Evaluation of a Brief Training on Mental Health and Psychosocial Support in Emergencies: A Pre- and Post-Assessment in Nepal

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IASC: Inter-Agency Standing Committee
NGO: non-governmental organization

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Abstract

Introduction: A principal strategy for the integration of mental health and psychosocial support in emergency settings is the training of front-line workers in international consensus-based guidelines.

Aim: This paper presents a pilot study evaluating changes in knowledge and understanding as a result of a brief training course in Nepal.

Method: Evaluation questionnaires were distributed to participants in two-day courses (n = 109) before, directly after, and at two months following completion.

Results: The course resulted in a post-training increase in correct answers of 21%, which further increased to 25% at two months.

Conclusion: A short training course based on widely endorsed guidelines to front-line staff can significantly increase mental health literacy for complex emergencies. While promising, the trend of knowledge gain is modest at most, and suggests a need for more intensive or more targeted training courses.

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Introduction

In the absence of consensus among mental health and psychosocial professionals on how to respond to emergencies, the international humanitarian community, under the umbrella of the Inter-Agency Standing Committee (IASC), developed the *Guidelines on Mental Health and Psychosocial Support in Emergency Settings* ("the guidelines").[1] These guidelines provide a common strategy or framework for the integration of mental health and psychosocial support in relief and rehabilitation efforts.[2] Specifically, the guidelines outline minimum responses, across multiple humanitarian sectors, as the first actions that need to be taken to support mental health and psychosocial well-being during an emergency. The underlying premise is that the manner in which any type of humanitarian response is provided has implications, beneficial or detrimental, for the mental health and psychosocial well-being of the affected population.[3] The guidelines cover mental health and psychosocial considerations within various sectors, such as health, education, food security and nutrition efforts, shelter and site planning, water and sanitation.

With the publication of the guidelines as a major step in increased policy clarity, the subsequent pertinent issue is the development of a viable rollout strategy of the guidelines, especially given the multi-sectoral nature of the guidelines. Central to current strategies for implementation are brief workshops, at global, national or community levels, to advocate or build capacity for the use of the guidelines.[4] The training of front-line responders is an important part of an early intervention phase.[5] There is, however, no evidence for the effectiveness of that strategy, especially for the non-specialist, and in settings in which mental health and psychosocial support is relatively novel. The need for a more rigorous data-driven or evidence-based approach to the guidelines has been advocated.[6]

Brief training courses to improve mental health literacy among the public have resulted in changed knowledge, attitudes and helping behaviors among participants.[7,8] To the authors' knowledge, such information is not available for low-income, emergency settings.

Nepal is a country situated between India and the Tibetan autonomous region of China, with a population of approximately 28 million, 90% of whom live in rural areas. A decade-long conflict, which ended in 2006, exacerbated the humanitarian needs of people already at risk. Poor economic performance, entrenched caste, ethnic and gender-based discrimination, and social marginalization, ongoing communal violence or conflict, lack of infrastructure and the high frequency of recurring emergencies from natural events (i.e., floods, landslides, earthquakes) have resulted in chronic and recurrent humanitarian needs. Reviewing the mental health policy in Nepal, Acharya and colleagues concluded that there was no coordinated psychosocial and mental health strategy in disaster response to date in Nepal. They recommended further strengthening of the mental health and psychosocial aspects of disaster preparedness.[9] In response, a multi-agency process of using the guidelines as a tool to raise awareness, foster coordination and systematically integrate mental health and psychosocial considerations within the humanitarian cluster approach has been ongoing in Nepal.[10] The country spends 0.08% of its total health budget on mental health, with virtually no formal mental health care in rural areas.[11]

The present study aimed to evaluate the impact of brief two-day training courses on the knowledge and attitudes of front-line level staff on the integration of mental health and psychosocial support in disaster relief and humanitarian efforts. The study was part of a process to operationalize the international guidelines in Nepal.[10]

Methods

Participants and Training

An evaluation was conducted among 109 participants of two-day training courses aimed at increasing the awareness and knowledge of the IASC *Guidelines on Mental Health and Psychosocial Support in Emergencies*. All participants in the evaluated courses agreed to participate. Although the internationally available outlines for seminars on the guidelines for general humanitarian workers are designed for seven hours, in Nepal, a two-day (14-hour) course was developed to allow more time. All participants were employed by national or local disaster relief organizations. Organizations and staff members were selected based on their previous experience in emergency settings. Participation in the evaluation was entirely voluntary; informed consent of the subjects was obtained. The methods of evaluation conformed to the Helsinki Declaration.

The workshops were conducted in different parts of the country (the Sunsari, Danusha, Chitwan, Kailali, and Banke districts), from mid-December 2009 through mid-January 2010. Training course content and methods were compatible with internationally-developed standards for this type of course. Topics included: (1) understanding mental health and psychosocial concepts; (2) understanding the impact of emergencies and humanitarian operations on the mental health and psychosocial well-being of people; (3) understanding and application of the core principles and key actions of the guidelines; (4) "dos and don'ts" of support; (5) implementation of emergency preparedness and minimum responses per sector or domain; and (6) facilitation of collaboration among all partners. The course was provided by an experienced Nepali trainer with extensive disaster psychosocial program and training experience. The course made use of visual reference materials, and followed a participatory teaching style, which included group discussions, exercises, brainstorming sessions, and lectures.

Instruments

Study respondents were given questionnaires for self-completion before the start of the workshop (pre-test) and directly afterward (post-test). The questionnaires were administered again through phone calls two months after the workshop (follow-up). The instrument was developed for the purpose of this workshop evaluation.

The questionnaire consisted of 16 items covering the essential themes and topics of the workshop. The questions aimed to assess conceptual understanding and envisioned application of knowledge of the guidelines. Eleven items were statements to be scored with true or false, three items were multiple choice questions and two items were vignettes with multiple action possibilities. The instrument covered the following topics: (1) inter-agency coordination (two items); (2) do-no-harm principle; (3) sustainability of services (two items); (4) participation of local community; (5) quality assurance of human resources; (6) impact of emergencies; (7) integration of support systems; (8) multi-sectoral nature of support; (9) complementary nature of multi-layered support; and (10) the meaning and application of mental health and psychosocial support (five items pertaining to psychological first aid, case management and counseling).

Analysis

Responses to all items were coded as dichotomous variables (right/wrong), resulting in a 0-16 total score range. Response tendencies were assessed to ensure that there was no pattern in missing values. First, mean group differences were assessed among pre-, post- and follow-up measurements using paired *t*-tests. Second, differences of crude change scores (δ pre-post; δ post-follow-up; δ pre-follow-up) for gender, occupation, education, and age groups were assessed (using independent sample *t*-test and ANOVA with Tukey's post-hoc analyses, respectively). Third, multivariate regression analyses were conducted to study predictors of change scores, including the same variables in the models. Regression analyses were conducted using standardized *z* scores. Data were entered and analyzed in SPSS 16.0 (SPSS Inc., Chicago, Illinois USA).

Results

The sample (n = 109) consisted of approximately two-thirds male participants. The average age was 33.06 (SD = 9.86), with education quite evenly divided among the three levels of education. In terms of occupation, the largest group comprised of program coordinators (33%), followed by social mobilizers (27%). Table 1 contains an overview of characteristics of participants.

With a mean baseline score of 8.65, respondents answered just above 50% of the answers correctly prior to training. At the end of the two-day workshop, the mean score increased to 10.96 (t = 9.735; $P = .000$), an increase of 21.1%. This increase was maintained two months after termination of the workshop, with a further significant increase between the post-test and follow-up measurement to 11.58 (t = 2.432; $P = .017$), a total increase since baseline of 25.3% (Table 2).

Women (t = 2.8959, df(98); $P = .005$) and respondents under 25 years of age (F = 3.939; $P = .023$) improved more at initial evaluation than did other groups. However, at the time of two-month follow-up, there were no longer any statistically significant differences among the groups. The group of administrative staff demonstrated the strongest improvement at the time of follow-up (F = 3.806; $P = .006$). No significant differences on knowledge

Characteristic	Frequency (%)
Gender	
Male	64.2
Female	35.8
Age (years)	
<25	16.5
25-40	64.2
>40	19.3
Education	
Up to Intermediate level	33.9
Bachelor degree level	35.8
Master degree level	30.3
Occupation	
Program coordinator	33.0
Social mobilizer	26.6
Health provider[a]	11.9
Psychosocial care providers[a]	13.8
Administrative	14.7

Table 1. Respondent characteristics (n = 109)
[a]Para-professional service providers.

improvement among groups based on education were observed. Regression analyses to assess predictors for change scores demonstrated a significant association for gender ($\beta = .222$; $P = .037$) for short term improvement. No other associations were found.

Item-level analyses to assess trends or large disparities demonstrated that improvement occurred on all items, with a tendency toward smaller margins of change for the multiple-choice items. One item was scored correctly less frequently at each measurement (6.4% at baseline compared to the average 55.6%). Omitting this item from analyses resulted in slightly higher change scores ($t = 9.867$, $df(108)$; $P = .000$; 25.8% for change between pre-test and post-test and $t = 12.258$, $df(99)$; $P = .000$; 35.2% for change between pre-test and follow-up).

Discussion

This study aimed to evaluate a brief training course, based on widely-endorsed, consensus-based guidelines, for front-line humanitarian workers in Nepal. There was an overall increase in knowledge and understanding of the application of core principles for mental health and psychosocial support in emergency settings. Participation in the course significantly increased mental health literacy directly after the course, with further training gains two months later. At the same time, the absolute gain in knowledge (i.e., two more questions answered correctly immediately after the course) is less than may be expected considering the high compatibility between the evaluation questions and topics covered in the training course. Education, gender, age and occupation did not appear to play a major part in explaining the evaluation results. Gender and age group differences were short term, and the increased change for administrative staff can be explained by their lower baseline scores that allowed for more opportunity to improve. A regression to the mean trend also explains the other sub-group differences. This indicates that this type of course can target front-line humanitarian aid workers in general.

The maintenance of the gain in knowledge after two months is especially promising, and points to the potential of using such courses as part of disaster preparedness packages. Providing short courses prior to actual disasters may prime participants with general principles, which are subsequently better understood when applied in real-life settings. As the demonstrated knowledge gain is limited in absolute or practical terms, efforts to enhance the impact of training courses on mental health literacy are warranted. It can be argued, although not concluded, from the results of this study that a longer course may ensure a more substantial change in knowledge and understanding, or perhaps better connect to practice through real-world practical assignments. The argument for a longer course is strengthened by the fact that a relatively large amount of training time is devoted to the mere task of making the novel concepts of mental health and psychosocial well-being comprehensible, thereby reducing effective training time on the specific guidelines.

Future research should demonstrate the impact of training courses compared to alternative, less expensive options for knowledge transfer, especially in low-resource settings. Reading a pamphlet, or taking an interactive CD-ROM course, on the core principles may have resulted in a similar change.

These results of this study are salient given current recommendations for brief, generic orientation and training seminars (typically one-half to one day) to instill basic knowledge about mental health and psychosocial support for humanitarian workers.[1] To be clear, the guidelines further advocate post-training follow-up and more focused sector-specific training (i.e., integration of psychosocial considerations into the nutrition sector, with nutrition sector people as training participants). Both would also be recommended based on the results of the present study. These strategies should be evaluated separately in the future. Generic training courses on the guidelines remain necessary, however, for them to be carried out appropriately by disaster relief organizations. Moreover, NGOs (non-governmental organizations) more often than not work with aid workers who perform a multitude of tasks that transcend the arbitrary borders of humanitarian aid sectors. Other forms of knowledge transfer, such as mentoring, on-the-job training or e-learning modules (e.g., http://www.iasc-elearning.org//home) that increase the compatibility between the somewhat abstract guidelines and field reality should be considered.

Limitations

This study has several limitations. The training course was conducted in areas of recent and recurrent emergencies, although at the time of the course, no disaster-relief efforts were operating. This may have made the training course more abstract than would be the case in an acute emergency setting. The study did not include a control group or an alternative training-intervention group (e.g., reading pamphlets), to make between-group comparisons. While the questionnaire represented the content of the training, it may not have captured changes in attitudes and beliefs that resulted from participation in the course.

Pre-Test	Post-Test			Follow-Up		
Mean baseline score (SD)	Mean change (SD)	*t* (df); *P* value	Change %	Mean change (SD)	*t* (df); *P* value	Change %
8.65 (2.65)	2.31 (2.37)	9.735 (99); .000	21.1	2.93 (2.36)	12.425 (99); .000	25.3

Table 2. Evaluation outcomes (n = 100)
Abbreviation: SD, Standard Deviation

Finally, while the evaluated training course aimed to increase psychosocial and mental health literacy in emergency settings, it did not aim to increase service provision skills. This would require a different training and evaluation. Ultimately, a training course should result in a change of quality of services and benefits to the recipients of care and support.

Conclusion

For front-line staff, a short training course based on widely-endorsed guidelines resulted in significant short-to-medium term increase in mental health literacy for complex emergencies. This indicates the potential use of such courses for disaster preparedness for front-line humanitarian staff. While promising, strategies to increase the impact of brief, generic training courses are warranted to strengthen the global rollout of the guidelines.

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