

Wright State University

CORE Scholar

Master of Public Health Program Student
Publications

Master of Public Health Program

2019

Cross-Cultural Adaptation of an Instrument to Address the Mental Health Needs in Nepal

Dene S. Berman

Wright State University - Main Campus

Follow this and additional works at: <https://corescholar.libraries.wright.edu/mph>



Part of the [Public Health Commons](#)

Repository Citation

Berman, D. S. (2019). Cross-Cultural Adaptation of an Instrument to Address the Mental Health Needs in Nepal. Wright State University. Dayton, Ohio.

This Master's Culminating Experience is brought to you for free and open access by the Master of Public Health Program at CORE Scholar. It has been accepted for inclusion in Master of Public Health Program Student Publications by an authorized administrator of CORE Scholar. For more information, please contact library-corescholar@wright.edu.

Cross-Cultural Adaptation of an Instrument to Address the Mental Health Needs in Nepal

Dene S. Berman

Wright State University Boonshoft School of Medicine

Master of Public Health Program

Cristina Redko, PhD – Committee Chair

Surendra Bir Adhikari – Reader

Author Note:

Submitted in partial fulfillment of the Master of Public Health degree.

Correspondence concerning this article should be addressed to Dene S. Berman,
Department of Population and Public Health Sciences, Boonshoft School of Medicine, Wright
State University, Dayton, OH 45435. E-mail: dene.berman@wright.edu

Acknowledgement

The assistance of Cristina Redko, ILE Chair, Surendra Bir Adhikari, Reader, and Nischal Shrestha, translator, is gratefully acknowledged. I also wish to thank Sachchida Subedi who provided the forward translation, as well as the expert panel of the graduate students from Nepal who made recommendations that resulted in the final version of the document: Astha Shakya, Sagar Sharma, Bishal Bhattarai, Seema Dahal, and Pariksha Thapa.

Table of Contents

Abstract.....	4
Introduction.....	5
Review of Literature	6
Methods.....	10
Results.....	15
Discussion.....	15
References.....	21
Appendices.....	25
Appendix A: Five Signs of Emotional Suffering.....	25
Appendix B: Healthy Habits of Emotional Well-Being	26
Appendix C: Forward Translation into Nepali	27
Appendix D: Recommended Edits to the Translation	28
Appendix E: Forward Translation with Edits	30
Appendix F: Back Translation.....	31
Appendix G: Human Subjects Regulations Decision Chart	32
Appendix H: Competencies Met in Integrative Learning Experience.....	33

Abstract

Nepal has had devastating earthquakes compounded by economic struggles, social and political crises. There is evidence of significant psychological distress but few mental health resources. The current project's aim is to provide the people of Nepal who are experiencing emotional distress with information about improving their lives in a way that otherwise would not be available in rural health centers. For this purpose, a culturally sensitive and valid adaptation of Healthy Habits for Emotional Well-being into Nepali was created following World Health Organization guidelines. Implications for its use were discussed, along with possible future directions for continued outreach efforts.

Keywords: mental health, global health, rural health care, psychosocial support,

Nepal

Cross-Cultural Adaptation of an Instrument to Address the Mental Health Needs in Nepal

Cross-cultural programming and research often involve translating materials into a different language from the language in which they were written. There are often cultural and linguistic differences between countries that renders verbatim translations problematic in that some words do not have literal translations into other cultures and idioms in one language may not translate well into other languages. Words in one language may not have the same meaning in another language (Hilton & Skrutkowski, 2002).

The goal of translating and adapting an instrument is to achieve a cross-cultural adaptation (CCA) of cultural equivalence by following a systematic process (Chavez & Canino, 2005). The general procedure for translating questionnaires from one ('original') language to another ('target') language was outlined by Brislin (1970), the key of which is to have a translation from the original language to the target language and then for another person to translate from the target language back to the original language. This 'back' translation allows for a comparison of the original wording to the translated wording for accuracy, and for the cultural equivalence of the two translations.

There is, however, a lack of consensus on the specific procedures that should be taken in creating a culturally equivalent instrument. While Brislin (1970) recommended 5 steps in the process, others specify as many as 12 steps in the process (Chavez & Canino, 2005). For the translation of lengthy psychological tests into the Nepali language, Van Ommeren et al. (1999), have recommended the use of a translation form. A comprehensive review of cross-cultural adaptations (Epstein, Santo, & Guillemin, 2015) was unable to find consensus among experts in the field concerning the best model to employ for CCAs. Most methods included use of committees, focus groups, and back translations. They concluded that "[r]esearchers should

choose any validated method of adaptation that seems the most appropriate in the context of the questionnaire of interest” (Epstein, Santo, & Guillemin, 2015, p. 439).

Statement of Purpose

Numerous mental health symptoms including those related to depression, anxiety, PTSD, substance abuse, and suicides are evident in Nepal, without adequate resources to address them. The aim of the current project is to create a culturally sensitive and accurate adaptation of an instrument to promote healthy lifestyles from English into Nepali. The model chosen for this project deemed appropriate for such a translation has been recommended by the World Health Organization (WHO, n.d.). WHO has established a methodological guideline based on the refinement of the process across numerous studies for forward and back translations of instruments from original languages into those of target languages. Those steps consist of a forward translation, the use of an expert panel, a back translation, pretesting, a final version, and documentation.

Review of Literature

Nepal is a diverse country, comprised of more than 125 ethnic groups dispersed among seven federal states. Mountains and hills occupy 77% of the country, with 50% of Nepal’s population of 29,000,000 people occupying these part of the country (United Nations, 2017).

In April and May of 2015, two major earthquakes struck Nepal, 83 km northwest of Kathmandu (KTM). As a result, more than 8,700 people died, and 25,000 people were injured. A third of the population of Nepal, nearly 10,000,000 people, was displaced. More than 750,000 homes were damaged or destroyed in these, the worst earthquakes to hit Nepal in 80 years. Prior to the earthquakes, Nepal experienced civil unrest as well as socioeconomic factors such as poverty that affected much of the population (Sharma, 2006).

A mental health survey conducted within months of the earthquakes (Kane et al., 2018) found a high incidence rate of depression, anger, suicidal ideation, and alcohol abuse. In the aftermath of these devastating earthquakes, the WHO and the Nepal Ministry of Health co-sponsored a Mental Health and Psychosocial Support (MHPSS) Project (United States Agency for International Development, 2016), with auspicious goals such as training 35 psychiatrists and psychologists to use Eye Movement Desensitization and Reprocessing (EMDR) (Shapiro, 2018) to treat posttraumatic stress disorder (PTSD). EMDR is a psychotherapy procedure to lessen the impact of traumatic events.

Unfortunately, MHPSS efforts in Nepal and elsewhere have been characterized as being inadequate and poorly coordinated (Sherchan et al., 2017). In addition, there is a gap in the continuum of care for mental health in Nepal such that there is a lack of sustained psychological, social and behavioral interventions (Chase et al., 2018). Adhikari and Mishra (2016) described the general health care situation in Nepal in which there are many fewer doctors in Nepal (0.17 per 100,000 population) than is recommended by the WHO (2.3 per 100,000). Medical training occurs primarily in Kathmandu and other larger cities, “depriving those living in rural regions of Nepal” (Adhikari & Mishra, 2016, p. 2740), despite 80% of the population living in villages, often remote from, and inaccessible to, the country’s centers for medical training.

Health care is provided through a network of primary health care (PHC) facilities throughout Nepal (Jha, 2013). A recent assessment of the status of mental health care in Nepal since the earthquakes of 2015 (Sherchan et al., 2017) pointed out a lack of a focal lead for mental health within the Ministry of Health, no comprehensive plan for the mental health care of the population outside of hospital care in major population centers. They point out that PHC facilities are unable to provide basic mental health services.

A comprehensive, continuum of mental health care is the ultimate goal for Nepal as well as other countries worldwide, including preventive efforts (WHO, 2013). While those individuals with severe, disabling disorders will continue to need psychiatric services at higher levels of care, such as hospital care, preventive and community based care are stressed, services that are needed but not readily available in Nepal (Jordans, Kohrt, Luitel, Komproe, & Lund, 2015). To ease the burden of mental health struggles, a model for guidance is needed to help people in all parts of the country, especially in rural areas with a sparsity of services.

The first step in creating a model is to assess those people who might be in need of care. Most people outside of major cities use PHCs for all things medically-related. Thus, PHCs provide the proper setting for conducting assessments. However, given the lack of training that paramedics in PHCs possess, relying on them to make referrals or seek consultation based on their untrained impressions is unworkable. Instead, short, easy-to-use, objective instruments that can be administered to patients by paramedics are needed.

The Patient Health Questionnaire-9 (PHQ-9) (Kroenke, Spitzer, & Williams, 2001) is a self-administered depression scale frequently used in primary health settings in the United States (U.S.) and has been translated into Nepali (Kohrt, Luitel, Acharya, & Jordans, 2016). This version contains culturally sensitive measures of distress and depression. It is designed to identify significant clinical depression. Shortcomings of this translated instrument are that there is a high incidence of false positives and that there are precious few referral sources to treat psychiatric disorders outside of major population areas.

An organization, ChangeDirection (n.d.a), has a second assessment instrument that has been translated into Nepali. ChangeDirection was an initiative that grew out of the White House National Conference on Mental Health in 2013 by a group of concerned citizens and leaders

from both the private and nonprofit sectors. ChangeDirection is partnered by the Substance Abuse and Mental Health Services Administration of the National Institutes of Health (SAMHSA). Its founding members include, among others, the National Association of Social Workers, The American Psychological Association, and the American Psychiatric Association (ChangeDirection, 2015).

This second instrument, designed as a screening and awareness instrument, is the *Five Signs of Emotional Suffering* (Five Signs) (ChangeDirection, n.d.a). Five Signs contains five icons with corresponding descriptions of personality changes, anxiety or anger, withdrawal, neglect or unhealthy behavior, and hopelessness/suicidality. This instrument has undergone a culturally valid and sensitive adaptation into Nepali that is part of an international movement for outreach and support of those people experiencing emotional and behavioral problems (Adhikari, 2018). It is intended for people in distress, their friends, and family to understand the major symptoms of behavioral and psychological problems. It differs from the PHQ-9 in that the former is to be used as a diagnostic tool to assess depression in order to determine those people in need of services, while the Five Signs reflects five dimensions and is designed for self-, peer-, or family-awareness of distress.

Once a need has been identified, either by the individual or by others, help in ameliorating the distress is needed. In that there are gaps in the provision of mental health care, especially in rural areas, guidance for helping those in distress is an important resource. Such an instrument exists. That instrument is from ChangeDirection (n.d.b) in the form of an outreach tool to aid people in mitigating some of the symptoms of distress - *Healthy Habits for Emotional Well-being* (Healthy Habits) (see Appendix B). Healthy Habits is in English, lacking CCAs in other languages.

Methods

Six graduate students (four women, two men) attending a midwestern U.S. university facilitated the adaptation of the Healthy Habits instrument. The university office for international studies provided the name and email address for the president of the Nepal student organization, who then recruited the other participants. All of the participants were from Nepal and bilingual in English. One participant translated the original document which was written in English into the Nepali target language. The other five served on the expert panel for editing the forward translation.

The WHO (n.d.) guideline was used to create the CCA for this project. The goal of translating from an original to a target language is to create a culturally equivalent, not literal, translation that functions in the target language as it does in the original language. The steps to achieve this end were as follows (WHO, n.d.).

1. Forward translation: A bilingual translator was chosen whose mother tongue, in this case, is Nepali, but who is familiar with English. This person is a health professional who is familiar with the terms of the instrument. In creating the translation, additional instructions were given.
 - a. Instructions to this translator were to create a translation that is culturally sensitive and understandable by a broad swath of the population of Nepal.
 - b. Idioms and words that might be offensive are to be avoided.
2. Convening a bilingual (in English and Nepali) ‘expert’ panel was the next step. The panel reviewed the translation, making suggestions about word choice, understandable language, and avoiding unclear, confusing, or offensive language.
 - a. WHO does not recommend a set number of panelists.

- b. The panelists should, and were, experienced in translating English documents into Nepali.
 - c. It is preferred that the original translator be included in the panel.
 - d. A document was created that was a modification of the original translation, based on recommendations of the panel.
3. Back translation: The instrument is then translated back in to the original language, English, by an independent translator. This step is a verification that the original translation, modified by the panel, when translated back into English, is equivalent to the original document.
 - a. It is preferred that this translator's mother tongue is English, but is bilingual in English and Nepali.
 - b. As with the forward translation, the emphasis is on cultural equivalence.
 - c. Any discrepancies between the original document and the back translation need to go back to the panel, as many times as necessary in order to arrive at a conceptual equivalence.
4. Pre-testing and cognitive interviewing. This step is for validation of the translation. However, the current project was an adaptation that did not involve validation and thus, field testing this instrument was not included in the current project.

Following the WHO guideline, a forward translation was created. The translator (Translator 1) was a bilingual graduate student from Nepal attending a master of public health program at a U.S. university. Instructions to the translator were to create a culturally equivalent, not necessarily literal translation of Healthy Habits that would be appropriate for rural Nepalese

citizens with little formal education. See Appendix C for the forward translation from English to Nepali.

The second step of the process was to establish an expert panel comprised of individuals who are bilingual in both the original and target languages. For this purpose, five graduate students from Nepal who have studied at a university for at least a year were chosen to constitute the panel. The original translator had returned to Nepal and was not available to participate in the panel discussion. Instead, the individual who coordinated the translation of Five Signs (Translator 2) is a doctoral level sociologist who works for the state-level department of mental health and who grew up in Nepal, and whose mother tongue is Nepali. The directions to the panel were to compare the original Healthy Habits document and the translation. They noted problems in the accuracy of the forward translation, problems with cultural sensitivity, and language that might not be understood by rural patients. The outcome of the panel discussion was a two-page document of changes to the forward translation. These changes were reviewed by the Translator 2, who approved that suggested changes. That document can be seen in Appendix D. The resulting translation encompassing the original translation with the changes recommended by the panel can be seen in Appendix E.

The WHO guideline recommends a bilingual translator whose native language is the source document, English in this case. Attempts to find a local translator whose native language is English but who is fluent in Nepali were unsuccessful. The person located in the geographic area of this study best able to perform the back translation is a professional Nepali-English translator (Translator 3) who has lived and worked in the U.S. for many years, but was born in Nepal. The back translation may be seen in Appendix F.

The comparison of the translation after the panel changes were made and the back-translation was completed by the Translator 2 in conjunction with the author. There were no significant discrepancies in the concepts between the original document and the back translation, although the language was not identical due to the linguistic changes necessary for the Nepali population.

Procedure

The outline of this project was presented to a faculty member who consented to serve as the chair of the Independent Learning Experience (ILE) committee. The second committee person, designated as the 'reader', was approached and agreed to serve in this role. This project then was submitted to and approved by the director of the ILE.

Institutional Review Boards (IRBs) are convened to protect the welfare, rights and privacy of subjects who are recruited to participate in research studies. It was determined by the ILE director that this study is exempt from submission to the Institutional Review Board. Reference is made to the U.S. Department of Health and Human Services Office for Human Subjects Protection Chart 4 concerning exemptions for IRB review (<https://www.hhs.gov/ohrp/regulations-and-policy/decision-charts/index.html#c1>). That chart is shown in Appendix G.

The basis for this exemption is that the study is not experimental research in the sense that it does not involve the manipulation of variables or interventions with subjects, private information was not obtained, and the participants were volunteers. With respect to the translators and expert panel, no personal data was collected beyond name, and university email address, all of which is readily available on the university website.

Permission to use Healthy Habits and translate it into Nepali was obtained from ChangeDirection by the reader of this committee. The reader had experience and contact with ChangeDirection in that he successfully completed the Five Signs (Adhikari, 2018) project with ChangeDirection.

The next step was to find a translator for Healthy Habits into Nepali. This request was made of a graduate student from Nepal who is bilingual and agreed to help with the project. Instructions to this translator included the avoidance of slang, the use of rudimentary language, and to strive for cultural equivalence rather than a literal translation.

Once the translation was obtained, an expert panel was chosen. An email was sent to the contact for a campus organization of students from Nepal who reached out to other students. This resulted in a panel of five bilingual students from Nepal who were willing to serve as panel members.

Unfortunately, the original translator (Translator 1) left the university and returned to Nepal in the midst of this project. The reader for the ILE offered to complete the process (Translator 2). A teleconference was held that included the chair and reader of the ILE along with the expert panel. None of the panel had seen the materials before the teleconference. Each panel member was provided with the original version of the Healthy Habits and the translation. The conference consisted of a reading of each section of both the original and target version of the document. Each panel member made notes of recommended changes. After the teleconference, the expert panel convened and condensed their recommendations from five sets of notes to one set of recommendations. Those were presented to and accepted by Translator 2.

Once accepted, the changes were typed into the target translation and presented to Translator 3. This person, previously described, had no prior knowledge of the project and had

not seen the original or the target documents. Translator 3 then performed a back translation of Healthy Habits from Nepali into English.

Both the original and back translated versions of Healthy Habits were compared and approved by Translator 2 (who is the reader for this ILE) and the chair of the ILE to assure equivalence. Once approved, the Nepali document was created in a format suitable for printing.

Results

The results of the study are in the form of the documents produced, as seen in the appendices. The forward translation of Healthy Habits into Nepali is in Appendix C. The expert panel's recommended edits are in Appendix D. Appendix E contains the forward translation with the edits. The back translation from Nepali to English is in Appendix F .

Discussion

The need for a rudimentary instrument is necessitated by the unique cultural and social aspects of Nepal. There is a lack of terms for common psychiatric symptoms, as was discovered by Kohrt, Luitel, Acharya, and Jordans (2016) in their attempt to create a culturally sensitive translation of the PHQ-9 into Nepali. Their study differs from the current study in a number of ways. They translated an instrument for diagnostic purposes that allowed them to refer participants who were distressed or expressed suicidal ideation for counseling and or medical evaluation in the Chitwan district where their study was conducted. Not every community has skilled staff to conduct verbal assessments as was the case in the Kohrt et al. (2016) study, nor do many other communities have the counseling or qualified medical staff for available services. In more rural areas, only those with the most serious psychiatric disorders are referred to district hospitals or larger population centers.

The focus of the current study was to provide a CCA for support and guidance of those individuals who have some lesser amount of distress such that they are able to maintain a healthy level of functioning while remaining in the community. The next step for this project is to field test the instrument to establish external validity (Beaton, Bombardier, Guillemin, and Ferraz, 2000). This will complete the WHO (n.d.) steps outlined previously. For that purpose, 30 to 40 people would be asked to read and discuss their reactions to Healthy Habits in order to determine the extent to which it reflects the dimensions it intended to cover – (take care of yourself, check in and get checkups, engage and have healthy relationships, relax, and know the Five Signs).

Healthy Habits, like Five Signs, is in such a form that it could easily be printed in the form of a poster that could be hung in PHCs, schools, or other public places. The Healthy Habits poster offers individuals ideas about ways of dealing with their issues without having to go through a provider. It has the added benefit of giving others, not in distress, ways of helping friends, family, or others in distress. For those individuals with care provided through PHCs with staff untrained in mental health, some guidance on healthy steps to ease distress would be of great benefit. Further, it encourages regular checkups at the PHC.

Healthy Habits builds on, and utilizes Five Signs, an instrument meant to identify, not diagnose, distress. In fact, knowing the Five Signs is one of the Healthy Habits. Five Signs and Health Habits are supported by an international organization, ChangeDirection. ChangeDirection not only has the support of the major professional mental health organizations and SAMHSA, it also has the support of public personalities such as Prince Harry (<https://vimeo.com/164325450>) and Michelle Obama (<https://youtu.be/VoDJrezLTbU>). This level of affiliation and support brings awareness of an international community to the needs of people in Nepal who are in need.

To date, Five Signs has only been translated into two languages – Nepali and Spanish. Healthy Habits has not previously been translated into any languages other than the original English.

Once there is an initial screening tool that is valid and reliable, there must be further assessment of the individual's unique struggles and the context in which they occur, as well as determining goals to help the person in distress and viable ways of achieving them. This cannot be accomplished by the administration of a simple screening test, nor can it be accomplished by someone with the training of paramedics. Healthy Steps and other psychoeducational tools can help people begin to make changes in their lives without professional intervention.

Further, the few mental health professionals in Nepal are clustered in major cities or in regional hospitals, too remote for an in-person consultation for a given person in distress, unless that distress is severe, as in the case of psychosis or suicidal risk. Cellphones present a readily available solution to this problem. Most areas in Nepal have cell service and most people have cellphones. With cellphones, it is possible for paramedics, patients, and professionals to conference in real-time. In this way, patients who reveal distress on such instruments as the PHQ9 or Five Signs can be interviewed in-person by a paramedic, with a mental health professional conferenced in. That professional can gather more data, help set goals, and identify means for achieving them that are at the level of paramedics.

Employing a model like this will involve training both paramedics and professionals with the use of the screening instrument, a way of gathering biopsychosocial information, setting treatment goals and a way of approaching their alleviation, and ways of assessing patient progress toward these goals.

With this model, the distance between the paramedic and the professional is bridged by use of telecommunications. Graduate students in psychology could be trained with this model,

thereby creating a role for psychologists in rural villages without having to reside in them. It could be a part of their graduate training.

Another opportunity for expanding professional outreach for mental health roles in Nepal is to utilize the network of female volunteers in rural settings that has been established as a priority by the Minister of Health. There is a demonstration project underway, under the auspices of Duke University to train volunteers to promote cardiovascular health among women by lowering their blood pressures that cellphones for telehealth consultation (Global Health Institute, n.d.). This Duke University initiative could be expanded on to focus on basic mental health issues.

The global mental health movement arose out of the realization that the burden of mental disorders constituted a global health crisis. In low and middle income countries, most people with mental health disorders do not receive treatment and, when they do, there are concerns about the quality of care (Frankish, Boyce, & Horton, 2018). Moreover, models such as Problem Management Plus (PM+) (WHO, 2016) that are intended to help people from low and middle income countries who are in distress are rather complex and require at least 80 hours of training. It is designed to be used under supervision that does not exist in rural communities. Other approaches such as Psychological First Aid (PFA) (National Child Traumatic Stress Network and National Center for PTSD, 2006) and the long-term follow-up to PFA, Skills for Psychological Recovery (SPR) (National Center for PTSD and National Child Traumatic Stress Network, 2010), are psychological programs designed for use after a traumatic event such as the earthquake in Nepal. These approaches, like PM+, are detailed, involve a set of technical skills not readily found in Nepal, and assume that an assessment and referral system is in place. Due to

their complexity and the insufficiency of mental health referral facilities, PM+, PFA, and SPR as impractical for most of Nepal, as are more traditional psychological treatments.

The Healthy Habits model is less comprehensive model that is not treatment *per se* but, rather, a method of support and psychoeducational guidance. It suggests ways in which people can alter their behavior, use their medical clinic, find social support and inner peace, and know the signs of emotional distress. Were it used in the form of public posters or in social media sites, it could reach much of the population.

The current project is consistent with the recently published United Nations Sustainable Development Goals (SDGs) (Patel et al., 2018) for mental health. This includes prevention as well as effective treatments, the provision of mental health care within primary health care, the use of paraprofessionals, the inclusion of family members, and the use of social interventions along with psychological and medication-oriented therapies.

Healthy Habits could also be used in conjunction with a telehealth consultation model in which people who need more than Healthy Habits can be in touch with mental health professionals via their cellphones. For some, Healthy Habits may be enough for increased functioning and community support.

The components of a potential comprehensive model are summarized in Figure 1 and represents a model for overcoming roadblocks to treatment in that each of the components provides a pathway toward stability and a higher level of functioning. In its simplest form, it would involve paramedics assessing all patients with Five-Signs or a more diagnostic tool such as PHQ-9. For those patients who endorse one or more of the symptoms, a consultation would occur with a mental health professional. This consultation would occur via cellphone and include the patient. Volunteer but untrained social workers who live in the community would have input

about larger socio-cultural considerations of the person’s needs. For those in need of more comprehensive services, a referral would be made to a regional hospital where mental health services would be available, with a consultation note forwarded to the hospital by the mental health professional who conducted the cellphone consultation

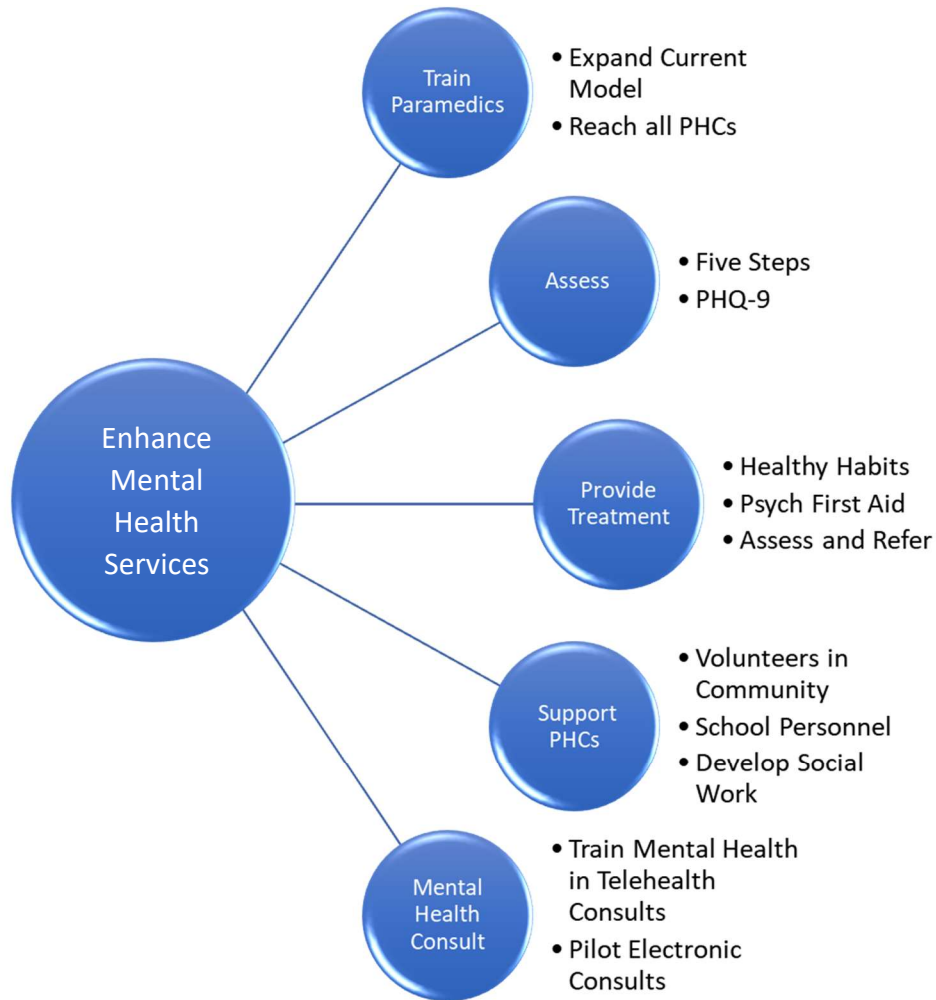


Figure 1. A model for providing mental health services.

References

- Adhikari, B. & Mishra, S. (2016). Urgent need for reform in Nepal's medical education. *Lancet*, 388(10061), 2739-2740. doi.org/10.1016/S0140-6736(16)32423-0
- Adhikari, S. (2018). *Five signs of emotional suffering in Nepali: A culturally and linguistically appropriate toolkit launched to observe minority health month*. Retrieved from <https://www.changedirection.org/five-signs-of-emotional-suffering-in-nepali-a-culturally-and-linguistically-appropriate-toolkit-launched-to-observe-minority-health-month/>
- Beaton, D., Bombardier, C., Guillemin, F., & Ferraz, M. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*, 25(24), 3186–3191. doi.org/10.1097/00007632-200012150-00014
- Brislin, R. W. (1970). Back translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185–216. doi.org/10.1177/135910457000100301
- ChangeDirection. (n.d.a). *Five signs of emotional suffering*. Retrieved from <https://www.changedirection.org/wp-content/uploads/2018/04/Five-Signs-Def-in-Nepali.pdf>
- ChangeDirection. (n.d.b). *Healthy habits for emotional well-being*. Retrieved from <https://www.changedirection.org/learn-the-healthy-habits-of-emotional-well-being/>
- ChangeDirection. (2015). *Campaign launch 03.04.2015*. Retrieved from <https://www.changedirection.org/wp-content/uploads/2015/03/National-Launch-Program-2015-03-4.pdf>
- Chase, L., Marahatta, K., Sidgel, K., Shrestha, S., Gautam, K., Luitel, N., Dote, B., & Samuel, R. (2018). Building back better? Taking stock of the post-earthquake mental health and

- psychosocial response in Nepal. *International Journal of Mental Health Systems*, 12(44).
doi.org/10.1186/s13033-018-0221-3
- Chavez, L. M., & Canino, G. (2005). *Toolkit on translating and adapting instruments*.
Cambridge, MA: Human Services Research Institute. Retrieved from
<https://www.hsri.org/publication/toolkit-on-translating-and-adapting-instruments>
- Epstein, J., Santo, R., & Guillemin, F. (2015). A review of guidelines for cross-cultural
adaptation of questionnaires could not bring out a consensus. *Journal of Clinical
Epidemiology*, 68(4), 435-441. doi.org/10.1016/j.jclinepi.2014.11.021
- Frankish, H., Boyce, N., & Horton, R. (2018). Mental health for all: A global goal. *Lancet*,
392(10157), 1493-1494. doi.org/10.1016/S0140-6736(18)32271-2
- Global Health Institute. (n.d.). *Developing a mobile phone-based community health program for
hypertension control in Nepal*. Retrieved from
[https://globalhealth.duke.edu/projects/developing-mobile-phone-based-community-
health-program-hypertension-control-nepal](https://globalhealth.duke.edu/projects/developing-mobile-phone-based-community-health-program-hypertension-control-nepal)
- Hilton, A., & Skrutkoski, M. (2002). Translating instruments into other languages: Development
and testing processes. *Cancer Nursing*, 25(1), 1-7. doi.org/10.1097/00002820-
200202000-00001
- Jha, N. (2013). Primary health care in Nepal. *Health Renaissance*, 11(3), 185-191.
doi.org/10.3126/hren.v11i3.9630
- Jordans, M., Kohrt, B., Luitel, N., Komproe, I., & Lund, C. (2015). Accuracy of proactive case
finding for mental disorders by community informants in Nepal. *The British Journal of
Psychiatry*, 207(6), 501–506. doi.org/10.1192/bjp.bp.113.141077

- Kane, J., Luitel, N., Jordans, M., Kohrt, B., Weissbecker, I., & Tol, W. (2018). Mental health and psychosocial problems in the aftermath of the Nepal earthquakes: Findings from a representative cluster sample survey. *Epidemiology and Psychiatric Sciences*, 27(3), 301-310. doi.org/10.1017/S2045796016001104
- Kohrt, B., Luitel, N., Acharya, P., & Jordans, M. (2016). Detection of depression in low resource settings: Validation of the Patient Health Questionnaire (PHQ-9) and cultural concepts of distress in Nepal. *BMC Psychiatry*, 16(58). doi.org/10.1186/s12888-016-0768-y
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16(9), 606–613. doi.org/10.1046/j.1525-1497.2001.016009606.x
- National Center for PTSD & National Child Traumatic Stress Network. (2010). *Skills for psychological recovery field operations guide*. Retrieved from https://www.ptsd.va.gov/professional/treat/type/SPR/SPR_Manual.pdf
- National Child Traumatic Stress Network & National Center for PTSD. (2006). *Psychological first aid field operations guide (2nd Ed.)*. Retrieved from https://www.nctsn.org/sites/default/files/resources//pfa_field_operations_guide.pdf
- Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton, P., ... Unützer, J. (2018). The Lancet Commission on global mental health and sustainable development. *Lancet*, 392(10157),1553-1598. doi.org/10.1016/S0140-6736(18)31612-X
- Sharma, K. (2006). The political economy of civil war in Nepal. *World Development*, 34(7), 1237-1253. doi.org/10.1016/j.worlddev.2005.12.001
- Shapiro, F. (2018). *Eye movement desensitization and reprocessing (EMDR) therapy (3rd Ed.)*. New York: Guilford.

- Sherchan, S., Samuel, R., Marahatta, K., Anwar, N., Van Ommeren, M. H., & Ofrin, R. (2017). Post-disaster mental health and psychosocial support: Experience from the 2015 Nepal earthquake. *WHO South-East Asia Journal of Public Health*, 6(1), 22-29.
doi.org/10.4103/2224-3151.206160
- United Nations. (2017). *Population situation analysis of Nepal*. New York: United Nations Population Fund. Retrieved from
<https://nepal.unfpa.org/sites/.../Nepal%20Population%20Situation%20Analysis.pdf>
- United States Agency for International Development. (2016). *Mental health and psychosocial support (MHPSS) project*. Retrieved from <https://www.usaid.gov/nepal/factsheets/mental-health-and-psychosocial-support-mhpss-project>
- Van Ommeren, M., Sharma, B., Thapa, S., Makaju, R., Prasain, D., Bhattaria, R., & de Jongg, J. (1999). Preparing instruments for transcultural research: Use of the translation monitoring form with Nepali-speaking Bhutanese. *Transcultural Psychiatry*, 36(3), 285–301. doi.org/10.1177/136346159903600304
- World Health Organization. (2013). *Mental health action plan 2013-2020*. Geneva: WHO.
https://apps.who.int/iris/bitstream/handle/10665/89966/9789241506021_eng.pdf;jsessionid=036F0464F8CE3CC4C3D5294F64701CDF?sequence=1
- World Health Organization. (2016). *Problem management plus (PM+): Individual psychological help for adults impaired by distress in communities exposed to adversity*. Retrieved from
http://www.who.int/mental_health/emergencies/problem_management_plus/en/
- World Health Organization. (n.d.). *Process of translation and adaptation of instruments*. Retrieved from http://www.who.int/substance_abuse/research_tools/translation/en/#

Appendix A – Five Signs of Emotional Suffering

Five Signs of emotional suffering

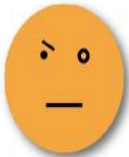
Nearly one in every five people, or 43.8 million American adults, has a diagnosable mental health condition.¹ Half of all lifetime cases of mental disorders begin by age 14.² In addition, 1.7M Americans sustain a traumatic brain injury each year - which may affect their cognitive and emotional functioning. Drug use is on the rise in this country and 23.5 million Americans are addicted to alcohol and drugs. That's approximately one in every 10 Americans over the age of 12.

Often our friends, neighbors, co-workers, and even family members are suffering emotionally and don't recognize the symptoms or won't ask for help.

Here are five signs that may mean someone is in emotional pain and might need help:

**Personality changes.**

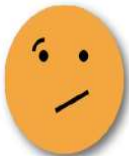
You may notice sudden or gradual changes in the way that someone typically behaves. People in this situation may behave in ways that don't seem to fit their values, or the person may just seem different.

**Uncharacteristically angry, anxious, agitated, or moody.**

You may notice the person has more frequent problems controlling his or her temper and seems irritable or unable to calm down. People in more extreme situations of this kind may be unable to sleep or may explode in anger at a minor problem.

**Withdrawal or isolation from other people.**

Someone who used to be socially engaged may pull away from family and friends and stop taking part in activities that used to be enjoyable. In more severe cases the person may start failing to make it to work or school. Not to be confused with the behavior of someone who is more introverted, this sign is marked by a change in a person's typical sociability, as when someone pulls away from the social support typically available.

**May neglect self-care and engage in risky behavior.**

You may notice a change in the person's level of personal care or an act of poor judgment. For instance, someone may let personal hygiene deteriorate, or the person may start abusing alcohol or illicit substances or engaging in other self-destructive behavior that may alienate loved ones.

**Overcome with hopelessness and overwhelmed by circumstances.**

Have you noticed someone who used to be optimistic and now can't find anything to be hopeful about? That person may be suffering from extreme or prolonged grief, or feelings of worthlessness or guilt. People in this situation may say that the world would be better off without them, suggesting suicidal thinking.

Appendix B – Healthy Habits of Emotional Well-Being

Healthy Habits of Emotional Well-being

It is important to recognize when someone is in emotional pain. It is equally important to learn basic habits that keep us emotionally healthy.

What are the Healthy Habits of Emotional Well-being? They are habits that everyone can learn – habits that allow each of us to identify and practice what works for us.



Take care of you.

Eat, sleep and be active. We don't often think about how important these basic activities are for our mental health – but they are critical.



Check In and get checkups.

We get check-ups for our physical health. We see our dentist to take care of our teeth. We even take our cars in for tune-ups. It's time to take responsibility and get check-ups for our emotional well-being. Talk with your doctor, a counselor, a faith based leader...and your family and friends to make sure you – and those you love – are doing well emotionally.



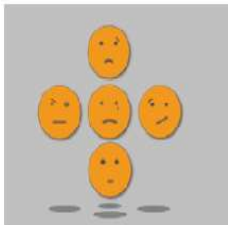
Engage and connect wisely.

Pay attention to your relationships. We can't be healthy if our relationships are not.



Relax.

Learn ways to reduce the stress that we all face – and practice what works for you: meditate, run, knit, dance, sing, write, love.....



Know the Five Signs of Emotional Suffering.

The *Five Signs* are change in personality, agitation, withdrawal, decline in personal care, and hopelessness. Someone may exhibit one or more signs. Many conditions can result in emotional pain. If you see them in someone you love, reach out, connect and offer to help.

If everyone is more open and honest about mental health, we can prevent pain and suffering, and those in need will get the help they deserve.

Appendix C – Forward Translation into Nepali

भावनात्मक हितका लागि स्वस्थ बानीहरु

कोहि भावनात्मक पीडामा छ भने त्यो पीडालाई पहिचान गर्न अत्यन्तै महत्वपूर्ण हुन्छ । आफुलाई भावनात्मक स्वस्थ कसरी राख्ने भनेर जान्न पनि त्यतिकै आवश्यक छ । भावनात्मक हितका लागि स्वस्थ बानीहरु के हुन् त ? ती तिनीहरु हुन जो सबैले सिक्न सक्छन् । आफुलाई कुन बानीले सहयोग गर्छ भनेर पहिचान गरी अभ्यास गर्न सक्छौं ।



१) आफ्नो हेरचाह गर्ने-

खाने, सुत्ने र सक्रिय बन्ने । हामी धेरै जसो सोच्दछौं कि यी बानीहरु मानसिक सन्तुलनका लागि कति आवश्यक छन् भनेर - तर यो धेरै नै महत्वपूर्ण छ ।



२) जाचँ गर्नुहोस-

हामी हाम्रो शारिरिक स्वस्थको लागि जाचँ गराउंदछौं - दातँको हेरविचार गर्न दन्त चिकित्सककोमा जान्छौं, गाडी मर्मत गर्नका लागि मेकानिक काहां जान्छौं । अब भावनात्मक स्वस्थको लागि

जिम्मेवारी लिने समय आएको छ । आफ्नो डाक्टरसंग ,सल्लाकारसंग , विश्वासिलो मान्छेसंग ,आफ्नो परिवारसंग र साथीसंग कुरा गर्नुहोस साथै उनिहरुको भावनात्मक स्वस्थको पनि ख्याल गर्नुहोस ।



३) आफ्नो साथी र सङ्गत बुद्धिमानीको साथ चुन्नुहोस-

तपाईंको सम्बन्धहरुमा ध्यान दिनुहोस । यदि सम्बन्धहरु राम्रा छैनन् भने हामी स्वस्थ रहन सक्दैनौं ।



४) आराम गरौं-

आफ्नो तनाव कम गर्ने तरिकाहरु सिक्ौं । आफुलाई के गर्दा तनाव कम हुन्छ त्यसलाई नियमित अभ्यास गरौं जस्तै- ध्यान गर्ने , दौडने , बुन्ने , नाच्ने , गाउने , लेख्ने आदि ।



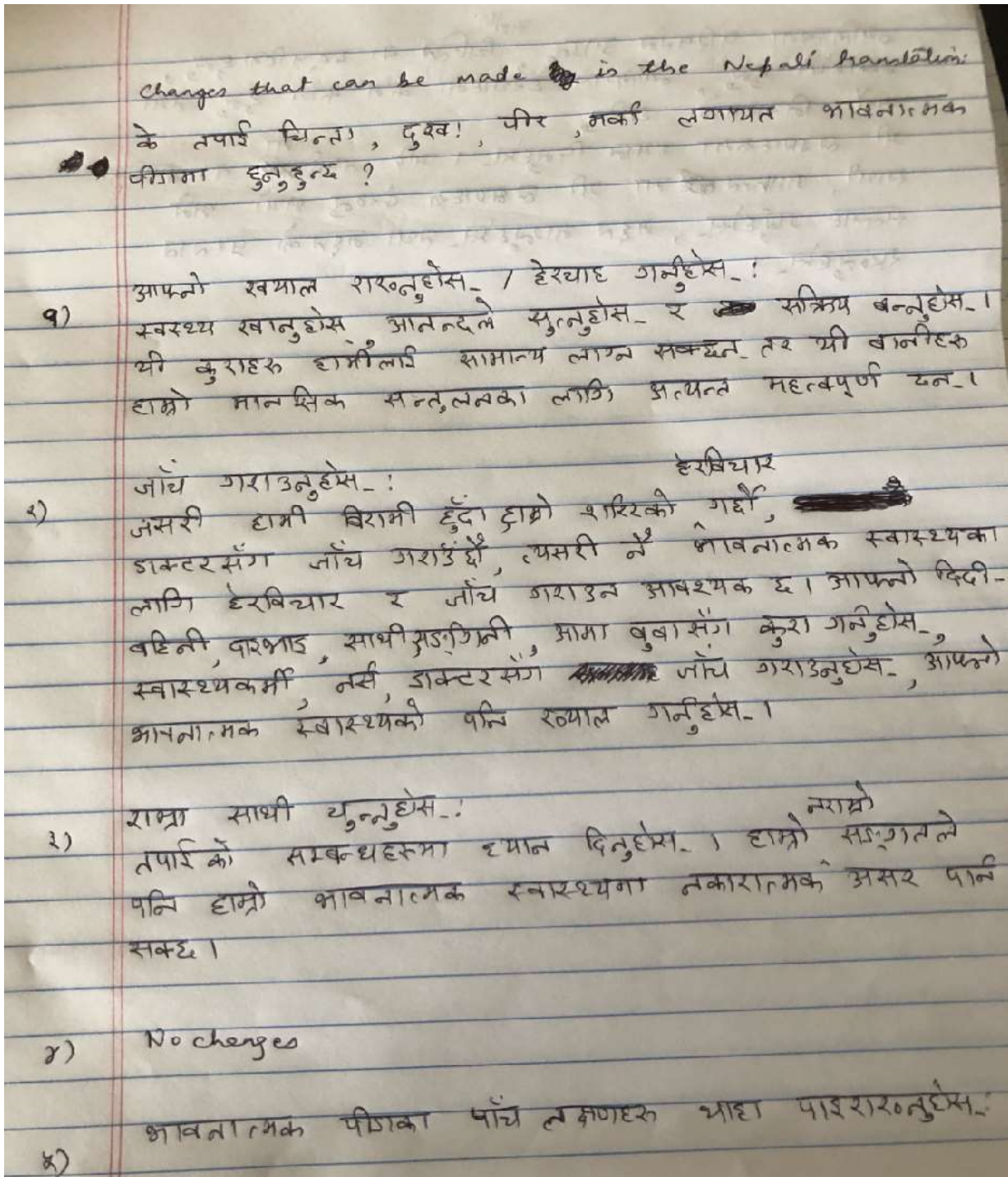
५) भावनात्मक पीडाका पाचँ लक्षणहरु थाहा पाइराखौं-

व्यक्तित्वमा परिवर्तन , चिन्ता वा छट्पटि , एकलोपना , व्यक्तिगत हेरचाहमा अभिरुचि , गिरावट वा आशाहिनता । यी पाचँ लक्षणहरु हुन् । कसैले एउटा वा बढी लक्षणहरु प्रदर्शन गर्न सक्छन् । जीवनमा

धेरै परिस्थितिले भावनात्मक पीडा दिन सक्छ । यी तपाईंले आफ्नूत वा मनपर्ने व्यक्तिमा यी लक्षणहरु देख्नु भयो भने उनीहरुसंग जुड्ने , कुरा गर्ने र मद्दतको प्रस्ताव राख्नु होला ।

यदि सबैजना मानसिक स्वस्थको बारेमा खुल्ला र इमान्दार हुने हो भने, हामी यसबाट हुने दुःख ,पीडा रोक्नका साथै हरेक मानिसलाई बचाउन र आवश्यक सहयोग पुऱ्याउन सक्दछौं ।

Appendix D – Recommended Edits to the Translation



व्यक्तिवमा परिवर्तन आउनु ^{सद्यः} चिन्तित वा दृष्टपटिमा हुनु, शकोहीरो हुनु, व्यक्तिगत हेरचाहमा कम रुचि हुनु तथा सधैं निराशाले घेरिनु, यी लक्षणहरूमा ध्यान दिनुहोस्। यदि तपाईं ~~मा~~ वा तपाईंका साथी, आफन्त ~~मा~~ यी लक्षणहरू देखाउनु भयो भने सल्लाह गर्नुहोस्, मद्दत माग्नुहोस् तथा मद्दतको प्रभाव राख्नुहोस्।

Appendix E – Forward Translation with Edits

भावनात्मक हितका लागि स्वस्थ बानीहरु

कोहि भावनात्मक पीडामा छ भने त्यो पीडालाई पहिचान गर्न अत्यन्तै महत्वपूर्ण हुन्छ । आफुलाई भावनात्मक स्वस्थ कसरी राख्ने भनेर जान्न पनि त्यतिकै आवश्यक छ ।

भावनात्मक हितका लागि स्वस्थ बानीहरु के हुन् त ? ती तिनीहरु हुन जो सबैले सिक्न सक्छन् । आफुलाई कुन बानीले सहयोग गर्छ भनेर पहिचान गरी अभ्यास गर्न सक्छौं ।



१) आफ्नो हेरचाह गर्ने-

खाने, सुत्ने र सक्रिय बन्ने । हामी धेरै जसो सोच्दछौं कि यी बानीहरु मानसिक सन्तुलनका लागि कति आवश्यक छन् भनेर - तर यो धेरै नै महत्वपूर्ण छ ।



२) जाचँ गर्नुहोस-

हामी हाम्रो शारिरिक स्वस्थको लागि जाचँ गराउंदछौं - दातँको हेरबिचार गर्न दन्त चिकित्सककोमा जान्छौं, गाडी मर्मत गर्नका लागि मेकानिक काहां जान्छौं । अब भावनात्मक स्वस्थको लागि जिम्मेवारी लिने समय आएको छ । आफ्नो डाक्टरसंग, सल्लाकारसंग, विश्वासिलो मान्छेसंग, आफ्नो परिवारसंग र साथीसंग कुरा गर्नुहोस साथै उनिहरुको भावनात्मक स्वस्थको पनि ख्याल गर्नुहोस ।



३) आफ्नो साथी र सङ्गत बुद्धिमानीको साथ चुन्नुहोस-

तपाईंको सम्बन्धहरुमा ध्यान दिनुहोस । यदि सम्बन्धहरु राम्रा छैनन् भने हामी स्वस्थ रहन सक्दैनौं ।



४) आराम गरौं-

आफ्नो तनाव कम गर्ने तरिकाहरु सिक्ौं । आफुलाई के गर्दा तनाव कम हुन्छ त्यसलाई नियमित अभ्यास गरौं जस्तै- ध्यान गर्ने, दौडने, बुन्ने, नाच्ने, गाउने, लेख्ने आदि ।



५) भावनात्मक पीडाका पाचँ लक्षणहरु थाहा पाइराखौं-

व्यक्तित्वमा परिवर्तन, चिन्ता वा छट्पटि, एकलोपना, व्यक्तिगत हेरचाहमा अभिरुचि, गिरावट वा आशाहिनता । यी पाचँ लक्षणहरु हुन् । कसैले एउटा वा बढी लक्षणहरु प्रदर्शन गर्न सक्छन् ।

जीवनमा धेरै परिस्थितिले भावनात्मक पीडा दिन सक्छ । यी तपाईंले आफ्नो मनपर्ने व्यक्तिमा यी लक्षणहरु देख्नु भयो भने उनीहरुसंग जुड्ने, कुरा गर्ने र मद्दतको प्रस्ताव राख्नु होला ।

यदि सबैजना मानसिक स्वस्थको बारेमा खुल्ला र इमान्दार हुने हो भने, हामी यसबाट हुने दुःख, पीडा रोक्नका साथै हरेक मानिसलाई बचाउन र आवश्यक सहयोग पुऱ्याउन सक्दछौं ।

Appendix F – Back Translation

BACK TRANSLATION

Healthy Habits for Emotional or Spiritual Well-Being

Are you troubled by anxiety, sadness or pain? It is very important to find such emotional pain.

What kind of habits do you need to follow in order to stay healthy emotionally? Let's look at some of the points below and exercise them.

1. Take care of yourself

How much we love and take care of our little children. Similarly, it is important to take care of ourselves. Eat well, get good sleep, and live an active life. Eat healthy food and keep yourself and your house clean. Even though these habits look normal to you, they are very important for your mental health.

2. Don't hesitate to get help.

When we get sick we go to the doctor. In a similar way, if you are troubled by emotional pain, you will also need help. When you share your pain with your sisters, brothers, or parents, you will feel relief. If this doesn't relieve your emotional pain, you should go to the nearby health clinic or a doctor.

3. Choose good friends.

Pay attention to your relationships. Bad relationships can cause emotional distress.

4. Relax and rest your mind, and be creative!

Let's learn some ways to reduce mental stress. For example, meditate, run, knitting, dance, or sing, joke, or read books with your neighbors, take part in plays, draw, write stories or poems, always be creative.

5. Know these five signs of emotional pain.

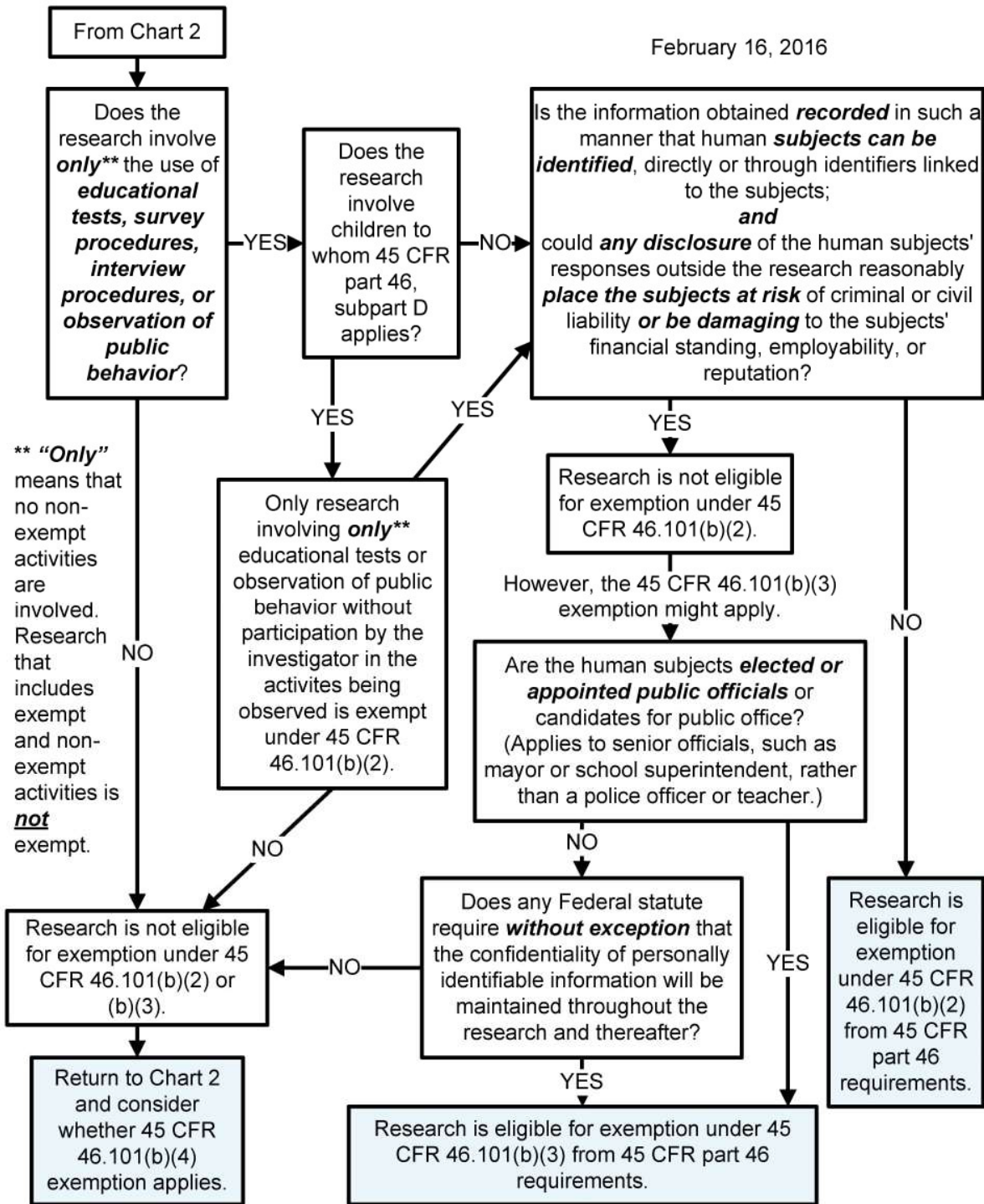
Changes in your personality. Always feeling anxious or worried. Feeling lonely. A decline in your personal care. Always feeling disappointed.

- If you notice these kinds of signs in your friends, then give them emotional support. Try to help as much as you can and teach them these points that you read here. Don't get angry with them and don't gossip about them.

- Everybody should look at emotional health in a natural way. Let's take care of our health honest, open way and then when needed, don't hesitate to ask for help. Show love to those who are in emotional pain and try to help them as much as you can. By doing this, you, your family, and our society, will thrive.

Appendix G – Human Subjects Regulations Decision Chart

Chart 4: Does exemption 45 CFR 46.101(b)(2) or (b)(3) (for Tests, Surveys, Interviews, Public Behavior Observation) Apply?



Appendix H – List of Competencies Met in Integrative Learning Experience

CEPH Foundational Competencies

Evidence-based Approaches to Public Health
2. Select quantitative and qualitative data collection methods appropriate for a given public health context
4. Interpret results of data analysis for public health research, policy or practice
Planning & Management to Promote Health
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs
9. Design a population-based policy, program, project or intervention
11. Select methods to evaluate public health programs
Policy in Public Health
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations
Communication
18. Select communication strategies for different audiences and sectors
19. Communicate audience-appropriate public health content, both in writing and through oral presentation
20. Describe the importance of cultural competence in communicating public health content
Interprofessional Practice
21. Perform effectively on interprofessional teams
Systems Thinking
22. Apply systems thinking tools to a public health issue

WSU MPH Concentration Competencies

Population Health
1. Use evidence based problem solving in the context of a particular population health challenge.
2. Demonstrate application of an advanced quantitative or qualitative research methodology.
3. Demonstrate the ability to contextualize and integrate knowledge of specific population health issues.
4. Address diversity when evaluating population health issues related to improving population health, reducing disparities, or increasing equity.
5. Analyze public health as part of larger inter-related systems of organizations that influences population health at the local, regional, national, and global levels.