

MENTAL HEALTH EDUCATION INTERVENTION FOR TRAINING TEACHERS IN AREAS AFFECTED BY EARTHQUAKE

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INTRODUCTION

On 8th October, 2005, Pakistan was hit by a massive earthquake resulting in more than 86,000 deaths, twice as many injured and nearly 2-3 million people made homeless.

A mental health needs assessment survey conducted after the earthquake in Pakistan found willingness and motivation among a range of local people including schoolteachers, and community and faith leaders in participating in awareness raising and health promotion activities to help their community to deal with the massive psychological impact of the disaster¹.

In the current scenario of mental health services in Pakistan where only 3.2 psychiatrists are available for a population of 1 million, the psychosocial interventions and mental health awareness cannot be delivered by mental health professionals alone. The essence of the community mental health programme in Pakistan has always depended on an intersectoral collaboration and a multifaceted and a multiprofessional approach in implementing mental health in the community. Personnel belonging to education, Non Government Organizations and social development sectors have always been useful in creating mental health awareness.

Previous work indicates that specially the school mental health program as part of the community mental health programme in Pakistan succeeded in improving

the awareness of mental health not only of schoolteachers and school children but also in general of the whole community².

The present study aimed to find the level of awareness for mental health in the school teachers in an earthquake affected area.

SUBJECTS AND METHODS

This study was conducted as part of a two days workshop which was conducted for the primary school teachers for 'understanding mental health and psychosocial interventions' in the Union Council Salmiah of Azad Jammu & Kashmir in August 2006.

Union Council Salmiah has a total of 42 schools out of which 4 are privately run and the rest are administered by the District Education Department. There are 4 schools for higher education, 6 for middle education and the rest 32 for primary education. There are a total of 3708 students currently attending the schools and 130 school teachers involved in teaching.

The study design was pretest and post test interventional. In the study there were 29 primary level schools teaching from class nursery till class five, with a total number of 86 teachers. All the teachers were invited for the workshop but unfortunately due to difficulties in communication and adverse weather and road access only 12 teachers attended the two days workshop.

Questionnaire

An indigenous questionnaire was designed to assess the baseline knowledge about various aspects of mental health. The questionnaire had 20 questions with a range of three possible responses; Yes, No or Don't Know.

The Questionnaire was developed in English and back translated in Urdu. It can be obtained on request from the author.

Statistical Analysis

The pretest evaluation questionnaires were administered before the start of the workshop and post test evaluation done at the end. The pretest and the post test questionnaires comprised of the same questions to evaluate the knowledge imparted by the intervention. Both had 20 questions in total with three possible responses, 'yes', 'no' and 'do not know'.

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Question no 1-4 were related to knowledge regarding the general awareness about mental illnesses and mental health, question 5-10 were related to knowledge about causes for the common mental illnesses. Questions 11 and 12 were about presentation of mental illnesses and questions 13-14 were about mental health difficulties in children. Question 15-17 were related to issues related to addiction. Question 18-20 were about the knowledge of treatment modalities available for mental illnesses. Scoring was done for each question, 1 for one correct answer and 0 for wrong answer or those with response 'do not know' with a highest possible attainable score of 20.

Data was entered in SPSS version 11 and statistical analysis was done. Descriptive statistics were applied for background variables and means of scores were calculated along with the frequencies and percentages of participants with correct and incorrect responses both before and after the intervention training course was assessed as some participants answered to questions correctly before and after the training course whereas some answered incorrectly after the course. Similarly some participants answered to questions incorrectly before and even after the intervention whereas other corrected themselves after the interventions. For the hypothesis that the intervention led to increase in scores, t-test involving paired differences (dependent sample) was applied (for each teachers score in pre test evaluation form and post test evaluation form) at $\alpha=0.05$, a single tailed test.

RESULTS

A total of 12 teachers participated in the workshop, 2 (16.66%) were females and 10 (83.33%) were males and all of them were teaching at the primary level of education. About 50 % of the teachers had been teaching at the same facility for last 5 months whereas the mean duration of the remaining 50 % of the teachers for teaching at the same facility was 238.33 months (S.D. + 50.03 months).

The mean scores of the females were 12.00 (S.D. + 0.0) before the intervention and in their post test evaluation forms their mean score was 14.00 (S.D. + 2.82). The mean scores of the males were 11.80 (S.D. + 1.36) in the pretest evaluation forms and in the post test evaluation forms it was 12.60 (S.D. + 1.64).

When the questionnaires were evaluated on the basis of the questions related to specific areas, the improvement in responses was determined by calculating the percentages .

Regarding the issues related to the General Awareness about mental illnesses and mental health, 39.85% of participants gave correct responses in both the pretest forms and post test evaluation.

There were 27.08% of participants with incorrect responses in the pretest forms but in the post test forms

they answered it correctly. There were 25% of the participants who were incorrect in the pretest evaluation and remained incorrect in the post test evaluation too. However, 8.33% of the participants had answered correctly in the pretest but gave incorrect responses in the post test. Based on the questions answered by the participants regarding each issue in the pretest forms compared with their post test forms.

Overall the mean scores of the participants were 11.83 (S.D. + 1.19) in the pretest evaluation forms and in the post test evaluation forms their mean score was 12.83 (S.D. + 1.80). When single tailed t-test, involving paired differences was applied for each participants scores in the pretest forms compared to their post test scores , at $\alpha=0.05$, the value of d_0 that is the critical value turned out to be 1.06 and the d i.e. -1.16, (the sample mean of the differences of scores for each participant) lied in the critical region. The differences of scores, in the pretest and post test forms of the participants were statistically significant.

The greatest improvement was noted in response to different treatment modalities available for Mental illnesses as 61% of respondents were able to recognize different treatment modalities in post test, compared to pre test. Least improvement was reported to issues related to addiction as only 2.7% of respondents answered correctly post test, compared to pre test. 4.16% of respondents were able to give correct responses in identification of mental health difficulties, 8.3% to the presentation of illnesses and 18.5% were able to recognize causes of mental illness correctly.

DISCUSSION

Post earthquake, the affected areas in Azad Kashmir and NWFP which already had meager mental health services showed a steep decline. The mental health service provision had to rely on primary care physicians, paramedical staff and the social organization workers. The survivors had some reservations relating their psychosocial issues to these healths professional, however the lady health workers and the school teachers comparatively had a better rapport with the survivors¹.

During the rehabilitation phase, one of the sectors which developed quickly was the education sector. Fortunately majority of the surviving school teachers were not only active in providing the educational services but were also a source of motivation for the community in rehabilitative services.

Previous experience with school teachers for mental health service and promotion² prompted the idea of using them as a resource for mental health and psychosocial rehabilitation in the earthquake affected areas.

However it was pertinent to assess the baseline knowledge of the school teachers regarding the mental health issues before they could be involved to dissipate mental health information. The current study highlighted the various positives and the negatives in the knowledge

of the schoolteachers before and after their training for mental health and psychosocial training.

Regarding the general awareness about mental health, majority of the school teachers had positive information. The cumulative percentage showed an overall improvement in the knowledge after the training workshop. However some concepts did not altered and knowledge alone cannot alter the practical perceptions. Majority had a belief that those who have mental illness are morally weak and a curse for the family and that those who suffer from a mental illness can never fulfill their responsibilities. Post workshop there has not been a significant improvement and this aspect needs more intensive efforts if teachers have to provide mental health service.

Majority of the school teachers had an understanding about the various etiological factors for mental illnesses and there was an improvement in the knowledge after the workshop. A majority continued to answer incorrectly to concepts regarding mental illnesses can be contained with will power. This has again strong implication because within the community population suffering from mental illness either adults or children are advised to “be strong” or use their will power to contain the mental illness. The understanding about the biological basis of mental illnesses is still vague and therefore a majority also believed that not being close to religious practices can predispose to having a mental illness.

The school teachers in general had adequate knowledge regarding the presentation of mental illnesses in our setting and specially the somatic presentation of psychiatric disorders which is very prevalent in the Pakistani setting³. Majority acknowledge the various physical and psychological presentations of mental illnesses

The school teachers had a good understanding about the difficulties of the children and during the workshop their attitudes towards solving the psychological difficulties of children was positive. Though the question-

naire did not focused on common psychiatric disorders in the children but the input from the school teachers in the after math of the earthquake was positive. Majority believed that psychosocial intervention would be more valuable in the children.

Misconceptions about the treatment modalities in our setting are again evident from this brief survey also. The high index of false response even post intervention indicates that the prevalent cultural values dominate the existing behaviors and attitudes. Majority of the school teachers misinterpreted the long term use of psychotropics with being addictive. In the community this misnomer dominates that mental illnesses are not treatable and therefore the medication has to be at times life long.

About marriage, as being one of the treatment modalities, majority believed so even after the intervention indicating that the knowledge pertained and for bringing a change in the practices a culturally appropriate mental health strategy is required.

In general the school teacher can be a good source for providing mental health and psychosocial rehabilitation in earthquake affected areas where no other mental health service exists but the training has to incorporate the correction of firm culturally accepted concepts regarding mental health.

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