



SUMMARY REPORT

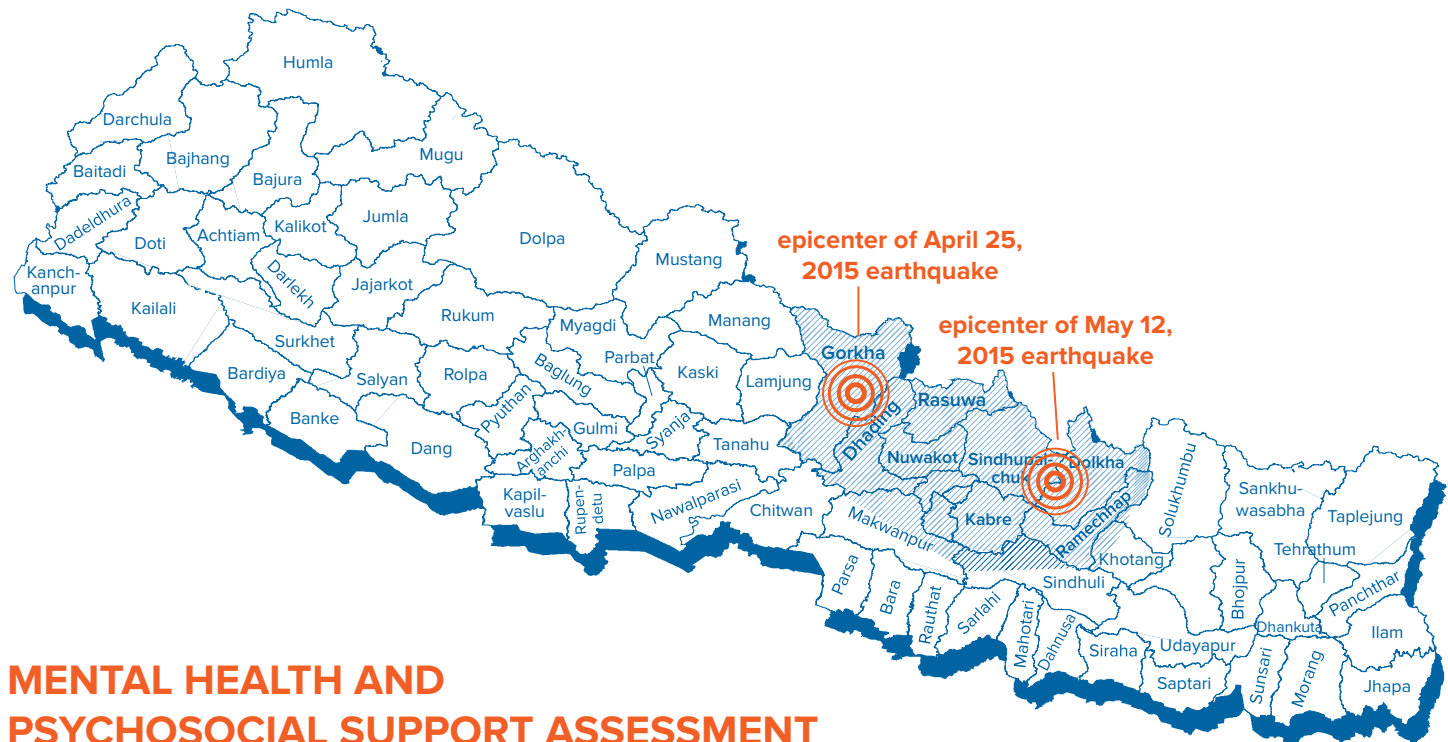
**Exploring the Mental Health and Psychosocial
Support Needs and Resources among
Earthquake-Affected Communities in Nepal**

DEVASTATION IN NEPAL

Over 8,000 people were killed, over 450,000 people displaced and approximately 8.5 million people directly affected after 2 massive earthquakes hit Nepal on April 25, 2015 and May 12, 2015, respectively. Following emergency situations such as this, most people can experience a myriad of mental health and psychosocial issues that can range from common normal reactions to stress (e.g. problems sleeping, feeling anxious), to developing mental health problems or an exacerbation of existing mental disorders.

This report summarizes our assessment findings of mental health problems and ways of coping among the affected population in three districts in Nepal to inform the mental health response.

Figure 1: Map of Nepal and Affected Areas



MENTAL HEALTH AND PSYCHOSOCIAL SUPPORT ASSESSMENT

The mental health and psychosocial support (MHPSS) assessment was carried out from August to September 2015 in Kathmandu, Gorkha, and Sindhupalchowk districts, three of the most affected areas in Nepal. The assessment was conducted by the Transcultural Psychosocial Organization Nepal (TPO Nepal) and supported by International Medical Corps (IMC). The mixed methods design included both qualitative (free-listing activity, in-depth interviews, focus groups) and quantitative (survey) approaches and had the following specific objectives:

- To understand the experience of the earthquake
- To assess mental health and psychosocial problems
- To identify availability of mental health services and sources of support
- To identify stakeholder recommendations in terms of mental health and psychosocial support interventions

Qualitative Methods: Qualitative methods were used to elicit descriptive responses from participants about their experiences of the earthquake¹, availability of mental health services and sources of support², and recommendations from key stakeholders³. The methods included (1) Free listing (240 general community members, 80 respondents in each assessment area), (2) In-depth one-on-one interviews with 45 participants and (3) Focus group discussions (15 with 8-12 participants each). In-depth interviews and focus group participants included key informants and stakeholders (religious and community leaders, health workers, traditional healers, women health volunteers) in addition to the general community members.

Quantitative Methods: A quantitative survey was used to estimate the extent of mental health and psychosocial problems in the three assessed districts. The survey involved 513 general community members (171 participants from each district) who were 16 years-old and older and measured the following symptom domains: (1) depression⁴, (2) anxiety⁵, (3) PTSD⁶, (4) alcohol use⁷, (5) functioning⁸, (6) suicide, (7) perceived needs⁹, (8) serious symptoms¹⁰. Participants who reported a high number of symptoms scoring above specified cut-off scores for each mental health domain (anxiety, depression and PTSD) were classified as having a potential mental health problem. The survey utilized clinical scales that were previously validated in Nepal¹¹.

KEY FINDINGS

Understanding the Experience of the Earthquake



"Father got buried. There was haze of dust everywhere and everything was invisible. There were smokes of dust and everything was invisible. We heard that father was buried so we ran towards that place, it was really difficult to rescue him and we cried for help. Finally, with difficulty we rescued him alive and he was able to speak. He died on the next day at around quarter past one after we rescued him."

- **Community Leader**

The following questions were asked in focus group discussions and in-depth interviews: (1) How did the earthquake impact community members? (2) What are the causes of earthquakes? (3) What should be done during earthquakes? Results are described below:

Impact of earthquake: Community members reported experiencing their own homes collapsing, death of family and loved ones; witnessing destruction of neighbor's homes, schools, and hospitals; and seeing dead bodies.

Perceived causes of earthquake: Beliefs explaining the cause of the earthquake included religious beliefs (the community is sinful), traditional beliefs (the big fish holds the earth and when the fish moves, earthquakes happen) and natural causes (shifting plates), while some people did not know what caused it. Some commented that people who believed in religious and traditional causes were "uneducated".

Beliefs about staying safe during earthquakes: Although the majority of people knew to stay in open spaces, many remained uninformed or misinformed (e.g. saying it would be best to stay under the bed or tables). Some reported that there were ongoing earthquake information efforts (radio and TV ads) but that their reach was limited to larger cities as remote areas have less access to TV and radio.

Mental Health and Psychosocial Problems

Common mental health related problems: Community members were asked to free list the most common mental health and psychosocial problems encountered after the earthquake. Mental health related problems mentioned during in-depth interviews and focus group discussions were classified as: behavioral (i.e., increased anger, aggression); cognitive symptoms (i.e., lack of concentration); sleep (i.e., sleeping difficulties); psychosomatic (i.e., lack of limb sensations). Results showed generalized fear, as most common, followed by sleep problems and unspecified worry. (see Figure 2)

“But after the earthquake, psychosocial problems have increased. People have many worries. Such people are so much worried as they had to lose their houses.

They can't express their worries to strangers. They are worried about the problems the earthquake has created. If they worry much then they can have the problem of psychosis later.”

- **Pharmacist**



Mental health symptoms: Results of the quantitative survey showed high estimates of several symptoms of mental health problems (see Figure 3). Participants most frequently met cut-off scores (indicating potential mental disorder) for depressive symptoms (32.4%) and anxiety (30.8%) while PTSD was the least frequent (5.2%). Of respondents, 36% reported to have ever drunk alcohol. The prevalence of hazardous alcohol use was 20.4%, indicating that among those who used alcohol, more than half (56.6%) met criteria for hazardous alcohol use.

Figure 2: Most commonly reported mental health and psychosocial problems (%) from free-list activity (n=240)

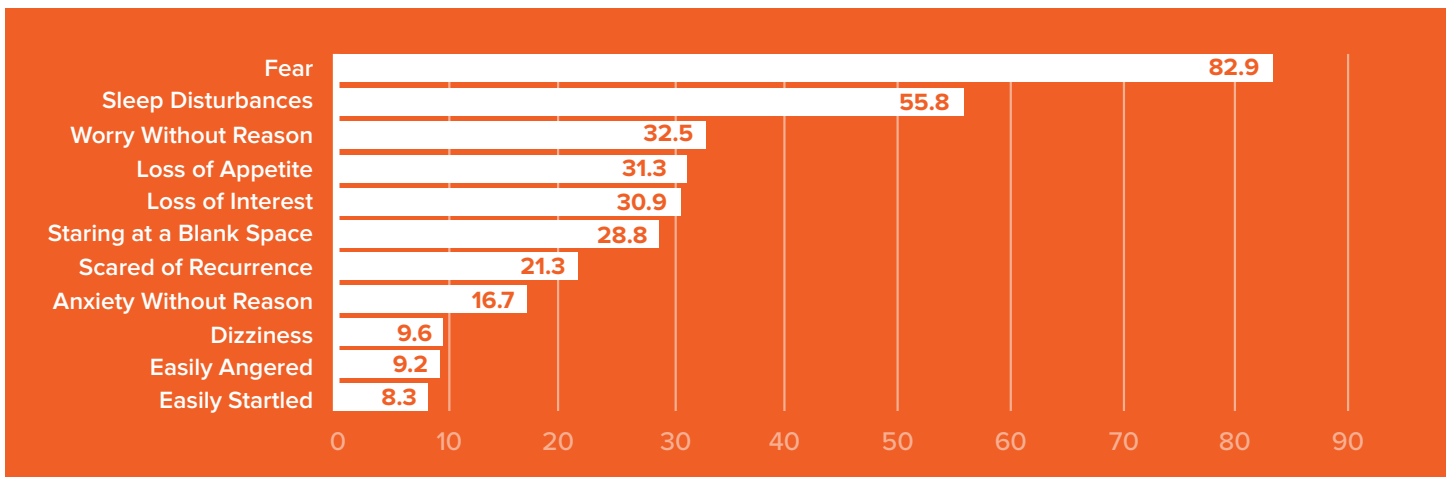
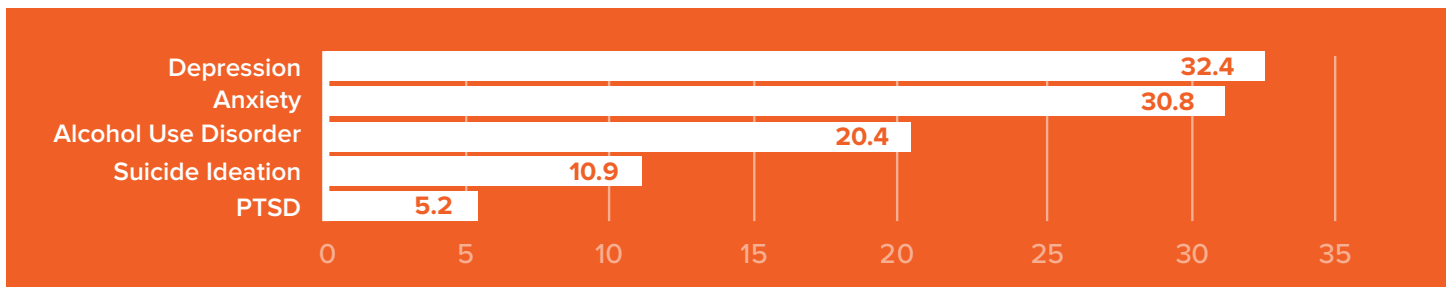
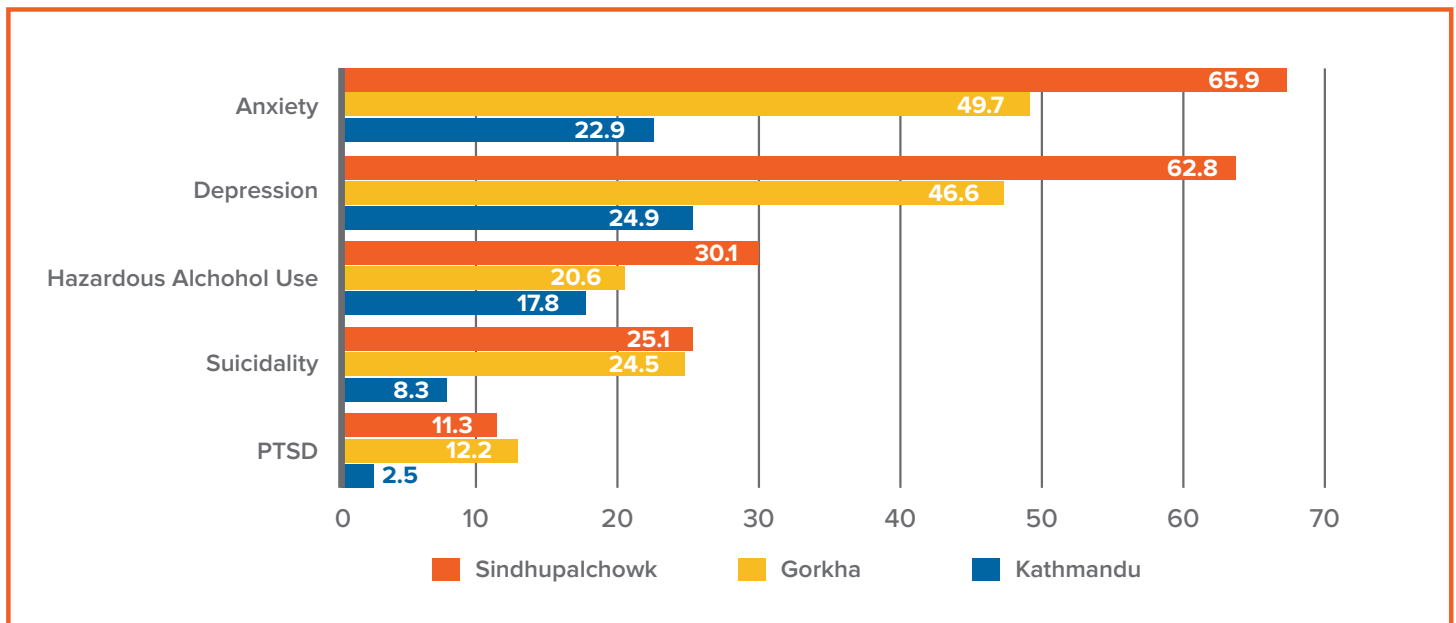


Figure 3: Percent of respondents who reported mental health problems from individual symptom measures (n=513)



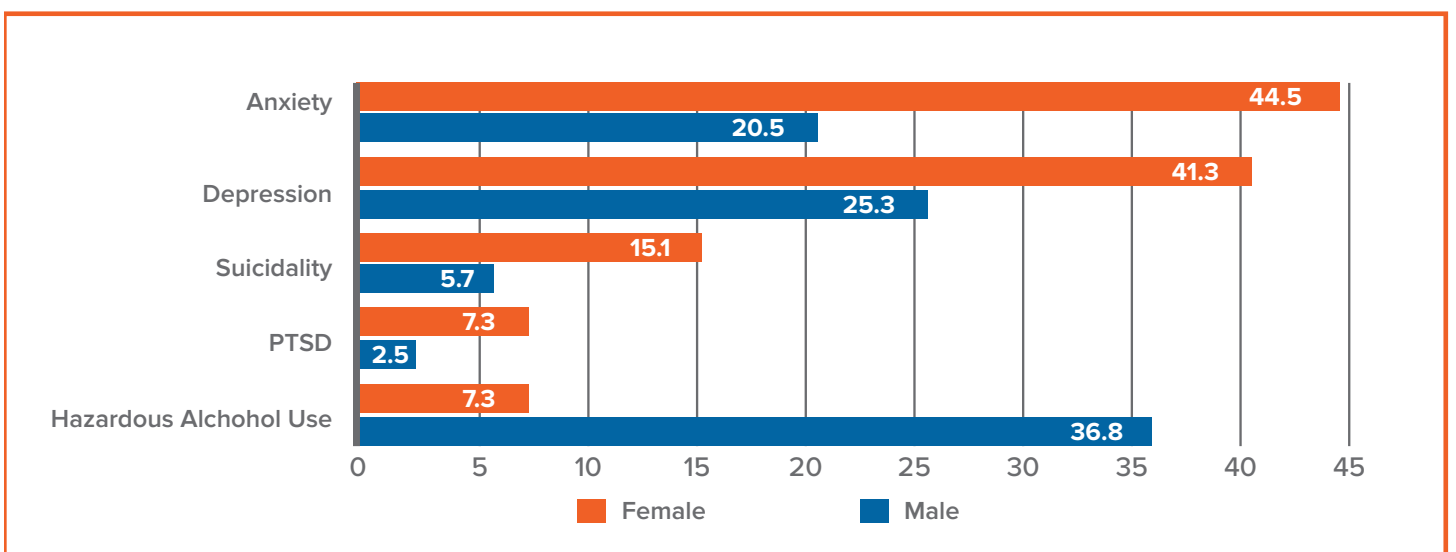
Mental health symptoms across three districts: Among the three assessed areas, Sindhupalchowk, the district most affected by the earthquake, showed the greatest proportion of people classified as having potential mental health problems suggesting a greater need for support or potentially for services (see Figure 4). Depression and anxiety symptoms are the two most commonly reported across all districts.

Figure 4: Percent of respondents who reported mental health symptoms by district (n=513)



Mental health symptoms across sociodemographic groups: Data of mental health problems disaggregated according to sex, age group and caste system¹² showed that women, participants 65 years-old and older and participants belonging to the Dalit and Janajati caste reported the most mental health symptoms (see Figures 5, 6 and 7). The exception was alcohol abuse which was more common among males.

Figure 5: Percent of respondents who reported mental health symptoms by sex (n=513)



¹² Nepal continues to use a caste system that reflects an individual's degree of ritual purity and social standing in the society. A person could be classified as high-caste (Brahmin and Chhetri), middle-caste (Janajati) or low-caste (Dalit) (The World Bank, DFID Report 2006).

Figure 6: Percent of respondents who reported mental health symptoms by age group (n=513)

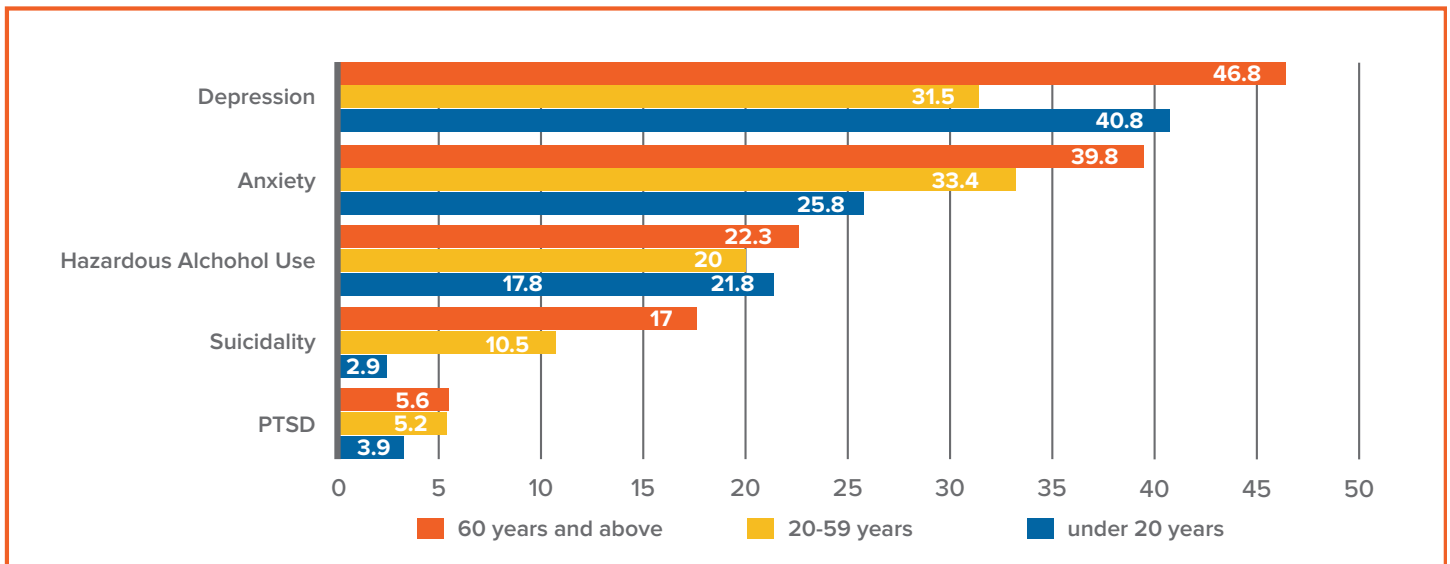
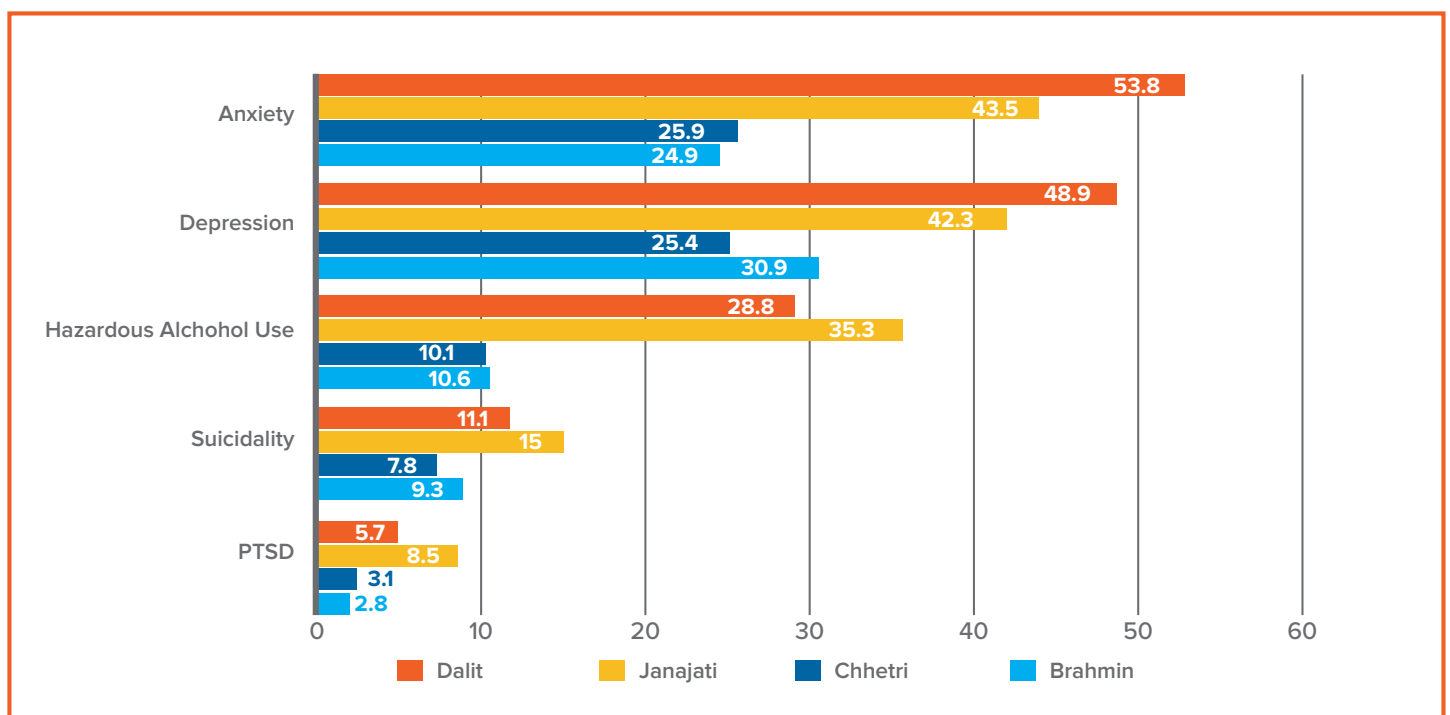


Figure 7: Percent of respondents who reported mental health symptoms by caste/ethnicity (n=513)

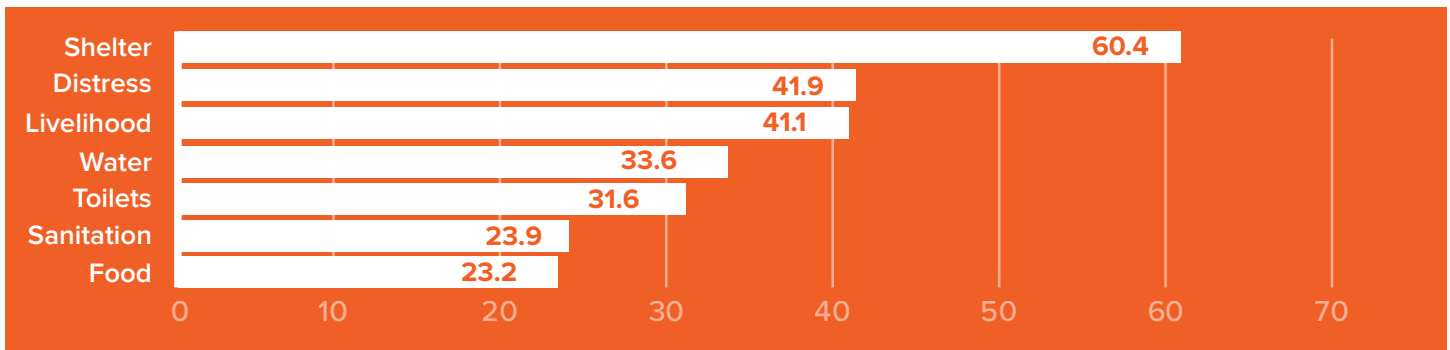


Functional impairment: A locally developed scale was used to measure respondents' reported difficulties in performing daily activities (i.e., household work, income generating activities, caring for the family etc.). Results showed that functional impairment was overall very low (overall mean of 2.83, possible range 0-27). Although, analyses showed that respondents who met criteria for depression, anxiety, PTSD or for hazardous alcohol use had higher scores of impaired functioning. Additionally, respondents with impaired functioning were more likely to report mental health symptoms.¹³

13 Details of statistical reference interval ranges and values: Analyses of functional impairment related to mental health problems showed that 29.2% (95% CI: 25.2%, 33.7%) of respondents who met depression criteria, 26.3% (95% CI: 22.2%, 31.0%) for anxiety, 20.3% (95% CI: 11.3%, 33.7%) for PTSD and 14.9% (95% CI: 9.2%, 23.2%) for hazardous alcohol use had higher scores of impaired functioning. Conversely, those respondents with impaired functioning were more likely to report symptoms of depression (OR=20.15; 95% CI:10.56, 38.44; p<.0001), anxiety (OR=17.77; 95% CI:9.56, 33.01; p<.0001), PTSD (OR=3.36; 95% CI: 1.84,6.16; p<.0001), hazardous alcohol use (OR=1.69; 95% CI:1.17, 2.44; p<.01), and suicidal ideation (OR=4.69; 95% CI:2.71, 8.13; p<.0001)

Perceived Needs: Participants were asked about pressing needs following the earthquake using the Humanitarian Emergency Settings Perceived Needs Scale (HESPER) and reported the following needs most frequently: shelter, distress, livelihood, water, clean water toilets, improved sanitation, and food (see Figure 8). Key informant interviews revealed that participants believed that providing basic services may also help improve psychological problems. Discussions with religious and community leaders, health volunteers and the community revealed a perceived need for the provision of mental health training to both medical and non-medical personnel, psycho-education, increased accessibility to earthquake information and better integration of mental health services into existing services.

Figure 8: Top responses (%) of perceived needs based on HESPER scale (n=513)



AVAILABILITY OF MENTAL HEALTH SERVICES AND SOURCES OF SUPPORT

“We live in a village and we are staying in a community. Beside visiting hospitals personally, one neighbor helps the other when they have such problems”.

– **Traditional Healer**



Key informant interviews and Focus Group Discussions (FGDs) about the availability and use of MHPSS services revealed the following:

MHPSS services before the earthquake: Nepal has a national mental health policy which aims to improve access and availability of mental health services. Local non-governmental organizations engage in ongoing mental health advocacy efforts at the national level. Existing mental health infrastructure and services in Nepal are centralized in major cities such as Kathmandu and receive limited budgetary allocations.

MHPSS services post-earthquake: At the time of the assessment, there were no MHPSS services in Sindupalchowk, one of the districts where mental health problems were most pronounced. Access to MHPSS services are provided by the government and several local and international NGO’s through hospitals and clinics in Kathmandu, Nepal’s Capital. TPO Nepal with International Medical Corps support has started to implement programs supporting MHPSS services in earthquake affected Gorkha, Dhading and Sindhuli districts.

Informal means of support: Participants were asked how community members find mental health support and services after the earthquake. Community members reported that support for mental health problems was most commonly sought either from social sources (neighbor helping another neighbor, cooking together) or through coping strategies including (1) positive strategies: talking to neighbors, staying active and participating in religious activities or (2) negative strategies: excessive alcohol use, smoking and gambling. If individual coping strategies were found to be insufficient in addressing common mental health issues, particularly depressive symptoms, PTSD and alcohol use, many community members mentioned seeking services from traditional healers as their next step in seeking assistance. Interestingly, many people reported that those who seek services from traditional healers are seen as ‘uneducated’.

Formal means of support: When consultation with a traditional healer was ineffective, community members reported seeking help with trained mental health professionals providing pharmacological and psychosocial interventions in community health posts, centers or hospitals. It should be highlighted that there were no reported psychotherapists and mental health professionals in health centers and hospitals in the districts of Gorkha and Sinhupalchowk (see Figure 9).

Figure 9: General Sequence of Community Mental Health Support/Services



CONCLUSIONS

The aftermath of the Nepal earthquake caused significant emotional and psychological burden on members of affected communities. Summary points are as follows:

- Especially in remote areas, understanding of earthquakes and safety responses by many community members remained limited and many still held on to traditional and religious beliefs.
- Ongoing efforts to inform and educate the public seem to be limited to larger, densely populated districts through means less available in more rural and remote areas (i.e., TV and radio).
- The most common perceived mental health related problem was generalized fear and the two most common mental health symptoms were depression followed by anxiety.
- About one third of the participants reported symptoms for depression (32%) and anxiety (31%). These results were higher than epidemiological surveys previously conducted in Nepal using the same measures (28% for depression and 23% anxiety). The results are higher than general WHO estimates that indicated traumatic events and loss increase the risk of mild to moderate mental health problems from 10% to 15-20%, and severe mental health problems from 2-3% to 3-4% (WHO/UNHCR, 2012).
- The prevalence of 20% hazardous alcohol use is striking given that only 36% of participants reported ever consuming alcohol. In fact, among those who ever reported drinking, the prevalence of problematic drinking was 57%.

- Impaired functionality was low overall. Respondents with impaired functioning were more likely to report mental health symptoms. However, it was found that most of the people meeting cut off scores for mental health problems did not report impaired functioning.
- Given that impairment in functioning is one of the defining criteria of mental disorders, it is likely that many of the respondents were experiencing normal and transient symptoms of stress rather than mental disorders. A follow up survey may be useful to determine to what extent reported symptoms and functional impairment may change over time.
- Respondents identified shelter, distress, livelihood, water, clean water toilets, improved sanitation, and food as top perceived priorities following the earthquake.
- Sindhupalchowk, the district most affected, reported the highest rate of mental health symptoms.
- Women, older persons and individuals belonging to the Dalit and Janjati castes reported higher levels of mental health symptoms.
- Community members received support initially through personal and community interactions. If these means were found to be insufficient, many sought help from traditional healers or mental health professionals. Professional mental health services were reported to be inadequate or non-existent especially in rural, smaller communities.

LIMITATIONS

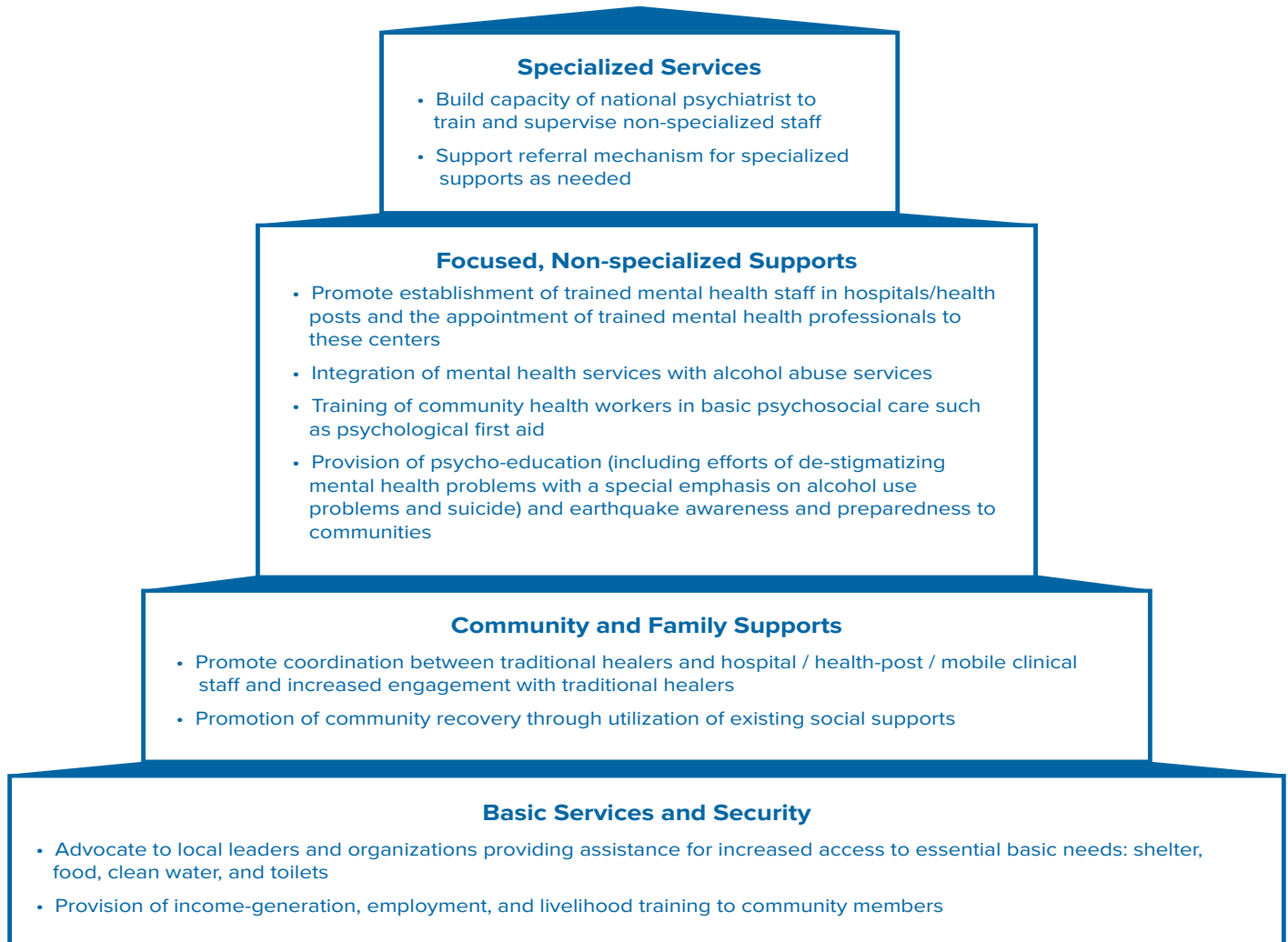
The MHPSS needs and resource assessment report detailed the most common reported mental health problems and symptoms experienced in the period following the earthquakes. This assessment however, did not (1) follow and track respondents overtime or (2) look at a whole range of mental and neurological problems that are important in humanitarian settings such as psychotic disorders, epilepsy and developmental disorders. In addition, some areas from the assessed districts were excluded from the sampling frame because they were inaccessible due to earthquake damage.



PROGRAM RECOMMENDATIONS

Recommendations are based on the findings of this needs assessment using the pyramid intervention structure developed by the Inter-Agency Standing Committee (IASC)¹⁴ as displayed in Figure 10.

Figure 10: IASC intervention pyramid structure for program recommendations



Basic Services and Security:

Increased access to basic needs: Shelter, distress alleviation, provision of livelihood, clean water, toilets, overall improved sanitation, and food were shown to be top prioritized needs. It is notable that distress was listed as second reported priority. It is therefore crucial, for continued coordinated efforts from both government and NGO's for the provision of these needs, especially to remote, inaccessible affected areas.

Community and Family Supports:

Strengthen and promote existing social supports: Social support (neighbor helping another neighbor, communal coping through social and religious activities) was viewed as a key positive coping mechanism for stress and

mental health problems. Focus should be in the promotion of the use of social support sources at the community-level through social engagement with local community and religious leaders. Alcohol use, gambling and smoking were reported as negative coping mechanisms. The prevalence of hazardous alcohol use was at 57% among those who reported to have ever consumed alcohol. It is therefore important to support and strengthen already existing social networks and recommend to create programs that target specific groups including men for preventing and addressing hazardous alcohol use and women, older persons and lower caste members for addressing mental health problems such as depression and anxiety. It is equally important to increase awareness of positive coping strategies and disseminate the deleterious consequences of negative coping strategies such as alcohol use.

Coordination of care and engaging with traditional healers: Given that traditional healers, as well as medical/psychological services were found out to be acceptable forms of treatment for mental health problems in communities, integration of these two modalities is important. This is also suggested by global guidelines (IASC, 2007) and may be achieved through discussion sessions and consultation with counselors, psychologists and psychiatrists who in some cases may be likely to dismiss or completely reject traditional healing methods. Direct engagement with traditional healers is encouraged as this will lead to an improved referral system, greater acceptance of (other) services by clients, and a culturally sensitive incorporation of clinical services (IASC, 2007).

Focused Non-Specialized Supports:

Training of community health workers and general health specialists: After emergencies, the risk of developing mental health problems increases, people with pre-existing mental health problems may be especially vulnerable and some people may need mental health services to regain functioning and livelihoods. Mental health services initially did not exist in earthquake affected areas, mental health related problems were reported by affected populations and FGDs and the HESPER revealed the perceived need for supporting people in distress and for mental health services. One of the key mechanisms to scale up mental health services more widely is the training of general health workers in mental health. This aims to address the lack of specialists in the diagnosis and management of mental health problems and makes such services more easily accessible and less stigmatizing. After the earthquake, TPO Nepal with IMC support began implementing capacity-building programs in the districts of Dhading, Sindhuli and Gorkha. The program consists of: (1) strengthening the capacity of medical and non-medical staff to integrate MHPSS services into the primary health care system using WHO mhGAP Intervention Guidelines, (2) developing a sustainable and multidisciplinary referral network of community-based providers, (3) providing both pharmacologic and non-pharmacologic interventions on individuals with pre-existing mental health problems and (4) improving access to services and support by awareness promotion and stigma reduction. Although capacity-building efforts are in place in select areas that may have brought considerable impact to served communities, these programs remain limited and inaccessible to underserved districts like Sindupalchowk, where the damage was greater and resources are less. Therefore, it is necessary to continue and expand program outreach.

Integration of alcohol use services: This report also showed that high levels of hazardous alcohol use, especially among men requires the inclusion of alcohol use services as part of the mental health service delivery. Before the earthquake, TPO Nepal began to pilot an alcohol problem counselling program in Chitwan province after evidence on the detrimental effects of alcohol use surfaced in studies conducted in South Asia¹⁴. Expansion and promotion of programs such as these can be adapted and expanded in the post- earthquake setting.

Specialized Service

Build Capacity: Future programs should aim to build the capacity of national psychiatrists as they play a key role in training and supervising trained general health care staff. This role includes strengthening general health care providers' understanding and use of referral pathways.



ENDNOTES

1. World Health Organization & United Nations High Commissioner for Refugees. Assessing Mental Health and Psychosocial Needs and Resources: Toolkit for Humanitarian Settings. Geneva: WHO, 2012 (tool 7, 10, 11)
- 2,3. World Health Organization & United Nations High Commissioner for Refugees. Assessing Mental Health and Psychosocial Needs and Resources: Toolkit for Humanitarian Settings. Geneva: WHO, 2012 (tool 11)
4. Derogatis LR, Lipman RS, Rickels K, Uhlenhuth EH, Covi L. The Hopkins Symptom Checklist (HSCL): a self-report symptom inventory. *Behav Sci.* 1974 Jan;19(1):1-15. (plus two local items added to the scale)
5. Derogatis LR, Lipman RS, Rickels K, Uhlenhuth EH, Covi L. The Hopkins Symptom Checklist (HSCL): a self-report symptom inventory. *Behav Sci.* 1974 Jan;19(1):1-15. HSCL-25 (plus one local item added to the scale)
6. Ruggiero KJ, Del Ben K, Scotti JR, Rabalais AE. Psychometric properties of the PTSD Checklist-Civilian Version. *J Trauma Stress.* 2003 Oct;16(5):495-502.
7. Bradley KA, Bush KR, Epler AJ, Dobie DJ, Davis TM, Sporleder JL, Maynard C, Burman ML, Kivlahan DR. Two brief alcohol-screening tests from the Alcohol Use Disorders Identification Test (AUDIT): validation in a female Veterans Affairs patient population. *Arch Intern Med.* 2003 Apr 14;163(7):821-9.
8. Nagendra P, Luitel, Mark J. D. Jordans, Ram P. Sapkota, Wietse A. Tol, Brandon A. Kohrt, Suraj B. Thapa, Ivan H. Komproe, Bhogendra Sharma; Conflict and mental health: a cross-sectional epidemiological study in Nepal; *Social Psychiatry and Psychiatric Epidemiology*, 2012, Page 19.
- 9, 10. WHO/UNHCR toolkit: World Health Organization & United Nations High Commissioner for Refugees. Assessing Mental Health and Psychosocial Needs and Resources: Toolkit for Humanitarian Settings. Geneva: WHO, 2012 (HESPER tool 3, WASS tool 2)
11. Thapa SB, Hauff E. Psychological distress among displaced persons during an armed conflict in Nepal. *Soc Psychiatry Psychiatr Epidemiol.* 2005 Aug;40(8):672-9. Epub 2005 Jul 15.
14. Inter-Agency Standing Committee (IASC). IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings, Geneva: IASC, 2007.
15. Patel V, Weobong B, Nadkarni A, Weiss HA, Anand A, Naik S, Bhat B, Pereira J, Araya R, Dimidjian S, Hollon SD, King M, McCambridge J, McDaid D, Murthy P, Velleman R, Fairburn CG, Kirkwood B. The effectiveness and cost-effectiveness of lay counsellor-delivered psychological treatments for harmful and dependent drinking and moderate to severe depression in primary care in India: PREMIUM study protocol for randomized controlled trials. *Trials.* 2014 Apr 2;15:101. doi: 10.1186/1745-6215-15-101.

This summary report was prepared by:

Dr. Jules Patrick Antigua, International Medical Corps Intern supported by the Global Mental Health & Psychosocial Officer, Ashley Leichner and the Global Mental Health and Psychosocial Advisor, Dr. Inka Weissbecker.

Study Team:

Mr. Nagendra P Luitel, Transcultural Psychosocial Organization (TPO) Nepal

Dr. Jeremy C Kane, Department of Mental Health
of Johns Hopkins Bloomberg School of Public Health

Dr. Wietse Tol, Peter C. Alderman Foundation, Bedford, New York

For any questions regarding this summary report please contact:

Dr. Inka Weissbecker (iweissbecker@internationalmedicalcorps.org)

Mr. Nagendra P Luitel (npluitel@tponepal.org)
