

Documenting the contextualization and implementation of mhGAP-HIG in post-  
earthquake Nepal

by

Hillary Jayne Richards

Duke Global Health Institute  
Duke University

Date: \_\_\_\_\_

Approved:

\_\_\_\_\_  
Brandon A. Kohrt, Supervisor

\_\_\_\_\_  
Joanna Maselko

\_\_\_\_\_  
Neil Prose

Thesis submitted in partial fulfillment of  
the requirements for the degree of  
Master of Science in Global Health  
in the Graduate School of Duke University

2016

ABSTRACT

Documenting the contextualization and implementation of mhGAP-HIG in post-earthquake Nepal

by

Hillary Jayne Richards

Duke Global Health Institute  
Duke University

Date: \_\_\_\_\_

Approved:

\_\_\_\_\_  
Brandon A. Kohrt, Supervisor

\_\_\_\_\_  
Joanna Maselko

\_\_\_\_\_  
Neil Prose

An abstract of a thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Global Health in the Graduate School of Duke University

2016

Copyright by  
Hillary Richards  
2016

## Abstract

**Background:** The burden of mental health is increased in humanitarian settings, and needs to be addressed in emergency situations. The World Health Organization has recently released the mental health Global Action Programme Humanitarian Intervention Guide (mhGAP-HIG) in order to scale up mental health service delivery in humanitarian settings through task-shifting. This study aims to evaluate, contextualize and identify possible barriers and challenges to mhGAP-HIG manual content, training and implementation in post-earthquake Nepal.

**Methods:** This qualitative study was conducted in Kathmandu, Nepal. Key informant interviews were conducted with fourteen psychiatrists involved in a mhGAP-HIG Training of Trainers and Supervisors (ToTS) in order to assess the mhGAP-HIG, ToTS training, and the potential challenges and barriers to mhGAP-HIG implementation. Themes identified by informants were supplemented by process notes taken by the researcher during observed training sessions and meetings.

**Results:** Key themes emerging from key informant interviews include the need to take three factors into account in manual contextualization: culture, health systems and the humanitarian setting. This includes translation of the manual into the local language, adding or expanding upon conditions prevalent in Nepal, and more consideration to improving feasibility of manual use by non-specialists.

**Conclusion:** The mhGAP-HIG must be tailored to specific humanitarian settings for effective implementation. This study shows the importance of conducting a manual contextualization workshop prior to training in order to maximize the feasibility and success in training health care workers in mhGAP.

## **Dedication**

To all who perished in the 2015 Nepal earthquakes.

And to the survivors,

Resilient,

And building back better.

# Contents

Abstract.....	iv
Dedication.....	v
Acknowledgements .....	viii
1. Introduction .....	viii
2. Methods.....	5
2.1 Setting.....	5
2.2 Participants .....	6
2.3 Procedures.....	7
2.4 Measures.....	10
2.5 Analysis.....	12
3. Results.....	13
3.1 Manual Content.....	<b>Error!</b> <b>Bookmark not defined.</b>
3.2 Training Implementation.....	30
4. Discussion .....	38
4.1 Adaptation: Cultural Context.....	38
4.2 Adaptation: Health System Context.....	44
4.3 Adaptation: Humanitarian Context.....	45
4.4 Limitations and Further research.....	47
5. Conclusion .....	49

Appendix A.....	51
Appendix B.....	53
Appendix C.....	57
References.....	64

## Acknowledgements

My deepest thanks and gratitude to: my mentor, Brandon Kohrt, for all of his guidance, inspiration, support, and encouragement, without which this research wouldn't have been possible; to my parents, for their unwavering love, support, faith and encouragement in every single one of my adventures and endeavors; to my committee members, Joanna Maselko and Neil Prose, for their insight and feedback in the thesis process; the Duke Global Health Institute, for providing me with the opportunity to pursue this research; to Sauharda Rai, for all of his help, support and companionship through the thesis process, in both Durham and in Nepal; to all of the psychiatrists, for their participation in this research and dedication to improving mental health in Nepal; to the doctors in Gorkha, for being so welcoming and hospitable during my visit; to Adesewa Adelekun, for assistance in coding transcripts; to everyone at TPO Nepal, for their sponsorship, support, and help during my fieldwork; to Prasana Khatiwoda, *mero pyaro saathi*, for her assistance in translation, teaching Nepali, and for always being there through the thesis process; to Auntie and Uncle Khatiwada, and Laxmi didi, for taking the best care of me and treating me like their very own *chori* during my stay in Nepal; and finally, to Kaba,, for reminding me to take breaks and chase snakes



# 1. Introduction

A massive earthquake struck Nepal in April 2015, followed closely by a second earthquake in May. The United Nations provided initial estimates of 8 million people affected in the aftermath of the earthquake (OCHA, 2015a). Humanitarian crises such as this have arisen around the world, including recent natural disasters such as flooding in Myanmar, India, Malawi and Mozambique and the Ebola outbreak in West Africa, along with complex, man-made crises such as the ongoing Syrian conflict and EU refugee crises. Increasing attention has been paid to mental health needs during humanitarian crises; as a result, the World Health Organization released the mental health Global Action Programme Humanitarian Intervention Guide (mhGAP-HIG) in 2015 in order to address the scale-up of mental health services in humanitarian settings (WHO, 2010). The objective of this research is to evaluate and contextualize the mhGAP-HIG in regards to cultural, health systems and humanitarian contexts in post-earthquake Nepal.

On April 25, 2015, at 11:56am local time, Nepal was struck by an earthquake of magnitude 7.8 with an epicenter in Gorkha district, 77 kilometers northwest of the capital city, Kathmandu. At 12:50pm on May 12, another earthquake of magnitude 7.3 struck 76 kilometers northeast of Kathmandu in Sindhupalchowk district. As of March 15, 2016, 441 aftershocks of magnitude >4.0 have been recorded (National Seismological Center, 2016). The UN Office for the Coordination of Human Affairs reported 8,702 casualties, over 500,000 houses destroyed, and 864,000 people in hard to reach areas in need of

immediate assistance as of June 3, 2015 (OCHA, 2015b) Initially, 14 districts had been identified as affected by the earthquakes: Bhaktapur, Dhading, Dolakha, Gorkha, Kathmandu, Kavrepalanchok, Lalitpur, Makwanpur, Nuwacot, Okhaldunga, Ramechhap, Rasuwa, Sindhuli and Sindhupalchok. An additional 9 affected districts were added to the list as of May 10<sup>th</sup>: Tanahu, Kaski, Nawalparasi, Chitwan, Syangja, Parsa, Lamjung, Palpa and Parbat (OSOCC, 2015).

The World Health Organization (WHO) indicates that there is an increase in diagnosable health problems in emergency settings. For serious mental disorders, the WHO estimates an increase between 2-3% to 3-4%, while mild and moderate mental health problems may increase from 10% to 15-20% of the population (Carswell, 2015). In an assessment 5-6 weeks after the 2005 earthquake in Kashmir, India, Chadda et al. (2007) reported high levels of diagnoses of common mental disorders, including adjustment disorders (39.6%), stress disorders (22.1%) and depression (21.8%) (Chadda, 2007). Higher-income countries, such as Japan, have a structured mental health disaster preparedness plan in order to respond swiftly, raise awareness, and reduce overlap of mental health services (Kim, 2011). There is a dire need for to develop disaster preparedness plans in low and middle-income countries, including mental health service delivery as an area of high importance.

The mental health Gap Action Programme (mhGAP) was introduced in 2008 in order to address the gap between prevalence and need for mental, neurological and substance use (MNS) disorder treatment and the ability and availability of health care systems to address MNS disorders. mhGAP has targeted use in low and middle-income

countries, which face a larger burden of mental illness and lower number of human resources for mental health care (WHO, 2010). The WHO developed the mental health Gap Action Programme Intervention Guide (mhGAP-IG) in order to train, supervise and support non-specialist health workers in to effectively identify, assess and manage mental health conditions in low resource settings (WHO, 2010). The intervention is centered around the approach of task-shifting, in which non-specialist health workers are trained by specialists in order to increase delivery of mental health services.

A new mhGAP tool, the mental health Global Action Programme Humanitarian Intervention Guide, was developed in 2015 and piloted in Sierra Leone in response to the 2014 Ebola epidemic. mhGAP-HIG is designed to help non-specialists better assess, identify and manage mental health conditions in the context of humanitarian crises. The manual consists of a section on General Principles of Care (GPC) for people with MNS conditions in humanitarian settings, along with ten modules on common mental health conditions following humanitarian crises: acute stress, grief, moderate-severe depressive disorder, post-traumatic stress disorder, psychosis, epilepsy/seizures, intellectual disability, harmful use of alcohol and drugs, suicide, and other significant mental health complaints (WHO, 2015).

This study aims to evaluate, contextualize and identify possible barriers and challenges to mhGAP-HIG manual content, training and implementation in post-earthquake Nepal. Using qualitative research methods, a 4-day mhGAP-HIG training of

trainers and supervisors (ToTS) was evaluated through structured observation and supplemental key informant interviews. The training of trainers and supervisors on mhGAP-HIG, co-sponsored by the World Health Organization (WHO), Government of Nepal Ministry of Health and Population (MoPH), and Transcultural Psychosocial Organization Nepal (TPO Nepal), was held from July 5-8, 2015 at Annapurna Hotel in Kathmandu, Nepal. Participants in the training were prepared to train and health care workers in earthquake-affected districts on issues of mental health in order to integrate mental health care into primary health care.

## **2. Methods**

This study uses qualitative approaches consisting of: 1) key informant interviews and 2) participant observation. Ten weeks after the first earthquake, the WHO, Ministry of Health and Population (MoHP), and TPO Nepal conducted a ToTS with 14 psychiatrists. The ToTS was observed and documented with qualitative methods and this was supplemented with key informant interviews with psychiatrist trainees.

### **2.1 Setting**

Nepal is a landlocked country divided into three types of ecological zones, running from almost sea level to the highest point on earth. It is prone to a range of natural hazards. Nepal is classified as a low-income country with low levels of development. Economy centers around agriculture, but has recently included increased remittances from migrant workers, accounting for almost one-third of income. Demographically, Nepal has a young population which mainly lives in rural areas. Despite the small size of the country, over 60 different languages are spoken by more than 35 ethnic groups. The dominating religions in Nepal are Hinduism, practiced by 81% of the population, and Buddhism (9%) (IASC, 2015).

Nepal is divided administratively into 5 developmental regions (far west, mid-west, west, central, and east), 14 zones, and 75 districts. Districts are divided into Village Development Committees (VDCs), consisting of 3,915 in rural areas and municipalities, consisting of 58 in urban areas. The districts that have been most heavily affected by the

earthquake are located in the western, central, and eastern regions of the country (IASC, 2015).

## **2.2 Participants**

Recruitment for participants took place through nomination of psychiatric employees in major academic and mental health institutions and facilities to participate in the Training of Trainers and Supervisors. Participants in the mhGAP-HIG Training of Trainers and Supervisors included two trainers and 14 trainees (see Table 1). One psychiatric nurse, two NGO workers, and two graduate students also observed and participated in the training. The trainers consisted of one Nepali psychiatrist and one American psychiatrist who has worked in Nepal for over 20 years and is fluent in Nepali. Trainees consisted of 14 psychiatrists from Nepal; trainees were from Kathmandu (n=11), Chitwan (n=1), Pokhara (n=1) and Dharan (n=1). Participants were eligible for the mhGAP-HIG Training of Trainers and Supervisors if they were certified and registered psychiatrists in Nepal who had completed, or were in their final year, of psychiatry residency in Nepal. Participants work in various, and oftentimes multiple, contexts, including private practices, government, non-governmental organizations, and university settings.

The 14 psychiatrist participants in the Training of Trainers and Supervisors provided consent for all evaluations and did not receive financial compensation. With the exception of one psychiatrist who was deployed outside of Kathmandu immediately

following training, all participants participated in key informant interviews. Additional information was also gained through input from trainers.

## **2.3 Procedures**

### *Training of Trainers and Supervisors*

A training of trainers and supervisors on mhGAP-HIG, co-sponsored by the World Health Organization (WHO), Government of Nepal Ministry of Health and Population (MoPH), and Transcultural Psychosocial Organization Nepal (TPO Nepal), was held from July 5-8, 2015 at Annapurna Hotel in Kathmandu, Nepal. Participants in the training were prepared to train and health care workers in earthquake-affected districts on issues of mental health in order to integrate mental health care into primary health care. The four-day training began with a presentation on the current status of mental health in Nepal, an introduction to mhGAP and mhGAP-HIG to the participants, presentation and discussion of learning objectives of the training, review and completion of consent forms, and completion of pre-tests (see Table 2). Copies of English-language mhGAP-HIG, along with handouts in both English and Nepali were distributed to participants. The first day of training also included participants' discussion, opinions and feedback regarding mental health needs in post-earthquake Nepal and the barriers and strategies to assist in addressing these needs.

The second day of training included group presentations by participants on the General Principles of Care (GPC) section of the mhGAP-HIG manual; this section outlines mhGAP's guidelines for good clinical practices for health care providers. A

problem-based matrix to be used in conjunction with mhGAP-HIG specifically in Nepal was also introduced and discussed, and the trainers presented a module on anxiety to prepare participants for their own module presentations.

On the third day, participants presented modules in mhGAP-HIG: acute stress/grief, depression, PTSD, psychosis, epilepsy, harmful alcohol and drug use, and suicide. Following each module presentation, participants provided feedback and engaged in discussions regarding contextualization of manual material for use in the Nepali setting, and debates about medication and psychoeducation treatments. A child and adolescent psychiatrist of Nepali origin practicing in the US also gave a presentation on child mental health in humanitarian settings.

The final day of training included group discussion on the structure and content of forthcoming mhGAP-HIG trainings and discussion resulting in a supervision schedule. Participants also took part in Observed Structural Clinical Evaluations in order to practice for evaluation of future trainees, using the Enhanced Assessment of Common Therapeutic factors (ENACT) scale. This 18-item tool was developed by Kohrt et al. (2015) and piloted in Nepal to assess non-specialist competency in delivering mental health services (see Figure 1). The tool involves peer (non-specialist) and expert evaluation of trainees' responses to presenting patient vignettes.

Training was completed with a group discussion and feedback session about the entire training. Table 2 provides more detail on the training schedule. The majority of the training was conducted in Nepali, with the exception of reviews of the English-language



mhGAP-HIG manual and training material. Various didactics introduced on the first day, such as role-play, sandwich feedback, and free-listing were employed throughout the duration of the training by both trainers and participants; in addition, mhGAP videos from WHO were made available to participants.

#### *Development of Interview Guide*

An interview guide was developed by the researcher prior to training focusing on topics such as: prior experience with mhGAP and humanitarian settings, common mental health symptoms and complaints following in Nepal post-earthquake, feedback on training, supervision and mhGAP-HIG, perceived barriers and challenges for mhGAP-HIG training implementation, and perceived barriers and challenges for future trainees. The interview guide was reviewed by researchers with extensive experience in qualitative methods. Questions were added or edited throughout the interview process to reflect topics brought up by informants.

#### *Development of Codebook*

A codebook for analyzing interviews was developed by the researcher following the reading, analysis and identification of key themes from interview transcripts. Codes included: participants' prior experience, post-earthquake experience, positive training and mhGAP-HIG feedback, suggestions for training, mention of specific conditions covered in mhGAP-HIG, and benefits and barriers for trainers and trainees. The author and an

external researcher piloted the codebook together while coding one interview, and while separately coding two more interviews. During this process, the codebook was refined for use with the remaining interview transcripts.

### *Data Collection*

Audio recordings were done for most of the training to capture feedback and contextualization of the training and mhGAP-HIG, while select components of training were videotaped for further analysis and review. Key informant interviews were conducted in English by an American global health graduate student during and after training. Interviews lasted between 30-60 minutes, were digitally recorded and transcribed. Memorandums identifying key themes and further refinement of the interview guide were written following each interview.

Process notes were taken during the ToTS training as well as during observation of standard mhGAP supervision sessions with health assistants in Chitwan, Nepal, non-prescriber training in Sindhuli, Nepal, and stakeholder meetings regarding implementation of mhGAP-HIG training in Gorkha, Nepal.

Consent was obtained from all participants during training. All study procedures were approved by the Duke University Health System Institutional Review Board and the Nepal Health Research Council.

## **2.4 Measures**

Data were collected using a semi-structured interview guide that contains four sections:

(1) Prior experience

Questions in this section focus on participants' background, including years working as a psychiatrist and experience as a trainer or trainee in mental health-related trainings. Prior exposure to mhGAP materials, along with use of other manuals or training materials, was also included in this section.

(2) Current earthquake response

This section of the interview guide allows participants to self-report on their experiences post-earthquake, including: personal involvement in the humanitarian response, common psychiatric symptoms and complaints reported by patients after the earthquake, and new or Nepali-specific symptoms encountered.

(3) mhGAP-HIG training

Questions in this section center on opinions regarding mhGAP-HIG. Topics range from participants' feedback on ToTS training, feedback on manual material, and perceived barriers or challenges to future trainers and trainees, as well as perceived barriers or challenges to training implementation and supervision in general.

(4) mhGAP-HIG contextualization

A fourth section on mhGAP-HIG adaptation was added and used with some participants who were active in the process of adapting mhGAP-HIG for use in trainings in Nepal. These questions focused on the participant's specific role in adaptation and opinions on the most important or extensive adaptations to mhGAP-HIG. This section

served as a continuation and probe of answers in the third section related specifically to the manual adaptation process.

## **2.5 Analysis**

Interviews conducted by the author were transcribed from audio recordings and coded according to themes identified in the developed codebook. Recordings were translated by a native Nepali, bilingual English speaker and coded according to the codebook developed for key informant interviews. Translations were reviewed by a trained participant and translations were revised as needed to capture original meaning. Coding of interviews and training recordings was done by the author and an external researcher who was not engaged in on-site data collection or participant observation. Codebook refinement was conducted until the two raters achieved an IRR  $>.80$ . Representative quotations from interview and audio transcripts were selected to highlight key identified themes.

## 3. Results

### 3.1 Manual Content

#### More emphasis/additions

#### Part I. Conditions in mhGAP-HIG

##### *Generalized anxiety*

Generalized anxiety has not been included as a module in mhGAP-HIG. Thirteen informants reported that anxiety was one of the most common disorders encountered following the earthquakes. Additionally, many respondents reported patients presenting with a new anxiety symptom that they hadn't seen prior to the earthquake:

*“Something that is quite related to the earthquake would be this general feeling of dizziness, or as they would put it bhui halleko jasto lagne (“feeling like the ground is shaking”) oraafu halleko jasto lagne (“feeling like you are shaking”), which basically would translate as a general feeling of shakiness of self or the ground. So that’s quite a common complaint among people, and as we explore deeper into the symptoms, it’s basically related to acute stress reaction or anxiety symptoms” (Participant 13)*

Half of the respondents emphasized the need to add a generalized anxiety module to the manual in interviews, citing the spike in cases due to the earthquake. For the Training of Trainers and Supervisors, the trainers developed an anxiety module used to model a module presentation for the trainees; some respondents gave positive feedback on the module and coverage of anxiety during training, although the module was an addition rather than part of the mhGAP-HIG. Of all of the mental illnesses, respondents

overwhelmingly agreed that generalized anxiety was the most common presentation after the earthquakes and should be an integral section of mhGAP-HIG.

### *Conversion Disorder & Other Somatic Complaints*

The need to include more information on conversion disorder and other somatic complaints in the Nepali version of the mhGAP-HIG manual was also raised by the participants. Five informants cited somatic complaints, and conversion disorder specifically, as a common presentation after the earthquake and in Nepal in general, while five respondents confirmed that conversion disorder tends to be diagnosed, and misdiagnosed, in females compared to males:

*“We tend to diagnose females, mostly females with conversion disorder. We don’t think like males can also suffer from dissociative, conversion disorder, so then we tend to over-diagnose cases of conversion disorder in females and underdiagnose the case in males”* (Participant 5)

*“And over-diagnosis in emergency set-up, it’s like female, with any symptom. If she’s screaming, they think that it’s conversion. Even when it’s purely general causes, if they have actual abdominal pain. If a female is pre-menstruating, they think it’s actually conversion disorder”* (Participant 3)

When asked about the risk of trainees misdiagnosing mental disorders, eight respondents mentioned the risk of either diagnosing conversion disorder as another mental illness, or diagnosing other mental illnesses as conversion disorder. Frequency of

conversion disorder in Nepal, along with the risk of misdiagnoses in relation to conversion disorder, led to participants stressing the importance of providing more material on this particular illness for country-specific trainings.

Respondents reported uneasiness regarding the possibility of misdiagnosis of mental health conditions, along with uncertainty that trainees will be comfortable or adequate in prescribing medication, when asked about potential barriers and challenges facing future trainees in the implementation of mhGAP-HIG in health care settings. The issue of misdiagnosis has been addressed specifically in the sections on harmful use of alcohol and drugs and conversion disorder, but participants also noted concern of misdiagnosis of epilepsy, depression, psychosis, PTSD and anxiety. Additionally, there was concern that somatic complaints attributed to mental health conditions would not be identified:

*“Even in context of Nepal, until the person has somatic complaints, somatic features, then they won’t go to the doctors. If a patient is having a sleepless night, or loss of interest, if their mood is low, they do not go directly to the psychiatrist. They will go to the physician and say, “Yeah, I have a headache. After headache, my stomach is not good. I am having gastritis. I am feeling bad in my chest. My muscles are paining, my knees are paining, yeah? I have dizziness.” So that is the main complaint – they do not say like “I am not sleeping at night, my mood is low, I am feeling so lazy, I am too much worried” – they do not say that” (Participant 14)*

### *PTSD*

Post-traumatic stress disorder (PTSD) was mentioned by twelve respondents during interviews. While only four informants reported encountering PTSD at the time of interviews – two of whom noted they had seen only a few cases – ten informants

specifically mentioned PTSD as a condition that they expected to increase in presentation in the future. However, respondents were quick to point out concern that too much emphasis may be placed on PTSD post-earthquake when other conditions are more common:

*“Relatively, we’re seeing few patients with PTSD. We’re seeing more with depression and non-specific symptoms, like somatic complaints, let’s say. A lot of people coming with somatic complaints like djum-djum type symptoms, aches and pains, burning and tingling sensations, and decreased sleep. Which comes under anxiety, non--specific anxiety, or sometimes even somatic complaints. So we’re seeing this more than PTSD” (Participant 8)*

*“We talked about depression, PTSD. So now, in the CMA, or HA, or even MBBS level, when they refer a patient to us, the diagnosis is written as PTSD. Post-traumatic stress disorder. So actually, not all are PTSD, but there are some anxiety, depression. But whatever they find after the earthquake, they’re all [diagnosed as] PTSD. So this is one good example that we can teach them, so that it’s not post-traumatic stress disorder, that there are others, also. These things, they’re a good part” (Participant 14)*

Concerns of over-diagnosis of PTSD, as stated above, is one concern in the post-earthquake setting. Another concern mentioned by two respondents is that the treatment plan for PTSD, particularly EMDR, is too detailed for non-specialists, including MBBS doctors.

### *Harmful Use of Alcohol and Drugs*

Ten respondents listed harmful use of alcohol as one of the most common conditions encountered following the earthquake, particularly in villages. This included



relapses in former users along with an increase in new cases of alcohol use and attributed to use as a coping mechanism:

*“And the biggest problem was in the field of addiction. I’d say most of the treated alcoholic patients that I knew before had relapsed. At least, maybe, some got hold soon, some later, but in the first few days, alcohol was virtually the only coping thing they found around, because they were fearful all the time in the tent. Two shots of alcohol, and they felt better. And that’s still a common tendency. We still have a lot of patients taking alcohol” (Participant 7)*

In addition to being cited as a common condition, harmful use of alcohol was often raised as a concern in terms of misdiagnosis or under-diagnosis. Two respondents specifically pointed out that health care workers may misdiagnose alcohol withdrawal as psychosis. Regarding the possibility of misdiagnosis due to caste, gender or ethnicity, five informants expressed concern that harmful use of alcohol will be diagnosed more often in patients from castes to which alcohol consumption is attributed, but underdiagnosed in women and castes in which alcohol consumption is traditionally prohibited:

*“Under-diagnosis of substance use in women – that’s a major concern. And I think it came up in the training itself. Certain castes, they’re not allowed to drink, so some people do not ask, they just assume they don’t drink. And it’s not true – in fact, it’s the opposite. Most of the serious cases, they tend to be from caste that do not allow them to drink from start, so when they finally start drinking, it’s unregulated, because they do not know how to control it. So I think that will be underdiagnosed” (Participant 3)*

Due to the high prevalence of alcohol consumption in villages and following the earthquakes, along with the high risk of misdiagnosis or under-diagnosis by health workers, participants stressed the need to increase content and time spent covering harmful use of alcohol. Respondents mentioned that additional focus and content needed to address proper, thorough screening of patients for harmful use of alcohol, along with more detail regarding treatment. Additionally, in group discussion during training, participants noted that more time should be devoted to addiction and harmful use of alcohol due to the fact that it is often not characterized as a mental illness.

## Part 2. Other contents in mhGAP-HIG

### *Psychoeducation*

The use and inclusion of psychoeducation were also brought up by participants. All participants stated that they had used psychoeducation as a form of treatment following the earthquake. Five participants highlighted the importance of psychoeducation and the need to expand this component in the manual for health worker training, in part due to the practice of over-prescribing medication for health conditions.

As one participant noted:

*“Psychoeducation, I think, will change the way of dealing with patients, because mental health and treatment of mentally ill patients is not only about using psychotropics. Even after using psychotropics, they’ll start knowing that antidepressants are not dependent, they won’t make a person a zombie, after you start using antidepressants or antipsychotics. That will*

*address some of the issues. That's why it's important that we include psychoeducation”*  
(Participant 1)

While participants emphasized the importance of teaching and promoting psychoeducation to trainees, there was also mention that psychoeducation would be challenging and burdensome to doctor and health assistants:

*“I think there will be more of a problem when we will be talking about psychological approaches. We doctors, right from our training MBBS days, are very comfortable writing medications and prescriptions. But when it comes to talking to the patients and psychoeducation, non-pharmacological approaches to dealing with the patients, then maybe they will find it a little burdensome and time-consuming and unrewarding, especially in the initial days”* (Participant 11)

This sentiment was echoed by other participants, stating that doctors and health assistants wouldn't have the time needed for psychoeducation due to patient load, or wouldn't be able to have some psychoeducation techniques, such as eye movement desensitization reprocessing (EMDR), thoroughly explained to them during training.

#### *Role of Family and Caretakers*

A major area of manual contextualization brought to light by the informants is the need to consider the role of family members in mental health service delivery in Nepal. Five respondents remarked on differences between manual guidance and the Nepali reality regarding patient privacy and confidentiality:

*“I’ve read from American set-ups, so most of what I know particularly is from that. So I know what needs to be done.... [In Nepal] it’s a more family-oriented thing. So to say that, to maintain the privacy of the patient.... In general set-up, even with the patient of anxiety, the family needs to be included. Usually, the family is so protective of the patient, and so they want to come in, they want to share their experiences. I cannot just say “Stay outside. If I have permission from this patient, then I will talk to you.” .... If we do that, people won’t like it, because they are the primary caretaker....They have to buy the drugs, so who am I to tell them not to come inside? So I won’t do it.... So privacy and how much to tell the family members, I think that’s a bit different for us” (Participant 3)*

*“Basically, in our Nepali context, there is more family involvement, and people, still now they live with joint family or extended family. And most of the time, patients don’t come by themselves, they are brought by family members; unlike in Western settings, where patients most of the time come alone, and sometimes they are accompanied by family members. In the privacy and confidentiality part, they have given more emphasis to, like, try to talk as much as possible with the patient in privacy, and then if extra information is needed, then take help from family members. But here in our part of the world, even if the patient is educated, many of the times they hesitate to give the information themselves. And that is our experience. When we ask them about their symptoms, they look at their family members and say “You tell – I find it difficult to say”. So one thing is that. Another thing is that most of the information, family members know most of the information, because most of the time they live together. So I think, again, that’s important, like giving more emphasis to communication between, with the presence of both the caregiver and patient. And then whenever needed, or when the patient demands, then ask for private interviews with the patient or family member as well” (Participant 2)*

In group discussions during training, participants also pointed out the need to include family in order to understand the patient’s situation along with treatment and management needs. Following a presentation on suicide, one participant mentioned the need for family support following an attempted suicide. The need for family involvement and monitoring in regards to treatment and management was highlighted by participants during discussions on the issues of alcohol withdrawal symptoms and mixing of alcohol

and medication, as well as in the need to teach family members about deep-breathing techniques to treat depression.

### Less emphasis/reductions

#### *Principles of Protection of Human Rights*

Regarding existing content in mhGAP-HIG, participants in ToTS training that all of the content was important, necessary and appropriate, simply in need of contextualization or expansion for use in Nepal. The only topic that was identified as receiving too much attention in the manual was human rights. As one informant states:

*“Everything was very important – I guess that’s why it was included. But in our set-up, the thing that we discussed most, you know, the human rights portion. Because, yeah, we should try to do it, it’s always a concern, we should do it. But immediately to implement that – there’s no structure, you know.....[W]e know we should do it and we are not able to do it, so it’s a frustrating situation. And we know this has been an issue for long time, so it was included. It was very important, and there was a long discussion regarding this” (Participant 3)*

Although affirming the importance of the human rights aspect in general principles of care, respondents stated that in actuality, there is no time or structure available to enforce human rights advocacy and awareness.

### Modifications

### *Medication: List, Dosage, and Treatment Plan*

Much discussion surrounded the suitability of medication dosages and usages outlined in the manual. During training, participants raised questions about drugs listed in the manual and the National List of Essential Medicines versus medicines widely used or available in Nepal:

*“Some of the medications, they are not available in Nepal. So that is also a problem, that cannot work. So instead of that if there was an option of other drugs also. So this is the WHO, this [manual] was prepared for all the world, so they have to think about different countries. In certain countries, whether these drugs are available or not, if they’re applicable or not, these are also the things lacking over there” (Participant 4)*

*“Being specific, there is one drug, risperidone, added to the list, and we don’t use it over here. It’s supposed to be in the emergency medical kit, but for standard use, I’ve never used it. I’ve just read about it, I came to know that it’s in the WHO kit, but we use the other drug that is also mentioned. So other than adding something that we might not use, I suggested that we just scrap that and add an antipsychotic that we are much more likely to use” (Participant 3)*

A revised free essential drug list was developed, including five drugs listed in mhGAP. Of those five drugs, all were available at district hospital, one (diazepam) was available in primary health center level, and none were available in health post level. Even with this free drug list provided by the government, participants were still unconvinced that these drugs would be available in the health centers, that “free medicine is only on paper, not in reality.”

Another concern for participants is with the instructions for use of carbamazepine. In both interviews and group discussion, participants pointed out that when prescribed for

epilepsy, the manual states that carbamazepine is suitable for pregnant women, while valproate is not. In the depression section, however, it says that both carbamazepine and valproate should not be prescribed to pregnant women if possible.

Prescription of diazepam was also used as an example of the manual's lack of structured guidance for drug usage. Participants noted that the manual does not clearly instruct prescribers that diazepam should not be put in the patient's hands, particularly if there is a chance that the patient indulges in harmful use of alcohol. From the participants' perspective, more emphasis needs to be put in the manual to ensure that medication usage is thoroughly monitored and executed properly.

Dosage and tapering of medications were also discussed during training. In interviews, four respondents noted that dosages listed in the manual need to be modified for use in Nepal either generally, or specifically for trainees who are not MBBS doctors. One respondent highlighted the need to modify dosage due to alcohol use:

*“Regarding the use of benzodiazepines, I think that has to be tailored, because basically there is such heavy use of alcohol around our part, so mostly indigenous people, so I think that dose, in my clinical experience, that dose of 20-30mg, four times a day. And that they are given with severe alcohol use, life-threatening alcohol use, that's quite inadequate”* (Participant 2)

The tapering of benzodiazepines and anti-epileptics was also brought up in group discussion. Training participants noted that the manual didn't provide detailed instruction as to how to taper medicines, which may be difficult for trainees who are not used to prescribing and monitoring these medicines. Due to unfamiliarity or lack of experience

with medicine usage, dosage and monitoring, the state of availability of medications, and specific consideration regarding scenarios faced in Nepal with certain conditions and treatments, participants stressed that a more structured treatment plan is necessary for the mhGAP manual in order to assist non-specialists in adequate execution of drug prescription.

### *Language*

Participants mentioned the need to translate mhGAP-HIG into Nepali as one of the top changes needed for use with MBBS doctors and other health workers. When asked for suggestions to improve training or manual contextualization in interviews, five participants explicitly stated the need to conduct training in Nepali:

*“The most important part is the presentation...As Nepali is our first language, our mother tongue, despite education background, it’s difficult for everybody to speak in another language. So this is the major part, this presentation [in Nepali] added an increase participation of the trainee, because if they have to ask or reply to something, then it is quite difficult. Those whose English is poor, they hesitate” (Participant 4)*

One participant, however, stated that English terms for diagnosis should not be translated into Nepali:

*“My only concern is if we, over time, find different words – let’s say, find a Nepali word for anxiety, a Nepali word for depression, a Nepali word for PTSD – I would say that is not de-stigmatizing. I would prefer to use an English word as it is, saying “She’s depressed. She’s anxious. She has PTSD,” rather than finding a Nepali word. Because we will not stigmatize a language that is not ours. We will always stigmatize a term in Nepali language, because then we have our own conscious and we start making meanings out of it.... Let’s use the international words, as it is. That will help de-stigmatize. If*



*you say she has schizophrenia, rather than she is paagal [crazy], that is de-stigmatizing” (Participant 7)*

### Health system contextualization

Respondents commented on the need for consideration of the Nepali health system to be made when contextualizing mhGAP-HIG. Concerns centered around lack of resources, including the space and time available to conduct thorough patient examinations, and availability of certain diagnostic tests available in the health clinics in earthquake-affected districts, and the issue of MBBS turnover.

Issues of allocated space and time for interaction with patients was cited by multiple respondents. Informants explained the difficulty of thoroughly assessing and managing conditions as they are structured in the manual, specifically regarding the use of psychoeducation, due to the number of patients:

*“Obviously, if they have time and space, then they should follow the whole protocol, because that’s the ideal. And that’s a good thing to do. But when there is no such scenario, or time or place, then they should modify it according to the need. Because there are times when I had to see patients in a single table, sitting opposite from another psychiatrist, and we had to discuss with patients even when one could overhear another’s conversation. And that’s a sad thing, but we have to do it because we didn’t have any other options” (Participant 1)*

As previously mentioned, informants were concerned about the availability of drugs listed in mhGAP. Poor drug supply was also mentioned in terms of a more chronic feature in Nepal by six informants, who cited the interruption of medication flow as one

of the reasons for a resurgence of relapses following the earthquake. In group discussion about treatment and management of certain conditions outlined in the manual, the lack of diagnostic tests in villages or earthquake-affected areas was also brought to light. When speaking about epilepsy during group discussion, one participant asked about the availability of diagnostic tests; participants mentioned that major tests, such as EEG and CT most likely wouldn't be available, but smaller tests, such as standard blood tests and tests for hemoglobin and renal function, may be available. The question of diagnostic tests arose again when speaking about harmful use of alcohol:

*“While you're managing alcoholism and alcohol withdrawal in a community, we have to understand that even in the hospital, when you're managing cases like this, the patient goes into hepatic encephalopathy (HE). And you miss those cases – even while you're monitoring the liver function, the dyselectrolytemia, overall nutrition status, the patient goes into HE. So in this case, even in the community where in the hospitals you don't even have some of these minor tests, while using drugs that don't bypass the liver like benzodiazepines, which we are teaching right now, in this case, we have to explain to them that they need to take a lot of caution” (Participant 13)*

Monitoring for epilepsy and hepatic encephalopathy are stated in mhGAP-HIG, but participants showed concern as to the feasibility of monitoring or diagnosing these conditions without the proper diagnostic tools and tests at the health care workers' disposal.

The turnover of MBBS doctors is also a major issue in Nepal. Five respondents stated MBBS turnover as an obstacle to long-term implementation and sustainability of mhGAP-HIG:

*“Another [challenge] is that we are giving training to the health worker, to the doctor, but it’s not sure when this health worker, doctor, will be transferred from one place to another. Like, for example, if you are giving medical officer this training after 4 months, 2 months he works there, goes on leave for a few months and joins post-graduation program and becomes a surgeon. So that whole thing is gone. Sustainability is there, that means we are giving service, but there is no personal sustainability. That is the problem over here, especially doctor. I will say other health staffs, they may be from that side, but you know doctor, there is a problem. This is very major challenge. If we train one PHC doctor, one HA, they both are transferred then they will not, the model disappears also” (Participant 4)*

*“And another problem could be the change of doctors in the PHC setting, you know. Because once you train them and supervise them, and then they go to a different place, or they go for further education. And the whole thing goes to blank, the whole work goes to...it’s not totally wasted, but the objective is not met. Because you have to train, start training a new group of people, and that’s a different issue that we need to deal with” (Participant 1)*

Turnover of MBBS may influence the doctors’ motivation for training, as they are only posted in districts for two years following graduation; this would also lead to a need for continual cycles of mhGAP-HIG training in order to ensure that trained doctors are available in earthquake-affected districts.

### Feedback on Training of Trainers and Supervisors

In discussion and interviews, all participants offered positive feedback on the extensive active participation used in mhGAP-HIG training. Respondents highlighted the use of role play during training and how important it is to incorporate in their future position as trainers, as well as in their everyday interaction with patients:

*“If I had to pick [the most important skill from training], it was the role play. That was very good, because we did exactly how it should be, and sometimes watching ourselves or*

*watching our friends, we learn a lot, you know? Such as what the different things we need to correct are. So that was a good one”*

Six participants specifically gave positive feedback about ENACT evaluation in interviews:

*“The other thing is the use of standardized tools or simple tools. Like we learned about ENACT – it was such a simple tool for, let’s say, assessment or comprehensiveness of the program. So things like that. What it did was it helped us organize and give us an idea that if you want to help, what are the resources we have? What are the skills we need? And it just connected that, and I think that’s good” (Participant 7)*

*“So in our training, the training of trainers and supervisors, which areas do you remember from the training that you thought were maybe the most important? Like maybe modules or skills that we covered in it – what was the most important to you?*

*Most important is that ENACT, that ENACT form. How to interview, how to examine a patient, how to like, examine them from psychosocial point of view also. That was very good...Very informative. Even for us, we aren’t able to fulfill that ENACT form. You know, we are missing some points, and we are the psychiatrists. How can these people [non--psychiatrists], who don’t have the psychiatric knowledge, knowledge about mental illness, know how to talk to their patients? It’s very beautiful” (Participant 5)*

ENACT was described as a beneficial tool not only for non-specialists, but also as a reminder or refresher for the specialists as well. Following a thorough explanation of the use and evaluation of ENACT, participants strongly endorsed the utility of the tool.

Informants also gave positive feedback on the workshop environment within the training; however, they wished there was more group discussion and a more structured

workshop on manual contextualization, rather than the way in which contextualization discussions were simply embedded in the Training of Trainers and Supervisors:

*“I just wish that we focused a bit more on the technical aspect as well. Because we’re going to adapt the process. So everything was crammed in one day. Though we have done our MD and we are supposed to know about everything, I think when you discuss, when you prepare materials, it’s good to sit together and discuss, you know? More things come up that way, because, you know, if someone does not respond, you don’t know what’s happening. So when you’re sitting at a place and there is an opportunity, I think we should focus on that technical aspect as well. So, because everything was crammed, the whole session, the actual session where we would be training later on – I think that maybe could have been changed. That is one thing. Otherwise, the interaction, the process, everything was wonderful” (Participant 3)*

The only drawback that participants mentioned to the training was the amount of time spent presenting and covering the modules on Day 3 of training:

*“The problem is two people were presenting, but for others it was a routine thing, so it could’ve been just, we could’ve been given time a day back and just we had email facilities. We could’ve said “Ok, send the mails to everybody, just do the review,” and so we could’ve just discussed the summary, only the important point. So we could’ve done it in that way, rather than everybody taking 30 minutes at presenting it. We could’ve just reviewed within 10 minutes each, and then discuss for one hour for all, so that would have been useful” (Participant 11)*

*“Do you have any suggestions for improvement of the training that you went through in general? Like you could give some suggestions, some sandwich feedback?”*

*It was really helpful and it was conducted in a really good way. But like I said, instead of focusing more on the disorders, we could just focus more on how to present it and the things that could be added and could be taken out, so that would’ve made it even better. But all in all it was quite helpful” (Participant 13)*

While understanding the importance of being able to effectively present these modules to trainees as future trainers, participants were displeased with the lecturing

structure in which all participants listened to two presenters for 30 minutes as each module was presented, citing the activity as boring, time-consuming, and not group-oriented.

### *Benefits of mhGAP-HIG for trainees*

When asked how mhGAP-HIG would benefit future trainees, informants' responses focused on two areas: increased ability to identify and treat mental health presentations in primary health care, and improved patient-doctor interaction. Nine respondents mentioned that mhGAP-HIG training would increase non-specialists' understanding of mental health and capacity to address mental health conditions. Some respondents noted that the ability of non-specialists to differentiate between psychotic and neurotic disorders is beneficial as a step towards better understanding and identification of mental health conditions, while other respondents specifically mentioned the importance and benefit of non-specialists' ability to identify and treat mental health conditions when they are encountered in primary health care settings:

*“[mhGAP-HIG] is important because that will give them a sense of mastery over the area of the training where they are lacking – in MBBS training or HA training. And another thing is it will be helpful for them to deal with the patients on a day-to-day basis, because they will see at least 25-30% of people with mental health problems in their OPD [outpatient department], so probably they can do better, so that will be [good] for them” (Participant 8)*

Six respondents stated that mhGAP-HIG training would lead to improved patient-doctor interaction, highlighting the strengthening of communication skills and increased empathy:

*“I think that will be the same for MBBS, that they’ll know more about how to communicate. Especially with mental health patients, because communication skills are dismal, to say the least. The whole focus is on finishing up the patient. There’s such a patient load that we tend to forget the basic things like reaching out to the patient and being polite. So I think it might just remind them that this is a very important thing. And especially, I believe that the emergency set up, because you must have heard there are many fights in the emergency set up. Emergency as in the hospital emergency. So everyone is stressed, the health professional is stressed, he has not slept, and the patient is also stressed, the whole patient party...there are so many fights, so many disputes going on. So I think if they learn how to communicate better, that portion, that’s really important. Just follow through on that, I think it will really help to handle difficult patient parties” (Participant 3)*

*“Do you believe that mhGAP-HIG training, does it have benefits outside of mental health or humanitarian work? So in a personal setting, can it be helpful, can these skills and the modules be helpful...*

*Definitely yes, I would say. Because even in my training, in role plays and all, something which has to be done every day, it’s not only in psychiatry, not only in mental health, not only humanitarian crisis – but therapeutic relationship, good personal relationship, empathy. All these things are very important in day-to-day clinical practices” (Participant 11)*

*“This is a guide that is oriented around the very basic qualities that a physician needs. It is not just psychiatrists who need to build trust between the patient and the doctor. It is not just psychiatrists who need to empathize, to understand the patient. All doctors, all health care workers need to build trust, need to listen to [their patients], need to sit down and make them understand, and make them understand the real scenario, what are the possibilities that can be done to alleviate the problem. How one can be healthy in the long run, what are the things to be done, what are the things not to be done. What is the follow up, how we should follow up, These things like communication, assessment, management. And it doesn’t end with management. There is a lot more to go, even after management, according to mental health GAP. Human rights issues, strengthening social support, reducing stress. so that in the future, when there is a stressful situation, how to deal with it. What the person should do so that he doesn’t relapse, the disease doesn’t recur. So these issues are helpful for all health care providers” (Participant 10)*

## **3.2 Training Implementation**

### *Whom and How to Train*

Deciding whom and how to train in mhGAP-HIG was a major discussion both during training and in key informant interviews. Differences in levels of knowledge and prior training were concerns expressed by informants regarding how much information and where to place focus in trainings. Discussions about the level of knowledge of trainees occurred in two ways: training MBBS doctors versus other health workers – such as health assistants (HAs), community medical assistants (CMAs), and paramedics – and differing exposures to psychiatry during medical training for the MBBS doctors themselves.

Five informants stated that the manual provided too much detailed content for non-MBBS-level trainees, and stated the need to provide separate trainings for MBBS doctors and other health care workers, such as HAs or CMAs:

*“For MBBS, it will not be too difficult [to understand and use mhGAP-HIG]. We can teach them, we can make them understand. But for the level of CMA or HA, it might be difficult. It would be difficult, in what context? Like if I can teach for the MBBS in one hour, for the CMA, it will take 5 hours. Or 4 or 3 hours .... I have never trained CMA and MBBS together. I have held so many trainings before, regarding mental health, but it was different for the CMA, HA level. I have to do two presentations, like this is for the CMA/HA, this is ok, and this is for MBBS, this is ok” (Participant 14)*

Participants also cited uneasiness when it comes to non-specialists prescribing drugs for mental health conditions:



*“Well first, their prior experience with dealing with psychotropics [will be a challenge]. That will be a big thing, because usually MBBS are scared of using psychotropics, because they have a very...I think wrong information about them. Because they use so many hard drugs with several side effects, more than the psychotropics. They are confident in using those, but when it comes to psychotropics, people have a wrong concept, even doctors. That they’re very dangerous. And the first thing that I have experienced earlier is that people are very hesitant in starting drugs, increasing drugs, because of the side effects. They call for each and every increase in drug, and I think that’s the first problem” (Participant 1)*

Additionally, respondents believed that the use of drugs should be varied as to whether the prescriber is an MBBS doctor or an HA or CMA:

*“For CMA and HA, we have to outline specific symptoms, associated symptoms. These kinds of things should be separately done, I guess. So we have to teach them in a different way. For the MBBS, and for the CMA, HA, it will be a little bit different” (Participant 14)*

*“I think MBBS should be given the liberty to use a little more range of drugs than the HAs. Otherwise, I think it’s just a few medications, and hopefully the medications are available in the health post itself. Then it’s fine....If someone has to buy the medication from outside, then I think MBBS should be allowed to use them, too. So maybe we can just include a section for the MBBS and say that this is available, so if we’re not giving free medication, then they have to buy it, and we can suggest that they buy this. But not for the HAs. I think for the HAs, we should stick to the government plan, the free drug list, and then tell them whatever side effects may occur, and focus more on what can go wrong” (Participant 3)*

Concern about the disparate levels of exposure to psychiatry within MBBS level was also raised by informants. Three respondents expressed apprehension regarding the limited knowledge of psychiatry by MBBS in general, and seven other respondents addressed different levels of psychiatry knowledge presented in different universities:

*“So, like, regarding the MBBS, there is variation in the training, content of psychiatry text, and then in training, also, there is variability in different universities in Nepal itself and*

*many people have learned from outside, also. So I think it's difficult to say [what will be most important to trainees in mhGAP-HIG training]" (Participant 2)*

*"Yeah, because you know, like, medical schools, the curriculum has been so that there are two universities basically. One is Kathmandu University and the second is Tribhuvan University. And in [Tribhuvan University] curriculum there is more detail about the psychiatric diseases, their diagnoses, so they will be able to understand. But in KU curriculum, there is little regarding mental illness or psychiatry, so whether they are able to understand us....they don't know as much, they don't know the symptoms" (Participant 5)*

Differences in psychiatry exposure within the MBBS level led respondents to express concern over the varying levels of understanding and ability to implement of future mhGAP-HIG trainees.

### *Documentation*

The process of documenting cases and referrals was addressed by participants on the last day of training. Participants spoke to the fact that proper documentation has been lacking in Nepal, both in everyday work and even when required in additionally implemented programs:

*"In our part of the world, I have seen really mixed sincerity with documentation here. Like in my experience, there was this GIZ program for ORS [oral rehydration salts] therapy. There was this medical support unit and social support unit, and there were two different types of OPD tickets for that. But later, when people from Global Fund came to check those, none of the documentation was filled out like it was supposed to be. So we might face that issue"*

In order to improve the process of documentation, from health workers' lack of motivation or incentive to the added burden of work, different strategies were put

forward. Participants discussed ways in which documentation of mental health cases could be coupled with Health Information Management Services (HIMS) documentation, which is distributed and required to be filled out by the government. Adding a supplement to HIMS documentation specifically focused on mental health was suggested, along with the possibility of creating a carbon copy in order avoid the need for health workers to fill out two separate documents.

Minimizing the amount of time for recording information was also an aim.

Participants spoke about the importance of filling out the information in a timely manner, both to maintain fidelity and also due to the burden of everyday workload:

*“There’s this one PHC in Gorkha that is known as a model health post for its operation. I have seen there that they don’t fill the form out as soon as the patient leaves. They look at the patients, and in the evening, they go to registration and fill out those forms. And it could be wrong. I have seen this being done even right after the earthquake in that PHC”*

*“Well, they will be looking at a lot of patients. So when they are looking at the patient, there will be one patient inside, and outside will be 5-6 patients waiting. So you look at that patient, you send that patient away, and then you call for another patient. We cannot expect them to fill this out without looking at the patient, because there will be other patients waiting outside”*

The brainstorming session resulted in suggestions to partner with the government in order to share information from documents, hire or delegate the task of documentation to another worker, or reinforce the importance of documentation by including practice in the training itself, such as adding a question to ENACT or OSCE.

### *Supervision*

The final day of training involved a group discussion about the proposed supervision plan for trainees. During this discussion, a monthly in-person, facility-based supervision with trainees in earthquake-affected districts was agreed upon. Weekly phone calls or Skype sessions were also suggested, with many participants agreeing that weekly communication would be appropriate in the immediate weeks following training, but could be tapered off over time. Participants agreed that, in the first one or two weeks, supervisors should be available around-the-clock to field phone calls from trainees, as they begin to encounter mental health conditions and utilize mhGAP-HIG. Regarding emergency cases, participants suggested that trainees could be instructed that text messages, in addition to phone calls, are permitted; participants even suggested that a poster with emergency symptoms be created and hung in health centers, in order to assist trainees in identifying high-risk situations in which they should contact supervisors immediately.

Recording phone conversations, along with documenting information from phone calls, was also discussed. Participants agreed that recordings could be beneficial for use in the future as a tool for future trainers or in supervision of trainees. Additionally, participants suggested that additional information be gathered in addition to conversation content, such as duration and cost of the call. Documenting all of this information was deemed to be useful for future supervision, as well as useful information to report to the government in terms of finances. Participants suggested developing or downloading an

application in order to track and record this data, as supervisors and trainees alike are using smartphones.

### *Challenges in Humanitarian Context*

A major concern for respondents regarding the implementation of mhGAP-HIG training was where mental health fell on the list of priorities in the humanitarian crisis context. Eleven respondents alluded to the role of the government in training implementation. Informants noted the difficulty in implementation without government cooperation (n=8), citing lack of mental health awareness (n=6), psychosocial training not included in the list of priorities (n=5), and the government's role in logistics such as allowing health care workers to attend multiple-day trainings (n=2). As one informant commented:

*“...during post-earthquake scenario, people were much more aware about food, shelter. Those were the priorities, and last priority was mental health. And even the government authorities also, they don't have that much knowledge. “Why you need this mental health project?” When we went to Sindhuli, the CDO, Chief District Officer, said that, “Why you are bringing these things? There is no problem of mental health problems, psycho-social problems here. The problem is food, the problem is shelter. Why don't you bring these programs to our district?” There is no realization of the need of the psychiatric and psycho-social health in the district for the stakeholder, the intrinsic stakeholder. So that is the thing. Another thing is that with the government system, and they are basically focusing on only physical health. Less priority [to mental health] is given, no realization from the government level, central level. That is also the problem”*

Another area of concern for respondents is the availability of both trainees and trainers to engage in training. This concern was framed as both an issue of time, as

training removes doctors and specialists from their normal routines, and issues related to transportation or getting to the earthquake-affected districts for training. Regarding time issues, respondents pointed to the length of the training and the ability for trainers and trainees to leave their postings:

*“And then when we go to the district, again, you can’t call everyone working [in the district], “Come, come, we’re training you,” and things like that. So at the time maybe we can have 50% of the people who are available [for training]. So maybe, I don’t know, maybe you have to go a second time to do 100% training, or you could find a few people there as a focal person and then they’ll be responsible for that [second training]. So that’s another problem”* (Participant 8)

*“First of all is the scenario, with the affected areas, [trainers have] got to go over there, train 2--3 MBBS doctors, and they need to take out lots of time for that. And almost each and every psychiatrist who attended the training is very busy, and taking out around a week from every month, that’s a huge thing for them. And that’s the first problem I think we will face when we’re sending them, because most of them won’t be able to manage the time”* (Participant 1)

In addition to the availability of trainers and trainees to devote time to the training is the issue of transportation to trainings, a problem amplified by effects of the earthquakes, such as landslides, poor roads and aftershocks:

*“Also to get to areas, transportation difficulties, especially during the rainy season. There could be more disasters such as landslides in those communities that are already bad after earthquakes. So such issues will certainly come in implementing of programs. And regarding the supervision, too – frequency of follow up, supervision threshold, medication threshold”* (Participant 6)

*“The 37 kilometer road from Bharatpur to Mugling, that is very dangerous for landslides. And people have been saying that when they look up to the sky, they see a lot of like, possibilities of landslides. So that area has been very bad, it has a bad land for landslides. So we are having difficulty, we are worrying about traveling, so how would other people...? On top of*

*that, the roads are not good. This will add to all of us, our work of going to the training places, the people coming to us. Or taking materials and drugs, health, manpower to the community. All things will be affected” (Participant 10)*

### *Implementation Barriers and Challenges for Trainees*

While some participants spoke of the potential wariness of prescribing drugs, either due to fear or unfamiliarity with the drugs, other participants noted that they expected trainees may not show trepidation and tend to over-prescribe medications:

*“There could be a risk of over prescription because psychiatry has been accused in the past of medicalizing normal human emotions. There might be some truth to that, but in the case of untrained professionals who are basically untrained in mental health, there is a high risk of over prescription and over-medicalizing normal human emotions, human interaction. So there is a little bit of apprehension regarding that” (Participant 13)*

### *Stigma*

Stigma towards mental health was addressed by 13 respondents. All of these respondents indicated that stigma is a major problem in Nepal. Regarding the impact of stigma on delivery of mental health services in primary health care, one respondent believed that the level of stigma would not change, while nine respondents showed optimism about the potential of stigma to decrease through the integration of mental health care in primary health care settings:

*“...The main problem is when you’re just dealing with a mental health patient, then it’s like, oh, you’re just looking after mental health patients. But otherwise, if you go to the hospital, if it’s a general hospital, and all sorts of patients are coming, I think then it’s not a problem. But*

*if you go to a specialist, a mental health care facility, then it's a bit different. People tend to look at it a bit differently. But in the general PHC, in the health post, all sorts of patients come, so I don't think that will be a problem. Especially in that setting" (Participant 3)*

*"So one of my concerns that I have always had, and also raised in this training, is of that fear factor that people have regarding mental illness. I think, even now also, many of the friends who have trained these paramedics also have said they had the experience, that [paramedics] have entered the training with a fear of mental illness. Many of them are reluctant to diagnose or even to prescribe medicines" (Participant 2)*

Another respondent felt that including mental health in primary health care, if training of non-specialists is done properly, could decrease stigma; if non-specialists do not provide adequate mental health services to patients, however, stigma towards mental health could increase among the population.



## **4. Discussion**

Major findings from this research are taken into consideration under one, if not multiple, of three categories: cultural, health systems, and humanitarian contexts. Understanding and tailoring of mhGAP-HIG to these three areas will add not only to more effective training in mental health care knowledge for non-specialists, but more effective service delivery to patients.

### **4.1 Adaptation: Cultural Context**

Changes must be made from the standpoint of cultural contextualization in order to lead to more effective implementation of mhGAP-HIG. More focus needs to be placed on conditions that are widely encountered in Nepal, along with more detailed knowledge on how to diagnose, treat and manage these conditions within the Nepali context.

Informants overwhelmingly stressed the need for the addition of a module on generalized anxiety disorder. Anxiety was cited as one of the most common, if not most common presentation following the earthquakes; it was also stated to be more prevalent in women. A 2009 study on gender and anxiety showed that there was a high prevalence of anxiety in women in rural Nepal, even in the absence of a humanitarian crisis (Kohrt & Worthman, 2009). Additionally, respondents noted the need to cover generalized anxiety in training as it has been encountered much more than PTSD, a condition which is heavily focused on in post-disaster settings. In a prospective study comparing anxiety and depression rates before and after the Maoist conflict in Nepal, Kohrt and Hruschka (2012)

found the risk of anxiety to be three times higher following the conflict, and the increased anxiety to be related to conflict trauma itself, while the smaller increase in risk of depression in the post-conflict period to be regardless of post-conflict trauma (Kohrt and Hruschka, 2012). The frequency of anxiety as a major presenting condition before, and increasingly after the earthquakes, highlights the importance of a separate module, and keen focus on, generalized anxiety in mhGAP-HIG.

Discussion of alcohol use dominated in key informant interviews, covered under numerous themes such as symptoms common in post-earthquake Nepal, overall common conditions in Nepal, areas of concern for misdiagnosis, over-diagnosis or under-diagnosis, concerns about treatment and management, and an area in need of additional content in mhGAP-HIG. In the post-earthquake context, respondents have noted an increase in alcohol consumption and considered this a coping mechanism. Increased alcohol consumption, and the notion of alcohol use as a coping mechanism, has also been cited in studies of internally displaced refugees in Nepal (Luitel et al., 2013) and Georgia (Roberts et al., 2014).

Alcohol use is complex in Nepal, as it is closely linked with caste and often used in cultural and religious traditions. Nepali society is often separated based on alcohol use – different castes and ethnicities fall into the categories of *matwali* (traditional alcohol users) and *tagadharis* (traditional non-users of alcohol) (Dhital, Subedi, Gurung & Hamal, 2001). Additionally, there are different categories of alcohol in Nepal, including home-brews made from rice and millet, such as *chhang*, home-distilled alcohol known as *raksi*, and commercial alcohol. Despite changes in social tolerance and modern alcohol

consumption among both traditional users and non-users, this separation is deeply embedded, shown by the informants' responses regarding concern of over-diagnosis of harmful use of alcohol in patients from castes or ethnicities that traditionally use alcohol, and under-diagnosis of harmful use of alcohol in patients from castes or ethnicities that traditionally do not use alcohol. While social tolerance and acceptability for alcohol consumption may lead to higher risk of harmful use of alcohol in populations, cultural norms and traditions, without proper medical assessment, should not be a driving factor in the diagnosis of harmful use of alcohol (Kohrt and Patel, forthcoming).

Additionally, respondents showed concern regarding under-diagnosis of harmful use of alcohol in females. According to the 2004 WHO Global Status Report on Alcohol, alcohol use is higher in rural settings than urban settings in Nepal, where more than one-third of women are found to consume alcohol (WHO, 2004). As many earthquake-affected districts are in rural areas of Nepal, respondents felt that mhGAP-HIG needed to incorporate more cultural context, including information on local types of alcohol and information about alcohol use among traditional non-users of alcohol and women. Respondents also expressed a need to expand upon the concept of tapering in the manual, as mhGAP-HIG gives no explicit instructions on how much, and how often, patients should be tapered off of medication following withdrawal. Also worrying to respondents is the lack of caution in the manual regarding prescribing benzodiazepines to chronic users of alcohol. These cultural considerations surrounding alcohol use should be addressed in the manual in order to assist non-specialists in the identification, treatment and management of harmful use of alcohol.

The need for additional information and exposure to conversion disorder for non-specialists were also strongly encouraged by psychiatrists. Conversion disorder is defined as a disorder with underlying psychological factors in which symptom(s) affect motor or sensory function, are not feigned, and cannot be explained by a general medical condition (American Psychiatric Association, 2000). Conversion disorder was one of many areas of revision from DSM-IV to DSM-V. Major revisions made include the additional title “Functional Neurological Symptom Disorder,” more focus on the significance of neurological examination of patients, and acknowledgement of the fact that some psychological features may not be demonstrated by the patient during consultation (American Psychiatric Association, 2013).

The mhGAP-HIG does not specifically mention conversion disorder; the “Other Significant Mental Health Complaints” section acts as a catch-all for mental health complaints including somatic complaints with no physical causes, along with mood and behavioral changes. This leads to great difficulty for non-specialists to diagnose conversion disorder. For respondents, this was a major issue due to the high prevalence of conversion disorder reported in Nepal. Conversion disorder is often reported and diagnosed in Nepal, among various demographics. Research has shown a pronounced prevalence of conversion disorders among Bhutanese refugees (Van Ommeren et al. 2001), along with common occurrences of mass hysteria among adolescent girls (Sapkota 2008, Sharma et al. 2010).

Additionally, respondents highlighted the tendency to diagnose conversion disorder more often in females. Higher rates of diagnoses of conversion disorder in

women have also been shown in other parts of South Asia, including India (Deka 2007, Chaturvedi 2010) and Sri Lanka (Somasundaram, 2008). Informants stated that they believed conversion disorder was actually over-diagnosed in women in Nepal. Therefore, non-specialists must have exposure to content specifically concerning conversion disorder in order to identify and diagnose such a condition that is commonly presented, and possibly over-diagnosed in females, in Nepal.

In addition to the initial diagnosis, respondents raised concern about the misdiagnosis of conversion disorder, particularly with psychosis. While conversion disorder may occur in conjunction with psychosis, and may involve overlapping presenting complaints such as abnormal behavior, strange beliefs, and hearing voices or seeing things – all listed under the “Psychosis” section of the manual – a patient with conversion disorder is not always psychotic as well. This renders the inclusion of symptoms of psychosis in the manual that overlap with symptoms of conversion disorder – without a separate section addressing conversion disorder – misleading, and potentially leading non-specialists using mhGAP-HIG to incorrectly attribute symptoms of conversion disorder to psychosis.

Conversion disorder and somatic complaints should, however, be considered as potentially comorbid with common mental disorders. A study conducted in rural Nepal showed that rates of common mental disorders such as anxiety, depression and PTSD coexist, and are significantly higher, in females with conversion disorder than in those without (Sapkota, 2008). In regards to somatic complaints more broadly, one study in Nepal has shown a high level of psychiatric comorbidity, including anxiety and

depression, with the physical symptom of *djum djum*, or parasthesia (Kohrt 2005). This raises the importance of ensuring that other mental health conditions are assessed in conjunction with somatic complaints and conversion disorder, rather than misdiagnosis, or lack of diagnosis altogether, due to the oversight of possible comorbidities.

Reframing of patient-doctor communication is another area that respondents felt needed revision in the mhGAP-HIG. While Western societies tend to favor patient-centered care along with privacy and confidentiality, research in Nepal shows the preference for doctor-centered care and the inclusion of family members or caretakers in the consultation process (Moore, 2008). Patient-doctor interaction in Nepal was witnessed first-hand during observation of an MBBS doctor at the district hospital in Gorkha. During the 2-hour shift, approximately 25 patients were seen. Consultations were brief, generally consisting of a few questions, diagnosis and medication prescription or referral to another department. All patients were accompanied by a family member or caretaker, who often explained the patient's symptoms and to whom the patient's diagnosis and management instructions were explained, with the patient's input often limited to answering assessment questions in order to corroborate the caretaker's description. Additionally, while observing referral of psychiatric cases during supervision in Chitwan, all patients were accompanied by a family member who did the majority of talking by explaining the patient's symptoms and history, with input from patients to verify information and answer follow-up questions.

In the case of some mental health conditions, such as psychosis, it may be more beneficial to receive input from a caretaker who has close contact with the patient, in case

the patient is unfit or unable to speak for himself. As Nepali families are in close contact and patients often live with, or are frequently visited by, family members, caretakers' descriptions of patients' behavior and history are taken to be accurate and useful in assessing a patient's condition. For these reasons, respondents stated that the Nepali version of mhGAP-HIG needs to stress inclusion of caretakers in the assessment, treatment and management processes. Instruments such as ENACT, a tool to evaluate competency of non-specialists in delivering mental health services, has been piloted and used in the Training of Trainers and Supervisors as a means to improve patient-provider interaction and care in the Nepali context, and should be incorporated into non-specialist mental health training (Kohrt, 2015).

With concerns of overburdening health workers in daily activities, along with mhGAP-HIG training and implementation, health workers' ability to adequately address human rights issues in the post-earthquake context is questioned.

There is a question of whether it is the duty of MBBS doctors or health assistants to be the advocates of human rights. Human rights advocacy is not generally considered to be part of the responsibilities, and separate from the services provided by health care workers. Additionally, there is a history of tension regarding health care practitioners and human rights. During the Nepalese Civil War, health professionals were faced with prosecution by the government for treating rebels, going against the Hippocratic Oath and the upholding of international medical ethics standards (Singh, Dahal & Mills, 2005). Without a background in human rights advocacy, or the environment, time and infrastructure to integrate advocacy into the normal routine for health care workers, the

human rights component of the mhGAP-HIG may not be practical. The time spent during training on this section, especially when time is already constrained in the post-disaster setting, along the suitability or feasibility of human rights advocacy to be implemented by trainees without any past experience of advocacy, is a consideration that needs to be addressed.

Finally, translation of the mhGAP-HIG is required to make the mhGAP-HIG more accessible to non-specialists. Although MBBS doctors are educated in English, a manual and training in the local language would allow recipients to be more engaged in the training process and discussions that may arise regarding manual content. Other cadres of human resources for health in Nepal who are to be trained in mhGAP-HIG, such as health assistants and community medical assistants, often are not educated in, or fluent in, English; translation into Nepali language will help increase comprehension among these health care workers. Additionally, symptoms and content related to assessment of mental health conditions require the use of Nepali, as the majority of patients being seen in earthquake-affected districts are also not knowledgeable of English-language terms in mental health. Research has shown that various terms and idioms of distress in Nepali language are used in order to elucidate psychological trauma, and linguistic and cultural understanding may bolster communication with patients (Kohrt and Hruschka, 2010); this study also noted the impact of stigma as it relates to the utilization of different idioms in understanding, explaining and assessing mental health conditions. For these reasons, translation of mhGAP-HIG materials, along with inclusion of local terms and idioms for distress and symptoms related to mental health conditions in



Nepali, is essential. The need for translation into the local language has been echoed in contextualization reports of mhGAP materials in other countries, such as Sri Lanka and Nigeria (Siriwardhana et al., 2016, Abdulmalik et al., 2013).

## **4.2 Adaptation: Health System Context**

The health system in Nepal calls for the need for mhGAP-HIG contextualization. Specifically, changes to the manual must reflect issues such as adequate comprehension of manual content by those health care workers who will be on the front lines using mhGAP-HIG and inclusion of medicines available and widely used in Nepal.

Training for mhGAP-HIG is planned for a variety of non-specialists with various levels of education, such as MBBS doctors, HAs, CMAs and paramedics.

Comprehensibility of the manual content for these diverse human resources for health in Nepal must also be considered when addressing contextualization/usability of mhGAP-HIG, along with its effective implementation. The number of health care worker staff from these different cadres varies based on location and type of health care facility.

Paramedics are the largest cadre in terms of number and outreach, while MBBS doctors tend to be primarily located at district hospitals (MoHP, 2013). In Nepal, and especially in areas such as the earthquake-affected districts, non-MBBS health care providers tend to be at the front line. To account for this, mhGAP-HIG content and training materials must be tailored to reflect the level of knowledge of those who will be on the front lines of delivery. Respondents addressed the usability or feasibility of mhGAP-HIG materials in numerous ways: many cited the need for longer, more in-depth training for non-MBBS

trainees, expressed doubt over whether the manual content would be comprehensible to non-specialists as it stands, and also showed concern about the feasibility and/or comfort of non-specialists when it comes to prescribing treatment or avoiding misdiagnoses due to the manual's lack of specific information on specific conditions and lack of structured treatment plans. A study in Ethiopia also cited the lack of detailed treatment guidelines as a challenge to the feasibility of using mhGAP to integrate mental health into primary health care (Abera et al. 2014). In order to effectively introduce mhGAP-HIG to these various non-specialists, revisions to the manual are necessary to increase competency in implementation.

Revisions to the medications listed in mhGAP-HIG are also necessary. As participants pointed out, there are either drugs listed that are not available in Nepal, or in some cases, there is an alternative drug that is widely available or used that could be substituted for one listed in mhGAP-HIG. In addition, while drugs listed in mhGAP-HIG that are included in Nepal's free drug list are available in all district hospitals, they are not available in other facilities such as primary health centers or health posts. A shortage or absence of drugs listed in mhGAP-HIG at health facilities renders treatment plans impractical in many of the front lines of health care delivery in Nepal, and especially in earthquake-affected districts. Availability of medication has also been shown to be an issue in Mozambique despite a drastic increase in human resources for mental health through task-shifting (Santos et al., 2016). Therefore, it is essential to update the medications listed in mhGAP-HIG to reflect availability of medications in Nepal, and to ensure that health facilities frequented by patients also have these medicines on hand.

### **4.3 Adaptation: Humanitarian Context**

While the manual was developed for use in humanitarian settings, there are areas that still need to be addressed or revised for more effective implementation. Selection of modules covered in mhGAP-HIG need to reflect the time of trainings conducted, and feasibility of addressing content, in post-earthquake Nepal. With the trainings of non-specialists planned for August and September 2015, or 3.5-5 months following the earthquakes, some of the modules covered in mhGAP-HIG are no longer applicable, such as acute stress disorder and grief. Other conditions covered in mhGAP-HIG which respondents noted would continue even after the initial post-earthquake period, along with conditions that would begin to develop, should receive more focus; examples include PTSD, harmful use of alcohol, and conversion disorder. Additionally, respondents stressed that a module on anxiety should be included in the manual, as it was the most commonly cited presentation following the earthquakes and expected to continue presenting. Respondents also expressed doubt regarding the feasibility of non-specialists to address human rights issues in post-earthquake Nepal; while regarded as an important topic, respondents didn't believe that non-specialists would have the time or resources to address this issue.

Time constraints due to the immediacy of training and implementing mhGAP-HIG following the earthquakes also contributed to the need for revisions to the manual and its implementation. Manual contextualization and development of a supervision schedule had to be embedded within the Training of Trainers and Supervisors, rather than conducted separately; this addition resulted in truncation of the 4-day training and

contributed to the respondents' feedback regarding the large amount of content that was crammed into the short training. A pilot psychological first aid (PFA) training, conducted following the 2010 earthquake in Haiti, also detailed the need to shorten the length of training, in addition to using condensed materials, due to time constraints resulting from earthquake chaos (Schafer et al., 2010). The need for quick training in the post-disaster setting also led to other issues in the planning process for the training, such as the inability to distribute mhGAP-HIG training materials to participants in advance in order to ensure proper and thorough exposure to training content.

The priority of mental health in post-disaster settings was also an issue. On the one hand, the earthquakes opened a window of opportunity in which awareness of mental health could be raised and training could be done in order to integrate mental health into primary health care (Epping-Jordan et al., 2015, Shrivastave 2015, Ventevogel, 2012). On the other hand, the implementation of training has been delayed due to focus on other priorities, such as providing shelter and attending to physical health; this led to the respondents' discontent with the government's response and doubt that mental health ranked highly on the list of priorities after the earthquakes. Discussions on mental health priority of governments have previously taken place and cited as evident due to the lack of government budget allocation towards mental health care (WHO, 2011).

In one earthquake-affected district, the role of government involvement was observed in the implementation of training. A meeting with a district public health officer led to the decision that mhGAP-HIG training needed to be delayed due to more pressing issues, such as a vaccination/immunization campaign, along with the continuation of

other health and infrastructure-related programs in the district. A stakeholder meeting was held involving local government officials and non-governmental organizations working in mental health and psychosocial support in order to report on the importance of addressing mental health in the post-earthquake setting and fielding questions from stakeholders regarding the status of mental health in the district and the proposed training. This meeting confirmed the need and acceptance of mhGAP-HIG training in the district, but was followed by more delays in training implementation.

#### ***4.4 Limitations and Further research***

Limitations to this study include the number and scope of participants and time constraints for training and the contextualization workshop. Informants were limited to those who participated in the Training of Trainers and Supervisors, and did not include future trainers who were not present at this training, non-specialist health care workers, government officials such as District Public Health Officers, and other stakeholders such as coordinators from organizations such as International Medical Corps or the Department for International Development. There is also a lack of gender diversity, as there was only one female participant, which may have influenced results. Due to the time constraints regarding rapid training and implementation following the earthquake, the contextualization workshop was embedded within the Training of Trainers and Supervisors rather than conducted separately and more thoroughly.

Further research should include follow-up interviews with participants who have worked as trainers and supervisors for the mhGAP-HIG trainings. Non-specialist trainees should be interviewed to determine the comprehensibility, acceptability and feasibility of

the contextualized mhGAP-HIG. Pre and post-tests for mhGAP-HIG training, along with other evaluation tools such as ENACT, along with documentation on trainees' diagnoses and referrals, should be analyzed to evaluate effectiveness of the mhGAP-HIG training.

## **5. Conclusion**

The study has shown a need for mhGAP-HIG contextualization in three areas: culture, health system and humanitarian settings. Key cultural contextualization includes more focus on common conditions presenting in post-earthquake Nepal, patient-provider interaction as pertains to caretaker involvement, and translation from English into the local language. Considerations for health system contextualization includes revision of medications listed mhGAP-HIG in order to reflect availability in Nepal, along with revision of manual and training content to be comprehensible and feasible for a number of frontline health care workers. Key areas of humanitarian contextualization include manual revision in order to reflect conditions presenting at the time of mhGAP-HIG implementation, changes in regards to time and resource constraints, and the need to keep and advocate for focus on mental health on the list of priorities following a humanitarian crisis. This research shows the feasibility of rapid contextualization in a humanitarian setting and highlights the need for generalist documents or materials to be contextualized in order to be most effective.

# Appendix A

## Interview Guide: mhGAP-HIG Training of Trainers and Supervisors

### I. Prior experience

1. How long have you worked in as a psychiatrist?
2. Is this your first experience working in a post-disaster setting? If not, can you describe your prior experiences (location, how long, type of disaster/humanitarian crisis)? Are there any expected/anticipated differences between the Nepali earthquake response/environment and the responses/environments that you have previously worked in?
3. Is this your first (mental health? Humanitarian crisis?) **training** experience? If not, what other training have you had before? How is this different than those in the past?
4. Is this your first experience using mhGAP materials? mhGAP-HIG? If not, when else have you used it?
5. Have you used other materials similar to mhGAP in the past? Which materials? (Post-training: Do you find any other tools/materials more suitable for the Nepali context, or a good addition, to using mhGAP only?)

### II. mhGAP-HIG training

1. What is your overall opinion of the mhGAP-HIG training?
2. In your opinion, what are some problems or areas of focus that you think will be present in the Nepal post-earthquake victims/survivors? Do you think this is true specifically in the Nepal case, or for humanitarian interventions in general?
3. Which areas do you perceive to be the most important training modules/skills learned in mhGAP-HIG training?
4. Which areas do you believe to be the least applicable modules/skills in the Nepal post-earthquake context?
5. Are there any modules or skills that you believe should be expanded upon during this training? Is this a general belief or is it particular to the post-earthquake situation?
6. Are there any modules or skills that you believe should be reduced (less time spent on) during this training? Is this a general belief or is it particular to the post-earthquake situation?



7. Do you foresee any difficulties or barriers to implementation of mhGAP-HIG in post-earthquake Nepal? If so, can you give specifics/examples?
8. Do you believe that mhGAP-HIG, as it stands today (language of materials, role plays, type of instruction, focus of skills, etc), is appropriate in the Nepali context?
9. Do you have any suggestions for improvement of mhGAP-HIG training in general? Specifically in the Nepal context?
10. As trainers, what do you see as the perceived importance of mhGAP-HIG training for trainees? Do you think trainees will have specific areas of mhGAP-HIG that they find more applicable or important for their work? If so, describe.
11. What do you believe will be some of the difficulties of mhGAP-HIG training for the trainees?
12. Do you believe that mhGAP-HIG training has benefits outside of mental health/humanitarian work? In a more personal setting? How have skills learned in training been helpful in other areas?

## Appendix B

Table 1. List and affiliations of participants in Training of Trainers and Supervisors

<b>Participant no.</b>	<b>Practicing in Kathmandu</b>	<b>Current primary affiliation</b>
1	Yes	Non-governmental organization/private practice/multi-lateral organization
2	No	Academic institution
3	Yes	Non-governmental organization/private practice
4	Yes	Non-governmental organization
5	Yes	Government psychiatric facility
6	Yes	In residency
7	Yes	Recent graduate/Academic institution
8	Yes	Government psychiatric facility/multi-lateral organization
9	Yes	In residency
10	No	Government hospital
11	Yes	Academic institution
12	Yes	Academic institution
13	Yes	Academic institution
14	No	Government hospital
15	No	Academic institution

Table 2. Training of Trainers and Supervisors Schedule

ACTIVITY	DESCRIPTION	TECHNIQUE	LEARNING OBJECTIVE
<b>Day 1</b>			
Inauguration	WHO and TPO welcome		
Pre-Test	A brief pre-test (as a follow-up to the online ones)	Modeling	Psychiatrists explain reasoning for pre-/post-tests and perform standardized administration procedures
Objective of ToTS	Describe background and purpose of mhGAP-HIG in the context of humanitarian response (IASC guidelines and principles and role of psychiatrists; building back better <sup>1</sup> ; MH systems building); Roles and responsibilities; and 40 competencies in 4 days	Modeling;	Psychiatrists explain purpose of mhGAP-HIG and post-earthquake program in Nepal (detection, management, promote recovery, harm risk reduction, and long-term MH systems strengthening)
Personal Introductions	Participants pair up and learn each others' name, hometown, what they are already doing in earthquake and mental health response; expectations; and who you would be if someone famous	Buzz-groups; Ice-breakers; Free-listing	Psychiatrists conduct introduction sessions and collect participant expectations; Psychiatrists perform buzz-groups, ice-breakers, and free-listing exercises
Introduction to Facilitation Skills	Provide overview of lectures, role-plays, group work, buzz groups, problem based learning (PBL), etc.; discuss different types of training materials; ask about successes and challenges in prior training facilitation	Free-listing; Advantages/disadvantages (problem-solving)	Psychiatrists perform basic facilitation techniques (lectures, group work, etc.)
Barriers to Successful Trainings	Barriers and mitigation strategies – brainstorm and make free lists of potential barriers, then develop potential mitigation strategies, review pros and cons, decide upon priority mitigation strategies	Problem-solving techniques; Free-listing	Psychiatrists perform problem-solving techniques; Psychiatrists address barriers to training and develop mitigation strategies
Planning a training	Use PBL techniques to figure out steps to plan and implement a training for MBBS in earthquake-affected areas; incorporate prior training experiences	Problem-based learning	Psychiatrists lead PBL (problem-based learning) sessions; Psychiatrists plan MBBS training sessions
Day 1 Summarize	A pair of participants will summarize the day including which learning objectives were accomplished; they will also demonstrate feedback techniques by using the sandwich method: constructive feedback, areas for improvement ( <i>suggestions for tomorrow</i> ), constructive feedback	Giving feedback (sandwich method); conducting summary session	Psychiatrists give feedback using sandwich technique; Psychiatrists connect activities and learning objectives
Assign Homework	Read mhGAP-HIG; prepare role-plays for communication skills	Modeling	Psychiatrists assign homework to achieve learning objectives; Psychiatrists use role plays as a facilitation skill
<b>Day 2</b>			
Day 1 Recap and review of Day 2 schedule	Review Day 1 highlighting what learning objectives were discussed, outline goals for Day 2 and highlight upcoming learning objectives	Facilitation	Psychiatrists facilitate consolidation of learning; Psychiatrists draw attention to upcoming learning objectives

<sup>1</sup> World Health Organization (WHO): Building back better: sustainable mental health care after emergencies. Geneva: WHO; 2013. [http://www.who.int/mental\\_health/emergencies/building\\_back\\_better/en/](http://www.who.int/mental_health/emergencies/building_back_better/en/)

ACTIVITY	DESCRIPTION	TECHNIQUE	LEARNING OBJECTIVE
Setting up MH services and logistics in clinics	Review roles and responsibilities; include referral systems	PBL	Psychiatrists outline integration of MH in primary care including roles, responsibilities, and referrals
Process Documentation	Supervision, reporting, outputs, quality	Modeling	Psychiatrists describe documentation procedures and are familiar with proper forms
General Principles of Care (GPC) – Part 1	Communication (Common factors); Assessment skills; Psychoeducation pieces, ENACT,	Modeling; Role-plays	Psychiatrists teach (1) Communication skills, (2) Assessment Skills
GPC- Part 2	Management, Social support, Relaxation techniques, human rights, overall wellbeing; More ENACT	Modeling; Role-plays	Psychiatrists teach (3) management skills, (4) reducing stress and strengthening social support, (5) human rights, and (6) overall wellbeing
Problem-based matrix	Introduce Nepali problem-based matrix	Modeling	Psychiatrists demonstrate use of the Nepali problem-based matrix for HIG
Module: Anxiety	Trainers provide modeling example for trainees by teaching Anxiety	Modeling	Trainers model module presentations by teaching assessment and management of Anxiety, and psychiatrists provide feedback
Day 2 Summarize	A pair of participants will summarize the day including which learning objectives were accomplished; they will also demonstrate feedback techniques by using the sandwich method: constructive feedback, areas for improvement ( <i>suggestions for tomorrow</i> ), constructive feedback	Giving feedback (sandwich method); conducting summary session	Psychiatrist summarize, connect with learning objectives, and use sandwich method for feedback
Assign HW	In teams of 2, prepare teaching for remaining mhGAP-HIG modules	Modeling	Psychiatrists assign feasible homework connected to learning objectives
<b>Day 3</b>			
Day 2 Recap	Review Day 2 highlighting what learning objectives were discussed, outline goals for Day 3 and highlight upcoming learning objectives	Facilitation	Psychiatrists consolidate learning and highlight upcoming learning objectives
Module: Acute stress & grief	Teach acute stress & grief modules	Facilitation	Psychiatrists teach assessment and management of Acute Stress & Grief and provide feedback to presenters
Module: PTSD	Teach depression module	Facilitation	Psychiatrists teach assessment and management of Depression and provide feedback to presenters
Module: Psychosis	Teach PTSD module	Facilitation	Psychiatrists teach assessment and management of PTSD and provide feedback to presenters
Module: Epilepsy	Teach psychosis module	Facilitation	Psychiatrists teach assessment and management of Psychosis and provide feedback to presenters
Guest Presentation	Guest presentation by Nepali psychiatrist practicing in the US on child and adolescent mental health	Case-based learning	
Module: Substance	Teach epilepsy/seizure module	Facilitation	Psychiatrists teach assessment and management of Epilepsy/seizure and provide feedback to presenters
Module: Somatic	Teach harmful use of alcohol module	Facilitation	Psychiatrists teach assessment and management of Harmful use of alcohol and provide feedback to presenters
Module: Suicide	Teach suicide module	Facilitation	Psychiatrists teach assessment and management of Suicide and provide feedback to presenters

ACTIVITY	DESCRIPTION	TECHNIQUE	LEARNING OBJECTIVE
Day 3 Summarize	A pair of participants will summarize the day including which learning objectives were accomplished; they will also demonstrate feedback techniques by using the sandwich method: constructive feedback, areas for improvement ( <i>suggestions for tomorrow</i> ), constructive feedback	Facilitation	Psychiatrist summarize, connect with learning objectives, and use sandwich method for feedback
Assign homework	Groups are divided up to work on: facility supervision, remote supervision; peer supervision	Facilitation	Psychiatrists assign feasible homework connected to learning objectives
<b>Day 4</b>			
Day 3 Recap	Review Day 3 highlighting what learning objectives were discussed, outline goals for Day 4 and highlight upcoming learning objectives	Facilitation	Psychiatrists consolidate learning and highlight upcoming learning objectives
Introduction to Supervision	Free-list elements and forms of supervision; didactics on purpose & parameters of supervision	Free-lists; Modeling	Psychiatrists define supervision, its objective, and explain this to MBBS
Supervision tools	Handout and review tools and purposes	Lecture; Modeling	Psychiatrists familiarize themselves with, and use, basic supervision tools and documentation
Post-Test	Conduct post-test based on online exam and ENACT.	Facilitate evaluation	Psychiatrists explain rationale for evaluations, increase motivation for participants to properly complete evaluations, administer evaluations in a standardized fashion, and conduct an observed structured clinical evaluation (OSCE)
Supervision of Supervisors	Group discussion on needs and format for weekly supervision of supervisors	Free-list; brainstorming	Psychiatrists improve skills through supervision of supervisors
Emergencies and referrals	Review emergency and referral pathway	Group review	Psychiatrists provide supervisees with referral support, and psychiatrists will demonstrate how to seek support for referrals
Supervision schedules	Group brainstorming on supervision schedules	Group work	Psychiatrists develop supervision plans and schedules
Supervision barriers and mitigation strategies	Barriers and mitigation strategies – brainstorm and make free lists of potential barriers, then develop potential mitigation strategies, review pros and cons, decide upon priority mitigation strategies	Problem-solving techniques; Free-listing	Psychiatrists use problem-solving techniques to identify potential barriers and develop mitigation strategies
Review of logistics	Group discusses logistics to implement training and supervision in earthquake-affected districts	Group discussion	Psychiatrists summarize logistics and plan for training and supervision of MBBS
Feedback Session	Participants point out things they have learned and areas where they would like to learn more or develop more skills	Giving supportive feedback	Psychiatrists facilitate consolidation of knowledge and areas for future development using closing feedback sessions
Closing and presentation of certificates	Remarks from honorary guests; present ToTS certificates	Ceremonial	Psychiatrists provide professional motivation through delivery of training certificates

## Appendix C

Figure 1. Enhancing Assessment of Common Therapeutic factors for mhGAP-Humanitarian Implementation Guide (ENACT-HIG)

---

### ITEM 1. NON-VERBAL COMMUNICATION & ACTIVE LISTENING: EYE CONTACT, FACIAL EXPRESSION, BODY LANGUAGE & GESTURES

□ 1 NEEDS IMPROVEMENT = does not make any eye contact or stares at patient; shows anger; laughs at patient; mocks patient; turns away from patient; repeatedly interrupts patient; ignores patient; answers mobile phone without permission

□ 2 DONE PARTIALLY = does not consistently use body language to express interest; rarely makes eye contact; shows limited emotion; appears artificial

□ 3 DONE WELL = makes appropriate eye contact throughout interaction; smiles when appropriate; sits at appropriate angle from patient and leans in to show interest; use of ‘uh-huh’, ‘hmm’ or other culturally appropriate non-lexical utterances to signal interest

### ITEM 2. VERBAL COMMUNICATION SKILLS: OPEN-ENDED QUESTIONS, SUMMARIZING & CLARIFYING STATEMENTS

□ 1 NEEDS IMPROVEMENT = uses mostly ‘yes/no’ questions, e.g., “Will you? Can you?”

□ 2 DONE PARTIALLY = uses open-ended questions but does not explore topics further or offer summaries for patient reflection

□ 3 DONE WELL = uses open-ended questions, summarizing and clarifies statements, e.g., “What happened? Tell me more.”

### ITEM 3. RAPPORT BUILDING & SELF-DISCLOSURE

□ 1 NEEDS IMPROVEMENT = clinician does not introduce him/herself or attempt to make the patient feel comfortable or clinician dominates the session talking about his/her own experiences

---

---

2 DONE PARTIALLY = clinician introduces him/herself but does not help the patient feel

comfortable through small talk and informal conversation or clinician disclosure but it is not related to patient experience or needs

3 DONE WELL = clinician introduces him/herself, tries to make the patient feel comfortable and disclosure focuses on patient needs

#### **ITEM 4. EXPLORATION, INTERPRETATION & NORMALIZATION OF FEELINGS**

1 NEEDS IMPROVEMENT = clinician does not ask about patient's feelings or clinician is judgmental/critical about patient's emotions and feelings (e.g., "You shouldn't feel that way", "You should stop thinking or feeling that.")

2 DONE PARTIALLY = clinician asks about feelings but does not normalize/validate or does not explore feelings in detail with patient

3 DONE WELL = clinician explains that the patient's feelings in context and if appropriate, feelings are expected for a person in his/her situation

#### **ITEM 5. DEMONSTRATION OF EMPATHY, WARMTH & GENUINENESS**

1 NEEDS IMPROVEMENT = clinician is critical, hostile, or dismissive of patient's concerns or complaints

2 DONE PARTIALLY = clinician is generally warm and friendly to patient, but does not demonstrate the ability to put him/herself in the experience of the patient

3 DONE WELL = clinician demonstrates that he/she understands the experience of patient in a genuine and sincere manner

#### **ITEM 6. ASSESSMENT OF FUNCTIONING & IMPACT ON LIFE**

1 NEEDS IMPROVEMENT = clinician does not ask the patient about the impact on functioning and daily life from feelings, thoughts, psychosocial problems, etc.

---

2 DONE PARTIALLY = clinician asks about functioning and daily life activities but does not connect it to psychosocial/mental health concerns

3 DONE WELL = clinician explores the relationship between psychosocial problem and functioning

**ITEM 7. EXPLORATION OF PATIENT'S & SOCIAL SUPPORT NETWORK'S EXPLANATION FOR PROBLEM (CASUAL & EXPLANATORY MODELS)**

1 NEEDS IMPROVEMENT = clinician does not ask the patient about his/her own view of the cause or is judgmental/critical about patient's explanation (e.g. "Witchcraft doesn't cause these problems, that is an ignorant/backwards idea!")

2 DONE PARTIALLY = clinician asks patient about his/her own view of cause but does not explore if this the same as the family's view

3 DONE WELL = clinician asks the patient about cause and asks if family/support network have similar or different explanations

**ITEM 8. INCORPORATION OF COPING MECHANISMS & PRIOR SOLUTIONS**

1 NEEDS IMPROVEMENT = clinician does not ask the patient about how he/she has coped or clinician is judgmental about how patient has coped (e.g., "Why did you think that work?" or "That isn't helpful.")

2 DONE PARTIALLY = clinician asks about coping and prior solutions, but does not provide positive feedback

3 DONE WELL = clinician asks about coping and provides positive feedback in regard to agency or pathways thinking

**ITEM 9. ASSESSMENT OF PATIENT'S RECENT LIFE EVENTS & ACKNOWLEDGEMENT OF IMPACT ON PSYCHOSOCIAL WELLBEING**

1 NEEDS IMPROVEMENT = clinician does not ask about triggering life events

---



---

2 DONE PARTIALLY = clinician asks about life events but does not connect with current mental health issues

3 DONE WELL = clinician asks about life events and discusses connection with current mental health

**ITEM 10. ASSESSMENT OF OTHER MENTAL HEALTH PROBLEMS, ALCOHOL/DRUG USE & PHYSICAL HEALTH PROBLEMS**

1 NEEDS IMPROVEMENT = clinician does not ask about any related conditions, e.g., alcohol or drug use, physical health problems, injuries, head trauma, medications, etc.

2 DONE PARTIALLY = clinician takes partial history but does not explore positive responses in relation to mental health, e.g., clinician does not connect other health problems or substance use to current mental health

3 DONE WELL = clinician assesses related health issues and explains relationship to patient's condition when appropriate

**ITEM 11. APPROPRIATE INVOLVEMENT OF FAMILY MEMBERS & OTHER CAREGIVERS**

1 NEEDS IMPROVEMENT = *When family member is present:* clinician ignores family during session or clinician only talks to family members and ignores patient; *When family member is not present:* clinician does not ask about family at all

2 DONE PARTIALLY = *When family member is present:* clinician interviews both patient and family but does not facilitate interaction between family and patient during session; *When family member is not present:* clinician asks about family involvement but does not explore patient's reasons or preferences for involvement or non-involvement

3 DONE WELL = *When family member is present:* clinician helps both patient and family participate and encourages interaction between them; *When family member is not present:* clinician explores preferred family engagement with the patient and does role-plays or coaching

---

#### **ITEM 12. COLLABORATIVE GOAL SETTING & ADDRESSING PATIENT'S EXPECTATIONS**

1 NEEDS IMPROVEMENT = clinician does not ask patient about his/her goals and expectations for treatment, or clinician just tells patient what to do without asking his/her expectations

2 DONE PARTIALLY = clinician asks patient about goals but does not discuss if these are realistic or can be accomplished

3 DONE WELL = clinician asks about goals and discusses with patient what is and is not achievable through treatment, and clinician and patient collaboratively establish treatment plan

#### **ITEM 13. PROMOTION OF REALISTIC HOPE FOR CHANGE**

1 NEEDS IMPROVEMENT = clinician either gives no hope (e.g., you will never get better) or gives unrealistic expectations (e.g., you will be cured in a few weeks and never have problems again) for what to expect in treatment and recovery

2 DONE PARTIALLY = clinician vaguely tells patient what will happen during treatment

3 DONE WELL = clinician helps patient feel positive about the future and creates realistic expectations about what can and cannot be achieved through treatment, and clinician checks patient's understanding of realistic change

#### **ITEM 14. PSYCHOEDUCATION INCORPORATING LOCAL (ETHNOPSYCHOLOGICAL)**

##### **CONCEPTS & TERMS**

1 NEEDS IMPROVEMENT = clinician uses technical jargon to explain mental health or uses stigmatizing terms or does not explain how treatment works

2 DONE PARTIALLY = clinician uses a limited amount of technical jargon and no stigmatizing terms, but clinician does not incorporate patient's explanatory model or other local psychological concepts into psychoeducation

---

---

3 DONE WELL = clinician conducts psychoeducation using local psychological concepts including patient's explanatory model (see Item 7), local terminology, and idioms of distress to explain mental health and treatment in non-stigmatizing language, and checks to see if patient understands

**ITEM 15. USE OF PROBLEM SOLVING STEPS: PROBLEM FORMULATION, PRIORITIZATION, SOLUTION GENERATION & ACTION PLANNING**

1 NEEDS IMPROVEMENT = clinician does work with patient to formulate key problem requiring help, support, or treatment

2 DONE PARTIALLY = clinician helps patient formulate and prioritize key problem, but does not complete steps #2-4 (see below)

3 DONE WELL = clinician helps patient (1) formulate and prioritize primary problem, (2) brainstorm solutions, (3) explores advantages and disadvantages, and (4) formulate action plan

**ITEM 16. ELICITATION OF FEEDBACK WHEN PROVIDING ADVICE, SUGGESTIONS & RECOMMENDATIONS**

1 NEEDS IMPROVEMENT = clinician lectures patient about what to do without asking if this is acceptable and comfortable for the patient, or clinician does not give any suggestions at all

2 DONE PARTIALLY = clinician gives focused advice but does not ask for feedback from patient to see if the advice is helpful

3 DONE WELL = clinician gives a few suggestions when asked by patient and asks for patient feedback about suggestions

---

**ITEM 17. EXPLANATION AND PROMOTION OF CONFIDENTIALITY**

1 NEEDS IMPROVEMENT = clinician does not address confidentiality or does not adjust topics of discussion based on setting

---

---

2 DONE PARTIALLY = clinician tells patient that everything is confidential without explaining exceptions such as harm to self or others, or clinician states everything is confidential while conducting session in non-private setting

3 DONE WELL = clinician explains that all clinician-patient discussions are confidential with the exception of harm to self and others, and clinician adjusts conversation topics based on private or non-private setting

**ITEM 18. ASSESSMENT OF HARM TO SELF, HARM TO OTHERS, HARM FROM OTHERS & DEVELOPING COLLABORATIVE RESPONSE PLAN**

1 NEEDS IMPROVEMENT = clinician does not ask about harm to self or others

2 DONE PARTIALLY = clinician asks about harm to self or others, but does not help patient develop a plan for safety

3 DONE WELL = clinician asks about harm to self or others and facilitates appropriate planning and actions to assure safety

---

## References

- Abdulmalik, J., Kola, L., Fadahunsi, W., Adebayo, K., Yasamy, M. T., Musa, E., & Gureje, O. (2013). Country contextualization of the mental health gap action programme intervention guide: a case study from Nigeria. *PLoS Med*, *10*(8), e1001501.
- Abera, M., Tesfaye, M., Belachew, T., & Hanlon, C. (2014). Perceived challenges and opportunities arising from integration of mental health into primary care: a cross-sectional survey of primary care workers in south-west Ethiopia. *BMC Health Services Research*, *14*, 113.
- American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed., text rev.). Washington, DC: Author.
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Carswell, K. (2015, July 3). Bridging the human resources gap in times of imminent need. Retrieved from <http://mhinnovation.net/blog/2015/jul/3/bridging-human-resource-gap-times-imminent-need#.Vuq7vTYgo3S>
- Chadda, R. K., Malhotra, A., Kaw, N., Singh, J., & Sethi, H. (2007). Mental health problems following the 2005 earthquake in Kashmir: findings of community-run clinics. *Prehospital and disaster medicine*, *22*(06), 541-545.
- Chaturvedi, S. K., Desai, G., & Shaligram, D. (2009). Dissociative disorders in a psychiatry institute in India-a selected review and patterns over a decade. *International Journal of Social Psychiatry*, *56*(5), 533-539.
- Deka, K., Chaudhury, P., Bora, K., & Kalita, P. (2007). A study of clinical correlates and socio-demographic profile in conversion disorder. *Indian Journal of Psychiatry*, *49*(3), 205.
- Dhital, R., Subedi, G., Gurung, Y. B., & Hamal, P. (2001). Alcohol and Drug Use in Nepal. *Kathmandu: Child Workers in Nepal Concerned Centre (CWIN)*.
- Epping-Jordan, J. E., Van Ommeren, M., Ashour, H. N., Maramis, A., Marini, A., Mohanraj, A., ... & Suveendran, T. (2015). Beyond the crisis: building back better mental health care in

10 emergency-affected areas using a longer-term perspective. *International journal of mental health systems*, 9(1), 1.

Inter-Agency Standing Committee (IASC) Reference Group for Mental Health and Psychosocial Support in Emergency Settings (2015). *Nepal Earthquakes 2015: Desk Review of Existing Information with Relevance to Mental Health and Psychosocial Support*; Kathmandu, Nepal.

Kim, Y. (2011). Editorial: Great East Japan Earthquake and Early Mental-health-care Response. *Psychiatry and clinical neurosciences*, 65(6), 539-548.

Kohrt, B. A. (2005). "Somatization" and "Comorbidity": A Study of Jhum-Jhum and Depression in Rural Nepal. *Ethos*, 33(1), 125-147.

Kohrt, B. A., et al. (2015). Therapist competence in global mental health: development of the enhancing assessment of common therapeutic factors (ENACT) rating scale. *Behaviour research and therapy*, 69, 11-21.

Kohrt, B. A., & Hruschka, D. J. (2010). Nepali concepts of psychological trauma: the role of idioms of distress, ethnopsychology and ethnophysiology in alleviating suffering and preventing stigma. *Culture, Medicine, and Psychiatry*, 34(2), 322-352.

Kohrt, B. A., Hruschka, D. J., Worthman, C. M., Kunz, R. D., Baldwin, J. L., Upadhaya, N., ... & Jordans, M. J. (2012). Political violence and mental health in Nepal: prospective study. *The British Journal of Psychiatry*, 201(4), 268-275.

Kohrt, B.A. & Patel, V. (Forthcoming). Culture and psychiatric epidemiology: history, concepts, and measurement. In Prince, M., Stewart, R., Ford, T., & Hotopf, M. (Eds.), *Practical psychiatric epidemiology*, 2<sup>nd</sup> edition. New York: Oxford.

Luitel, N. P., Jordans, M., Murphy, A., Roberts, B., & McCambridge, J. (2013). Prevalence and patterns of hazardous and harmful alcohol consumption assessed using the AUDIT among Bhutanese refugees in Nepal. *Alcohol and alcoholism*, 48(3), 349-355.

Ministry of Health and Population and Nepal Health Sector Support Programme. (2013). Human Resources for Health Nepal Country Profile.

Moore, M. (2008). What does patient-centred communication mean in Nepal?. *Medical Education*, 42(1), 18-26.

National Seismological Center. (2016) Recent earthquakes. Retrieved from <http://www.seismonepal.gov.np/index.php?action=earthquakes&show=recent>

OCHA, UN. (2015). *Nepal: Earthquake 2015* (No. 04). Situation Report.

OCHA, UN. (2015). *Nepal: Earthquake 2015* (No. 20). Situation Report.

- OSOCC, UN. (20150). Situation Analysis Nepal Earthquake.
- Roberts, B., Murphy, A., Chikovani, I., Makhashvili, N., Patel, V., & McKee, M. (2014). Individual and community level risk-factors for alcohol use disorder among conflict-affected persons in Georgia. *PloS one*, 9(5), e98299.
- Santos, P. F., Wainberg, M. L., Caldas-de-Almeida, J. M., Saraceno, B., & de Jesus Mari, J. (2016). Overview of the mental health system in Mozambique: addressing the treatment gap with a task-shifting strategy in primary care. *International journal of mental health systems*, 10(1), 1.
- Sapkota, R. P., Gurung, D., Neupane, D., Shah, S. K., Kienzler, H., & Kirmayer, L. J. (2014). A Village Possessed by “Witches”: A Mixed-Methods Case–Control Study of Possession and Common Mental Disorders in Rural Nepal. *Culture, Medicine, and Psychiatry*, 38(4), 642-668.
- Schafer, A., Snider, L., & van Ommeren, M. (2010). Psychological first aid pilot: Haiti emergency response. *Intervention*, 8(3), 245-254.
- Sharma, P.P., Jha, A.K., Joshi, A., & Lamsal, R. Mass Hysteria and Adolescent Girl: An Interventional Study. *NJOG*, 5(1), 17-20.
- Shrivastava, S. R., Shrivastava, P. S., & Ramasamy, J. (2015). Are we well-equipped to restore the mental health of the traumatized in emergencies?. *Annals of Tropical Medicine and Public Health*, 8(6), 321.
- Singh, S., Dahal, K., & Mills, E. (2005). Nepal’s war on human rights: a summit higher than Everest. *International Journal for Equity in Health*, 4(9), 9.
- Siriwardhana, C., Adikari, A., Jayaweera, K., Abeyrathna, B., & Sumathipala, A. (2016). Integrating mental health into primary care for post-conflict populations: a pilot study. *International journal of mental health systems*, 10(1), 1.
- Somasundaram, Daya, T. Thivakaran, and Dinesh Bugra. (2008). Possession States in Northern Sri Lanka. *Psychopathology*, 41, 245-253.
- Ventevogel, P., van de Put, W., Faiz, H., van Mierlo, B., Siddiqi, M., & Komproe, I. H. (2012). Improving access to mental health care and psychosocial support within a fragile context: a case study from Afghanistan. *PLoS Med*, 9(5), e1001225.
- World Health Organization. (2004). Global status report on alcohol 2004.
- World Health Organization. (2010). *mhGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings: mental health Gap Action Programme (mhGAP)*. Geneva: World Health Organization, 2010.

WHO 2011. Mental Health Atlas. Geneva: Department of Mental Health and Substance Abuse, World Health Organization.

World Health Organization and the United Nations High Commissioner for Refugees. (2015). *mhGAP Humanitarian Intervention Guide (mhGAP-HIG): clinical management of mental, neurological and substance use conditions in humanitarian emergencies*. Geneva: WHO, 2015.