics are pre-eminent.

Team objectives need to be clear and agreed on, with regular revision to confirm that they are still relevant in the rapidly evolving post-disaster scenario. HHP were not always assertive in initiating discussion on these matters so it is important for MMT to initiate discussion by asking questions and seeking assistance. It was also important for HHP that advice they gave was taken seriously and respected. HHP in remote areas were less likely to be involved in collaborative relationships. MMT may need to allocate additional time and resources into establishing collaborative relationships to overcome additional barriers of distance, language, and educational gaps.

HHP valued working alongside MMT members and saw this as an opportunity to learn new skills, support the MMT with language and culture challenges, and add to the service provision of the mission. HHP were sensitive to being treated differently through compartmentalised workspaces or exclusion from break areas and social activities.

Multiple studies have raised the issues of training MMT members for deployment, working towards standardised care and ensuring minimum standards are met.

This study focussed on the HHP perspective which re-enforces the need for MMTs to engage more collaboratively. Equally, the results of this study call for increased training for HHP as hosts. Clarity on what to expect from MMT, what the minimum standards are, and how to manage the complex leadership and ethical issues that arise would be beneficial for host leaders in the Nepali medical workforce – doctors, nurses and paramedical workers.

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APPENDICES

Appendix 1 - Interview guide

Intro

Describe the work of a MMT and what your involvement/role with the MMT was?

Objectives

1. Please tell me about the development of the objectives of the MMT you were involved with (and if needed) how collaboration was used in their development.
   (prompts)

- How did you come to know the objectives?
- In what ways did the objectives of the MMT fit with the objectives of the local health service?
- In what ways did local staff and MMT collaborate in deciding what the mission objectives were?

Planning

2. Tell me about the planning for MMT.
   (If needed) How did MMT personnel and local staff collaborate in the planning for the mission?

   (prompts)

- What aspects of planning were you involved in and how? (eg planning themes: Objectives, Logistics, Costs to patient or hosts, Continuity of care/difficult diagnoses, Administration, evaluations, other?)
- What difficulties in collaborating with MMT if any did you face in producing your plan?
- Tell me about the way your ideas were responded to. Why or why not were your ideas respected and incorporated into planning
- How could planning have been improved?

Execution

3. Tell me about your experience of collaboration in working alongside a MMT in providing clinical care.
   (prompts)

- Please give any examples of what you or your staff were able to learn, or what you were or your staff able to teach to the person you worked with?
- What was the effect of collaboration on how services were provided?
- Describe the communication and decision-making you or your staff had with the MMT around patient care (eg ward rounds, discharge planning)?

Relationship

4. Tell me about your experience of being included as a part of the team for the mission/camp?
   (prompts)

- What activities contributed to you feeling a part of the team?
- How would you describe your relationship with your main MMT contact?
- What did the MMT member do that made you feel that way?

Summary

5. If you were to be involved in a future camp/mission what suggestions would you like to make to improve the collaboration between host health personnel and the visiting team members?

Appendix 2 - Information sheets, and consent forms - English

POSTER

Collaboration in mobile medical teams – participants needed!

Nepali medical, nursing, and paramedical staff leaders who would like to share their experiences regarding visiting medical teams and camps are invited to participate in a research project exploring the extent of collaboration between Nepali health personnel and visiting medical personnel.

An information session on the research will be held in the (location) at (time) on (date).

This research will involve being interviewed regarding your experience of visiting health personnel and how you were involved in the planning, implementation, and evaluation of the mobile medical team or camp. If you are interested in sharing your experiences and want to know more about this research please attend the information session or contact the researcher.

This study has been approved by the Human Research Ethics Committee of the University of Adelaide and by the Nepal Health Research Council.

For more information about this study, or to volunteer for this study please contact Leighton Filmer via email (Leighton.filmer@adelaide.edu.au) or phone (9818656161).

PARTICIPANT INFORMATION SHEET

PROJECT TITLE: Exploring the extent and impact of collaboration between host health personnel with short term mobile medical teams in Nepal.

HUMAN RESEARCH ETHICS COMMITTEE APPROVAL NUMBER: H-2018-043

PRINCIPAL INVESTIGATOR: Dr Lynette Cusack

STUDENT RESEARCHER: Leighton Filmer

STUDENT'S DEGREE: Master of Clinical Science

Dear Participant,

You are invited to participate in the research project described below.

What is the project about?

This research aims to identify what collaborative activities occur between host health personnel and visiting mobile medical teams and give host health personnel a voice in what they would like to see practiced when mobile medical teams come to conduct clinical care in their working area.

Who is undertaking the project?

This project is being conducted by Leighton Filmer. This research will form the basis for the Master of Clinical Research at the University of Adelaide under the supervision of Assoc Prof Lynette Cusack, Prof Kristine Gebbie, and Dr Prakash Bhattarai from Kathmandu University. International Nepal Fellowship (INF) is hosting this research. This research is funded by the Government of Australia through the Higher Degree by Research program.

Why am I being invited to participate?

In this study the experiences and views of Medical, Paramedical and Nursing leaders in the government health system who have encountered mobile medical teams (MMT) are being sought. If you are in a position of leadership and have hosted a mobile medical

team such as a medical or surgical camp, specialist surgical team, or child health programme, or observed one active in your area we would like to hear your views.

What will I be asked to do?

If you wish to participate in this study please contact the researcher using the contact details below to arrange a meeting with the researcher and a translator at a time that suits you in order to be interviewed. Ideally we will meet you at your workplace. If you have concerns about meeting with us on your own, you may bring along a friend.

At the interview we will explain the study to you and obtain written consent for the interview to be recorded. We will ask you for some demographic details such as your educational background, work roles and contact details. These will be kept strictly confidential and will assist us in our data analysis and in contacting you again if we need to. We will then conduct the interview, with a digital audio recording being obtained. The interview will be regarding your experience of mobile medical teams in the last three years.

How much time will the project take?

We anticipate that the interviews will take around 60 minutes and no more than 90 minutes of your time. Due to the length of time that you are giving for these interviews we will be very happy to provide you with food and non-alcoholic refreshments.

Are there any risks associated with participating in this project?

If you experienced significant physical, emotional or psychological trauma around the time of your experience with the mobile medical team, then remembering and recounting this experience might be distressing. If you wish to take time to compose or withdraw from the study at any time you can do so. Access to a professional counselling service will be offered if you would like to talk to counsellor about your experiences.

Your information will be de-identified and personal information kept strictly confidential so as to not affect your employment or relationship with any MMT. The researcher is themselves not involved with any MMT. Due to the small sample size, complete anonymity may not be guaranteed although all reasonable efforts will be made to protect

your identity. This may include withholding some information you provide if it cannot be sufficiently de-identified.

What are the benefits of the research project?

According to the World Health Organisation (WHO), Nepal is a nation that ranks poorly on many health indicators and this, along with tourism drawcards, attracts multiple MMT every year. Nepal is thus well positioned to benefit from improvements to the MMT sector. Medical professionals such as yourself can have a voice to impact future medical missions and this research may result in improvements to the way that hosts and visiting medical staff interact and collaborate.

Can I withdraw from the project?

Participation in this project is completely voluntary. If you agree to participate, you can later withdraw your data from the study by contacting the researcher in person, via phone or by email using the contact details below. Your data can be withdrawn prior to publication of results.

What will happen to my information?

Any identifying information such as names, work positions, locations, or organisation names will be removed before any information is made public. You will then have the opportunity to comment on the interview and add further thoughts regarding your experience with mobile medical teams. The interviews that have been recorded, along with the demographic information collected will be stored in a secure location in the University of Adelaide for 5 years before being deleted. Access to this data will be limited to researchers involved in this project.

Who do I contact if I have questions about the project?

If you have questions about the project or wish to participate you can contact the researcher via email <Leighton.filmer@adelaide.edu.au>, or by calling Leighton on 9818656161 or via the INF office in Pokhara on +977 [0]61 520 111

What if I have a complaint or any concerns?

The study has been approved by the Human Research Ethics Committee at the University of Adelaide (approval number H-2017-xxx). If you have questions about your participation in the project please contact the researcher via the details listed above or <prakash@kusoed.edu.np>. If you wish to raise a concern or have a complaint about the project, then you should consult the Principal Investigator via the email address lynette.cusack@adelaide.edu.au or the Human Research Ethics Committee via <hrec@adelaide.edu.au>. If you wish to speak with an independent person regarding a concern or complaint, the University's policy on research involving human participants, or your rights as a participant, please contact the Human Research Ethics Committee's Secretariat on:

Phone: +61 8 8313 6028

Email: hrec@adelaide.edu.au

Post: Level 4, Rundle Mall Plaza, 50 Rundle Mall, ADELAIDE SA 5000

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

If I want to participate, what do I do?

Please contact the principal researcher Leighton Filmer on +977 9824147927 to make a time for the interviewer and translator to meet you at your workplace or another suitable venue.

Yours sincerely,

Mr Leighton B Filmer, student

Assoc Prof Lynette Cusack, Adelaide School of Nursing, Lead supervisor

Prof Kristine Gebbie, Flinders University (ret), co-supervisor

Dr Prakash Bhattarai, Kathmandu University, external supervisor

CONSENT FORM

1. I have read the attached Information Sheet and agree to take part in the following research project:

Title:	Exploring the extent and impact of collaboration between host health personnel with short term mobile medical teams in
Ethics Approval Number:	**H-2018-043**

2. I have had the project, so far as it affects me, fully explained to my satisfaction by the research worker. My consent is given freely.

3. I have been given the opportunity to have a member of my family or a friend present while the project was explained to me.

4. Although I understand the purpose of the research project it has also been explained that involvement may not be of any benefit to me.

5. I have been informed that, while information gained during the study may be published, I will not be identified and my personal results will not be divulged.

6. I understand that I am free to withdraw from the project at any time prior to the publication of results by contacting the researcher in person, by phone (9818656161), or via email (leighton.filmer@adelaide.edu.au).

7. I agree to the interview being audio recorded. Yes ☐ No ☐

8. I am aware that I should keep a copy of this Consent Form, when completed, and the attached Information Sheet.

Participant to complete:

Name: _____Signature: _____ Date:_____

Researcher/Witness to complete:

I have described the nature of the research to

_____

(print name of participant)

and in my opinion she/he understood the explanation.

Signature: _____Position: _____ Date: _____

Appendix 3 - Information sheets, and consent forms – Nepali

PARTICIPANT INFORMATION SHEET

सहभागी सूचना तालिका

परियोजना शिर्षक : नेपालका कार्यरत स्वास्थ्य कार्यकर्ता सञ्चालक र आवधिक स्वास्थ्य उपचार घुम्तिटोलीहरु बीचको सहयोग/सहभागिताको प्रभाव र विस्तारको अन्वेषण

मानव अनुसन्धान आचरण समिति स्वीकृत दर्ता नं. : H-2017

मुख्य अन्वेषक : डा. लिनेट क्यूसक

प्रशिक्षार्थी अन्वेषक : लेइटन फिल्मर

विद्यार्थीको शैक्षिक उपाधि : चिकित्सा शास्त्रमा स्नातकोत्तर

सहभागी मित्रहरु !

तपाईहरुलाई देहायमा विस्तारपूर्वक वर्णन गरिएको अनुसन्धान परियोजनामा भाग लिन आह्वान गरिएको छ ।

परियोजनाको लक्ष्य वा उद्देश्य के हो ?

जब स्वास्थ्य उपचार घुम्ति टोलीहरुले आ-आफ्नो कार्य क्षेत्रमा स्वास्थ्य उपचार सेवा प्रदान गर्न आईपुग्छन्, स्वास्थ्य कार्यकर्ता सञ्चालक र स्वास्थ्य उपचार घुम्ति टोलीहरुका बीच कुन कुन क्रियाकलापहरू सहयोगी रूपमा आवश्यक ठानिन्छन्, अनि स्वास्थ्य कार्यकर्ता सञ्चालकले व्यवहारिक पक्षमा कुन कुन क्रियाकलापहरू उचित ठहर गर्दछ.सो सम्बन्धमा पनि राय, सल्लाह वा विचार प्राप्त हुन सकोस् भन्ने यस अनुसन्धान परियोजनाले उद्देश्य राखेको छ ।

परियोजना कसको मातहतमा सञ्चालित छ ?

यो परियोजना लेइटन फिल्मरद्वारा सञ्चालन गरिएको छ । प्रस्तुत अनुसन्धान अडेलाइड विश्वविद्यालय अन्तर्गत चिकित्साशास्त्रको स्नातकोत्तर उपाधिका निम्ति आधार बन्नेछ, यसको सुपरिवेक्षण काठमाण्डौं विश्वविद्यालयका डा. प्रकाश भट्टराई एवं सह-प्राध्यापक लिनेट क्यूसक र

"The Translation Copy is True and Verified"
Signature:
Name Kusma Prasad Khatiwada
Date: 28 JUN 2018
Certificate Number of the Notary Public: 751
Date of Expiry of Certificate: Nov. 30, 2022 AD
Seal of the Notary Public

R-NO/1652/018-075

NEPAL NOTARY PUBLIC COUNCIL

किस्टीन् गेबीद्वारा गरिनेछ । यस अनुसन्धान कार्यलाई अष्ट्रेलिया सरकारले उच्च शिक्षा परियोजना अन्तर्गतको कोषबाट आर्थिक सहयोग पुऱ्याएको छ ।

मलाई यहाँ किन भाग लिन आहवान गरिएको छ ?

यस अध्ययन अन्तर्गत जुन-जुन व्यक्तिहरु घुम्ति स्वास्थ्य टोलीसँग भेट भएका छन् र सरकारको स्वास्थ्य क्षेत्रमा चिकित्सक, चिकित्सा-सहायक र नर्सिङ् सेवाका विशिष्ट व्यक्तित्वहरुका अनुभवहरु र विचारहरुलाई एकमुष्ठ सङ्गालाका रूपमा लिई सदुपयोगमा ल्याउन खोजिएको छ । यदि तपाई पनि स्वास्थ्य क्षेत्रको नेतृत्वदायी हैसियतमा हुनुहुन्छ भने र यदि तपाई घुम्ति चिकित्सा टोलीमा चिकित्सकका रुपमा अथवा शल्य-चिकित्सकहरुको शिविरमा वा शल्यक्रिया-विशेषज्ञ टोली वा शिशु स्वास्थ्य कार्यक्रमअन्तर्गत सहभागी भई काम गरेको अनुभव छ, अथवा यस्तै कार्यक्रम आफ्नो क्षेत्रमा सक्रियतापूर्वक गरेको स्वयम्ले अवलोकन गर्नु भएको छ भने हामी तपाईको विचारधारालाई प्राथमिकताका साथ ध्यान दिएर सुन्नेछौं ।

मलाई के काम गर्न लगाइने छ ?

यदि तपाई यस अध्ययनमा भाग लिन इच्छा राख्नु हुन्छ भने कृपया संवन्धित अन्वेषक सँग सम्पर्क गर्नुहोस् । देहायमा दिइएको विवरणमा सम्पर्क स्थापित गर्नु भयो भने अन्वेषकसँग भेट हुने व्यवस्था मिलाउन सक्नुहुनेछ र आवश्यक परिआएमा उसै बखत तपाईको अन्तर्वार्ताको भाषा बुझ्ने एकजना अनुवादकर्ताको पनि व्यवस्था मिलाउन सकिने छ । सम्भव भएसम्म हामी तपाईकै कार्यस्थलमा भेटघाट गर्ने मनसाय राख्नु हुन्छ भने तपाई स्वयम्ले एकजना सहयोगी साथी पनि आफूसँगै ल्याउन सक्नुहुनेछ ।

अन्तवार्ताका क्रममा हामीले त्यस अध्ययनका विषयमा जानकारी गराउने छौ, र तपाईको अन्तर्वार्ताको लिखित अभिलेख राखिने छ जसका निम्ति तपाईले पूर्व स्वीकृति पनि दिनु हुनेछ । हामीले तपाईसँग केही जनसाँख्यिकी विवरणहरु लिने छौं जसअन्तर्गत तपाईले आफ्नो शैक्षिक पृष्ठभूमि, कार्यतालिका एवं सम्पर्क विवरणहरु पेश गर्नु पर्नेछ । यी सबै विषयवस्तुहरु अत्यन्त गोप्यताका साथ राखिने छन् र तपाईका यी तमाम् विवरणहरुले हाम्रो तथ्याङ्क विश्लेषणमा

विशेष सहयोग पुऱ्याउनेछन् भन्नेमा विश्वस्त रहने छौं । आवश्यक परिआउँदा तपाईको सहयोग लिन हामी जुनसुकै अवस्थामा पनि तत्पर रहने छौं ।

त्यसपछि हामीले अन्तर्वार्ता सञ्चालन गर्ने छौं, यस क्रममा हामीले अन्तर्वार्ता सञ्चालन लिदै जानेछौ, अन्तर्वार्ता लिदा अडियो-रिकर्डिङको माध्यमबाट लिइनेछ । अन्तर्वार्ताको मूलभूत बिषयवस्तु भने विगत तीन वर्षको तपाई स्वयम्को घुम्ति चिकित्सा टोलीमा सहभागी हुँदाका बखतको अनुभवलाई मात्र समेटिने छ ।

परियोजना कति समयमा पूरा होला ?

हामी आशा राख्दछौं कि अन्तरवार्ता करिब साठी मिनेटदेखि बढीमा नब्बे मिनेटसम्म तपाईको समय लिन सकिनेछ । तपाईसँग यति लामो समयसम्म अन्तरवार्ता लिइरहनु पर्दा हामी तपाईलाई त्यस दिनको खानपान र अल्कोहल विहीन (मदिरारहित) चियापान/ खानपान आदि दिलाउन पाउँदा हामी प्रशन्न रहने छौं ।

के यस परियोजनाअन्तर्गत कुनै जोखिमपूर्ण कार्यहरूको पनि सामना गर्नु पर्ला ?

यदि तपाई कथम कदाचित् कुनै उल्लेखनीय शारीरिक, संवेदनात्मक एवं मनोवैज्ञानिक असर परेको अनुभव चिकित्सा घुम्ति टोलीकै समयअन्तर्गत व्यहोर्नु पऱ्यो भने यस्तो अवस्थालाई मानसिकतामा रहिरहन र खुलस्त बताइरहन पनि दुःखद एवं अप्ठ्यारो महसूस हुन सक्दछ । यस्तो अवस्थामा आफूलाई सम्हाल्न समय लाग्ने भएमा वा अध्ययन अवधि पूरा नहुदैं पनि फूर्सद लिन वा कामबाट बाहिर निस्कन इच्छा भएमा निस्कन पनि सक्नु हुनेछ । यस्तो अवस्थामा कुनै पनि पेसेवर प्राविधिक सल्लाहकारको सहयोग उपलब्ध गराउन सकिने छ , जो सँग तपाई आफ्नो सबै समस्या बताउन सक्नुहुनेछ ।

तपाईको सूचनालाई छिपाएरै राखिनेछ, र व्यक्तिगत सूचनालाई तपाईको व्यवसाय, पेशा आदिलाई कुनै पनि प्रतिकूल असर नपारीकन अत्यन्त गोप्यताका साथ सुरक्षित राखिने छ । अनुसन्धानकर्ता स्वयम् पनि कुनै घुम्ति चिकित्सा टोलीसँग विशेष सम्बन्धित रूपमा सम्बन्ध राख्ने छैनन् ।

उदाहरणस्वरुप दिइने नमूना अन्यन्त सूक्ष्म भइदिने अवस्थामा पूर्ण रुपले गुमनाम राख्ने काम वा छिपाउने कामको निश्चितता नहुन सक्दछ, तथापि तपाईको परिचय र व्यवहारलाई संरक्षण गर्न उचित ठानिएका सबै प्रकारका उपायहरु अवलम्बन गरिनेछ । यसको मतलब हो यदि तपाईको सूचनालाई पर्याप्त मात्रामा लुकाउन छिपाउन सकिएन भने यसभित्र त्यस्तो सूचनालाई गोप्य राख्ने र छिपाएर राख्ने काम गर्न सकिन्छ ।

अनुसन्धान परियोजनाका के के फाइदाहरू छन् ?

विश्व स्वास्थ्य सङ्गठन (WHO) का अनुसार, नेपाल यस्तो राष्ट्र हो जहाँ धेरै नै स्वास्थ्यसूचक तथ्याङ्कहरूमा अत्यन्त गरीब देखिन्छ , पर्यटनमुखी कमजोरीहरु समेत रहेका कारण नेपालमा घुम्ति स्वास्थ्य टोलीको ध्यान हरेक वर्ष आकर्षित छ । घुम्ति स्वास्थ्य टोलीको निरीक्षण र सहयोगबाट नेपालले प्रशस्त फाइदा उठाउन सक्ने स्थितिमा छ । तपाई जस्ता औषधी व्यवसाय सम्बन्धि व्यक्तित्वहरुले भावी औषधी व्यवसायको लक्ष्यलाई प्रभाव पार्न कुनै अभिव्यक्ति दिन सक्नुहुन्छ र यस अनुसन्धानले यस परियोजनाका सहयोगीहरु र अतिथि स्वास्थ्यकर्मीहरुको विचार विमर्श र सहयोगको आदन प्रदानको माध्यमबाट सुधार ल्याउन सक्दछ ।

के म यस परियोजनाबाट अलग हुन सक्दछु ?

यस परियोजनाको सहभागिता पूर्ण रूपमा स्वेच्छिक हुनेछ । यदि तपाई सहभागी हुन ईच्छुक हुनुहुन्छ भने तपाई यस अध्ययनबाट आफ्नो तथ्याङ्क पछि हटाउन सक्नुहुन्छ, यसको निम्ति तपाई अनुसन्धानकर्ता स्वयम्लाई भेटेर वा फोन तथा इमेलको माध्यमबाट देहायको ठेगानामा सम्पर्क राख्न सक्नु हुनेछ । तपाईको तथ्याङ्क नतिजा प्रकाशन गर्नुभन्दा अगावै हटाउन सकिने छ ।

मेरो सूचनाबारे के हुन सक्ला ?

कुनै पनि सूचना सार्वजनिक गर्नुभन्दा अगाडि यस परियोजनासँग सरोकार राख्ने व्यक्तिका नामहरु, कामको ओहदा, स्थान वा संस्थाका नामहरु जस्ता परिचय खुल्ने सूचना हटाइने छ । अनि, तपाईलाई अन्तरवार्ताका बारेमा टिप्पणी गर्न पाउने अवसर प्राप्त हुनेछ र घुम्ति टिप्पणी

गर्न पाउने अवसर प्राप्त हुनेछ र घुम्ति स्वास्थ्य टोलीसँगको तपाईको अनुभव सम्बन्धी अन्य विचारहरु थप गर्न सक्नु हुनेछ । जुन अन्तरवार्ता जनसाङ्ख्यिकी सूचना सहित अभिलेखीकरण गरिएको छ त्यसलाई एडेलाइड् विश्वविद्यालयमा पाँच वर्षसम्म सुरक्षित रूपमा राखिने छ । यस तथ्याङ्कलाई हेर्न, देख्न र सदुपयोग गर्न पाउने अधिकार केवल यस परियोजनाका अनुसन्धानकर्तालाई मात्र हुनेछ ।

यदि यसै परियोजनाका बारेमा यदि मसँग केही प्रश्नहरु छन् भने मैले को सँग सम्बन्ध राख्न सक्दछु ?

यस परियोजनाका बारेमा यदि तपाईसँग कुनै प्रश्न वा जिज्ञासा छ, अथवा तपाई यसअन्तर्गत भाग लिन मात्र चाहनु हुन्छ भने तपाई अनुसन्धान वा अन्वेषक स्वयम्सँग सम्पर्क गर्न सक्नुहुन्छ । उक्त सम्पर्कका लागि ठेगाना यस प्रकार छ : इमेल leighton.filmer@adelaide.edu.au अथवा मोवाइल नं.9818656161 सिधा सम्पर्क गर्ने, अथवा INF अफिस, पोखराको नं. +977 (061) 520111 मा टेलिफोन मार्फत् पनि सम्पर्क गर्न सकिनेछ ।

यदि मसँग कुनै गुनासो वा कुनै सोधपुछ गर्नु पर्ने विषयवस्तु भएमा के गर्ने ?

यस परियोजना अन्तर्गतको अध्ययन वा अनुसन्धान कार्यलाई अडेलाइड विश्वविद्यालयको 'मानव अनुसन्धान नीतिशास्त्र समिति द्वारा स्वीकृत गरिएको छ । यसको स्वीकृति नंम्बर H-2017-*** रहेको छ । यदि तपाईसँग परियोजनामा सहभागी भई सकेको अवस्थामा कुनै प्रश्नहरु वा जिज्ञासा केही भएमा कृपया अनुसन्धानकर्ता स्वयम्लाई माथि नै उल्लेख भइसकेको ठेगानामा सम्पर्क राख्नु हुन अनुरोध छ, अथवा अर्को इमेल ठेगाना prakash@kusoed.edu.np मार्फत् पनि प्रश्नहरु सोध्न सकिने छ । यदि तपाईसँग परियोजनाका बारेमा कुनै गुनासो छ वा विशेष सन्दर्भ उठाउन चाहनु हुन्छ भने तपाई मुख्य खोजकर्ता वा अन्वेषकसँग यस इमेल ठेगाना मार्फत् सम्पर्क राख्न सक्नुहुन्छ' lynette.cusack@adelaide.edu.au अथवा मानव अनुसन्धान नीतिशास्त्र समिति hrec@adelaide.edu.au/यदि तपाई कुनै स्वतन्त्र व्यक्तिसँग कुनै गुनासो वा चासोखाँचो

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ature:
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लिएर बोल्न चाहनुहुन्छ वा अनुसन्धानबारे मानव सहभागीताका सन्दर्भमा विश्वविद्यालयको नीतिका बारे कुनै कुरा सोध्न चाहनुहुन्छ भने कृपया मानव अनुसन्धान नीतिशास्त्र समितिको सचिवालयको निम्न ठेगानामा सम्पर्क गर्नुहुन अनुरोध छ :

फोन नं. :+61883136028
इमेल : hrec@adelaide.edu.au
हुलाक :Level 4, Rundle Mall Plaza,
50 Rundle Mall, ADELAIDE SA 5000

हरेक गुनासो वा चासोलाई गोप्यताका साथ व्यवहारमा ल्याइने छ र पूर्णरुपमा अनुसन्धान गरिनेछ। तपाईलाई आफ्नो जिज्ञासा वा सोधपुछको निष्कर्ष बारे सुसूचित राखिने छ।

यदि म सहभागी हुन चाहन्छु भने म के गर्न सक्छु ?

कृपया तपाईले मुख्य अन्वेषक Leighton Filmer लाई मोवाइल नं. +977 9824147927 मा सम्पर्क गरी अन्तरवार्ता लिने आधिकारिक व्यक्ति र अनुवादकर्तासँग सम्पर्क राखी तपाई आफ्नै ठाउँमा वा अन्य उपयुक्त स्थानमा भेट हुने व्यवस्था मिलाउन सक्नु हुनेछ।

भवदीय
Mr. Leighton B Filmer, student
Assoc Prof, Lynette Cusack, Adelaide
School of Nursing, Lead Supervisor
Prof Krisne Gebbie, Flinders University
(ret), Co-supervisor
Dr. Prakash Bhattarai, Kathmandu
University, external supervisor

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CONSENT FORM

सहमति पत्र

१. यस फर्म सित संलग्न सुचना दस्तावेज पढेको छु र निम्न अनुसन्धान परियोजनामा भाग लिन सहमत छु :

शिर्षक : नेपालमा कार्यरत स्वास्थ्य कार्यकर्ता सञ्चालक र अन्य अर्थात स्वास्थ्य उपचार घुम्ति टोलीहरु बीचको सहभागीताको प्रभाव र विस्तारको अन्वेषण

नीतिशास्त्र समितिको स्वीकृति नम्बरः

अनुसन्धानकर्ता स्वयम्ले यो नम्बरलाई संलग्न राख्नुपर्नेछ (परियोजना स्वीकृत भइसकेपछि एक पटक निश्चित गरिएको)

२. मैले परियोजनालाई अध्ययन गरेको छु, जहाँ सम्म यस प्रति मेरो सरोकार छ, यस परियोजनाका बारेमा मलाई अनुसन्धानकर्ताबाट पूर्ण जानकारी दिलाइएको छ । मैले स्वतन्त्रतापूर्वक मेरो स्वीकृति दिएको छु ।

३. मलाई आफ्नै परिवारको एक सदस्यका रूपमा रहिरहन अवसर दिइएको छ, अथवा जति बेला मलाई यस परियोजना बारेमा व्याख्या गरियो त्यस बखत एउटा साथी संगसंगै उपस्थित रहेको कुरा पनि व्यक्त गर्न चाहन्छु ।

४. यद्यपि मैले यस परियोजनाको उद्देश्य बभ्दछु, तापनि मलाई स्पष्ट जानकारी दिइएको छ कि यसमा मेरो संलग्नताले मलाई व्यक्तिगत रुपमा कुनै फाइदा हुने छैन ।

५. मलाई जानकारी दिइएको छ कि अध्ययनका क्रममा प्राप्त जानकारी वा सूचना आदि प्रकाशित गर्न सकिने छ, मलाई परिचित व्यक्तिका रुपमा चिनाइने छैन, र मबाट प्राप्त भएको व्यक्तिगत निष्कर्षका कुराहरु खुलासा गरिने छैन ।

६. मैले बुझिसकेको छु कि म यस परियोजनाको निष्कर्ष प्रकाशित हुनु अगावै कुनै पनि समयमा परियोजनाका क्रियाकलाप देखि बाहिर निष्कन पूर्णतः स्वतन्त्र छु । यसका निम्ति मैले

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अनुसन्धानकर्तासंग व्यक्तिगत रुपमै सम्पर्क गर्ने छु, अथवा फोन मार्फत् (981865161) वा इमेल (leighton filmer@adelaide.edu.au) मार्फत् सम्पर्क स्थापित गर्नेछु ।

७. मेरो अन्तरवार्ता Audio मार्फत अभिलेख रुपमा राख्न मन्जुर छु ।

८. म सजग छु कि म यस सहमती पत्रको एक प्रति म आफैसँग सुरक्षित राख्ने छु । यो फर्म पूर्ण रुपमा पूरा भईसके पछि यससँग संलग्न रहेको सुचना पत्र मेरै साथमा सुरक्षित रुपमा राख्नेछु ।

सहभागीले पूरा गर्नु पर्ने :

नाम : ..... सही / हस्ताक्षर

मिति : .....

अनुसन्धानकर्ता वा साँक्षीले भर्नुपर्ने

मैले अनुसन्धानको स्वरुप ..... लाई बताएको छु ।

र मेरो विचारमा उसले / उनले बताइएको विवरण बुझेका छन् ।

हस्ताक्षर ..... पद/हैसियत .....

मिति : .....

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Appendix 4 - Ethics approval documents

Government of Nepal
Nepal Health Research Council (NHRC)
Estd. 1991

Ref. No.: 533

10 September 2018

Mr. Leighton Bruce Filmer
Principal Investigator, University of Adelaide

Dr. Archana Amatya
Co-Principal Investigator, Tribhuvan University Teaching Hospital

Ref: **Approval of thesis proposal** entitled **Exploring Nepali health personnel experiences of collaboration with short term mobile medical teams in Gorkha, Nepal**

Dear Mr. Filmer and Dr. Amatya,

It is my pleasure to inform you that the above-mentioned proposal submitted on **3 August 2018** (**Reg. no. 496/2018**) has been approved by Nepal Health Research Council (NHRC) National Ethical Guidelines for Health Research in Nepal, Standard Operating Procedures Section 'C' point no. 6.3 through Expedited Review Procedures.

As per NHRC rules and regulations, the investigator has to strictly follow the protocol stipulated in the proposal. Any change in objective(s), problem statement, research question or hypothesis, methodology, implementation procedure, data management and budget that may be necessary in course of the implementation of the research proposal can only be made so and implemented after prior approval from this council. Thus, it is compulsory to submit the detail of such changes intended or desired with justification prior to actual change in the protocol. Expiration date of this proposal is **June 2019.**

If the researcher requires transfer of the bio samples to other countries, the investigator should apply to the NHRC for the permission. The researchers will not be allowed to ship any raw/crude human biomaterial outside the country; only extracted and amplified samples can be taken to labs outside of Nepal for further study, as per the protocol submitted and approved by the NHRC. The remaining samples of the lab should be destroyed as per standard operating procedure, the process documented, and the NHRC informed.

Further, the researchers are directed to strictly abide by the National Ethical Guidelines published by NHRC during the implementation of their research proposal and **submit progress report in between and full or summary report upon completion.**

As per your thesis proposal, the total research budget is **NRs 59,400** and accordingly the processing fee amounts to **NRs 20,000.** It is acknowledged that the above-mentioned processing fee has been received at NHRC.

If you have any questions, please contact the Ethical Review M & E Section at NHRC.

Thanking you,

Prof. Dr. Anjani Kumar Jha
Executive Chairperson

THE UNIVERSITY of ADELAIDE

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OFFICE OF RESEARCH ETHICS, COMPLIANCE AND INTEGRITY
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EMAIL hrec@adelaide.edu.au

CRICOS Provider Number 00123M

Our reference 32290

08 March 2018

Associate Professor Lynette Cusack
Nursing

Dear Associate Professor Cusack

ETHICS APPROVAL No: H-2018-043
PROJECT TITLE: Exploring the extent and impact of collaboration between host health personnel with short term mobile medical teams in Gorkha, Nepal

The ethics application for the above project has been reviewed by the Low Risk Human Research Ethics Review Group (Faculty of Health and Medical Sciences) and is deemed to meet the requirements of the *National Statement on Ethical Conduct in Human Research (2007)* involving no more than low risk for research participants.

You are authorised to commence your research on: 08/03/2018
The ethics expiry date for this project is: 31/03/2021

NAMED INVESTIGATORS:

Chief Investigator:	Associate Professor Lynette Cusack
Student - Postgraduate Masters by Research:	Mr Leighton Bruce Filmer
Associate Investigator:	Professor Kristine Gebbie
Associate Investigator:	Dr Prakash Bhattarai

CONDITIONS OF APPROVAL: Thank you for the detailed response and amended application dated 7.3.18 to the matters raised.

Ethics approval is granted for three years and is subject to satisfactory annual reporting. The form titled Annual Report on Project Status is to be used when reporting annual progress and project completion and can be downloaded at http://www.adelaide.edu.au/research-services/oreci/human/reporting/. Prior to expiry, ethics approval may be extended for a further period.

Participants in the study are to be given a copy of the information sheet and the signed consent form to retain. It is also a condition of approval that you immediately report anything which might warrant review of ethical approval including:

- serious or unexpected adverse effects on participants,
- previously unforeseen events which might affect continued ethical acceptability of the project,
- proposed changes to the protocol or project investigators; and
- the project is discontinued before the expected date of completion.

Yours sincerely,

Ms Sabine Schreiber
Secretary