

# Effectiveness of mental health community training on depression and anxiety to the health care profession working in rural centers of eastern Nepal

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## ABSTRACT

**Background:** Depression and anxiety is the leading cause of disease burden in low- and middle-income countries. It is associated with a worse clinical course over the lifespan. This study aims the post-effect on the approach of managing depression and anxiety after the training on diagnosis and management of depression and anxiety. **Methods:** This is a prospective observational study done in the health care professionals who had done training on diagnosis and management of depression and anxiety from me. The participants were evaluated with the questionnaire. **Results:** The training was given in three parts in three different places of eastern Nepal with the health care professionals working near to those centers. There were total of 49 participants from 17 different primary health care centers. The referral rate of patients with depression and anxiety was decreased by 27% as stated by the participants as they can give psychoeducation and counseling in a very well manner after training which was lacking before training. **Conclusions:** Overall, the findings from the current data suggest that there is merit in continuing to evaluate and deliver community health training programs for depression and anxiety. While prevention type and personnel delivering the intervention account for aspects of the heterogeneity observed, more research is needed to identify how program completion and fidelity impact outcomes.

**Keywords:** Depression and anxiety, mental health training, rural centers

## Introduction

Anxiety and depression are common, debilitating mental health problems that often emerge for the first time. Up to 20% of young people will experience a depressive episode or an anxiety disorder by the age of 18 years.<sup>[1-3]</sup> Both depression

and anxiety disorders tend to run a chronic and recurring course, with comorbidity levels of between 10 and 50%.<sup>[4-6]</sup> This poses a significant public health burden, with depression already the leading cause of disease burden in low- and middle-income countries like Nepal where the prevalence of anxiety and depression is 22.7% and 11.7%, respectively.<sup>[7]</sup>

Earlier onset of depression and anxiety is associated with a worse clinical course over the lifespan, and in youth is associated with drug and alcohol abuse, risky sexual behavior, suicide risk, poor academic outcomes, and physical health problems.<sup>[8-10]</sup> One way

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in which to address this disease burden is via early detection, psychotherapy, medical treatment, and prevention. On the whole, the evidence suggests that there is a modest but positive effect of prevention programs for depression and anxiety,<sup>[3,5,10]</sup> particularly those based on cognitive behavior therapy.<sup>[11]</sup>

This study aims the post-effect on the approach of managing depression and anxiety after the training on diagnosis and management of depression and anxiety.

## Material and Methods

This is a prospective observational study done in the health care professional who had done training on Diagnosis and management of depression and anxiety from me. The training was done from Jan 2019 to March 2019. The training was provided by me as I have taken the trainer's workshops. I have delivered the PowerPoint presentation to the participants which was followed by role-plays and question-answer session. The effect of training was evaluated with the questionnaire after 1 month and 3 months of training. Ethical Clearance was taken from the ethical committee in March 2019.

The participants were evaluated with the questionnaire which includes following questions like

- How many patients of mental health disorder do you see daily?
- Which is the five most common mental health disorder do you encounter in your daily practice?
- What was your level of skills in the diagnosis and management of depression and anxiety before training?
- Do you think that after training there is an improvement in skills?
- Were you confident in managing such patients before training?
- Whether your level of confidence improved or not after training in 1 month and 3-month time duration?
- Which area do you think has improved after the training?
- Was there any difference in 1 month and 3-month experience after training?
- What was your knowledge of psychoeducation before training and after training?
- Does the referral rate of patients with depression and anxiety decrease after your training in the primary health care center where you work?
- What was your overall impression of the training?

All the results are compiled in Microsoft Excel and are assessed by the SPSS 10. The results are shown in figures, tables, and charts. Informed consent was taken from the participants before starting the research.

## Results

The training was given in three parts in three different places of eastern Nepal with the health care professionals working near

to those centers. There were a total of 49 participants from 17 different primary health care centers [Table 1].

Most of the participants stated that the confidence was improved after regular use of training experience in 3 months' time rather than 1-month time [Tables 2 and 3].

The referral rate of patients with depression and anxiety was decreased by 27% as stated by the participants as they can give psychoeducation and counseling in a very well manner after training which was lacking before training. The overall impression

**Table 1: Demographic profile**

Particulars	n=49 (%)
Sex	
Male	30%
Female	19%
Health care providers	
Health assistants/ANM	21%
Staff nurse	19%
Medical doctor (Undergraduates)	4%
Primary care physicians (MDGP)	5%
Level of health care	
Health post	11%
Primary health care centers	21%
Community health care center	17%
Average number of patients daily	8%

**Table 2: Five most common mental health disorders**

1. Depression
2. Post-traumatic stress disorder
3. Anxiety
4. Schizophrenia
5. Mood disorder

**Table 3: Level of skills and confidence**

Improved	84%
Static	16%
Not improved	0

**Table 4: Area improved**

Diagnosis	42%
Assessment	41%
Cognitive behavior therapy	49%
Other psychoeducation	43%
Counseling	49%
Share decision-making	49%
Medical treatment	41%

**Table 5: Knowledge of psychoeducation**

improved	69%
Not improved	13%
Can't say (need more time to assess)	18%

of the training was satisfactory and they also stated that they need those training in a regular period so that they can be updated in their knowledge and skills [Tables 4 and 5].

## Discussion

The aim of this study was to provide an evaluation of training that was given to the health care professions who worked in a rural setup and provide health care in the respective areas to prevent depression and/or anxiety. Our findings show that those types of training programs have a beneficial effect on health care delivery to depressive and anxiety patients.

Mental health training could be an effective intervention for improving knowledge, attitudes, and practices among primary health care professionals regarding mental, neurologic and substance use disorders. Training is a prerequisite and vital to enhancing the knowledge, attitude, and practice of primary care professionals which plays a significant role in the easy success of integrated care and treatment of mental, neurologic and substance use disorders into the existing general health care.<sup>[12]</sup>

In this research, we found that the confidence level and the skills in diagnosis and management of depressive and anxiety patients were improved compared to before. This was suggested that before training the health care professional was assessing the patients but not in the correct way as they have to be. They know the skills that were told in their studies but not clinically practiced. So, after training when they got the chance to do role-plays and another update in depression and anxiety, obviously it will add value in their skills and confidence in assessing and managing. This was also supported by various studies done in the past.<sup>[6,13,14]</sup>

The most common mental disease was depression followed by post-traumatic stress disorder and it was also shown the same pattern in other studies done in other low- and middle-income countries. The reason behind may be the financial situation, tragedy, separation, no job, and family collision.<sup>[13,15]</sup>

The general public tends to visit district hospitals or primary health care centers in rural areas for their initial contact with mental health care. GPs were shown to be the first professional contact in over 70% of cases in most of the countries. However, primary care providers, especially those without mental health training, may perceive insufficient knowledge as a barrier to management. Furthermore, some primary care providers have limited motivation to manage mental health problems. While policies such as the better access initiative in many countries have increased the rate of management of depression by primary care providers through enhancing training for mental health treatments, training remains the fundamental strategy to improve primary care providers' skills, motivation, and participation in mental health care.<sup>[16]</sup>

Before training the main skills that the health care profession was lacking were psychoeducation and counseling. After training most

of the health care professionals stated that they were confident in counseling, delivering cognitive behavioral therapy, and other psychoeducation not in a professional way but to some extent that might help the patient to cope with depression and anxiety.

The health care professionals also stated that they were very motivated with such type of training and wants to get involved in other such trainings that help them to update their knowledge, skills, and approach.

Taken together, these data suggest that the effect of training on diagnosis and management of depression and anxiety prevention programs is maintained at 1–3 months after the program is delivered and highlights the need for long-term follow-up assessments to establish whether gains remain at and beyond this point. Indeed, more research is needed to accurately assess if prevention programs, in general, have the potential for prolonged effects. We are relying on participants' self-report, and do not have any independent evidence that their knowledge and clinical skills have changed.

## Conclusions

Overall, the findings from the current data suggest that there is merit in continuing to evaluate and deliver community health training programs for depression and anxiety. While prevention type and personnel delivering the intervention account for aspects of the heterogeneity observed, more research is needed to identify how program completion and fidelity impact outcomes.

## Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient (s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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## Conflicts of interest

There are no conflicts of interest.

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