The Unified Protocol for Depression and Anxiety in Adults: Preliminary Findings from Pakistan

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***Abstract*—** Most patients with depression and anxiety in low-resource settings don't get evidence-based treatment. Transdiagnostic approaches like UP are promising for these settings because they are multi-problem, modular, flexible, and have low complexity. The present study aimed at a preliminary examination of the adapted Unified Protocol for Transdiagnostic Treatment of Emotional Disorders (UP) for patients suffering from depression, anxiety, or comorbidity of both in Pakistan. In a pre-post study design, 15 patients suffering from depression and anxiety completed a 14-week UP treatment program. Multiple outcome measures including depression and anxiety, work and social adjustment, and emotion dysregulation were administered during the baseline, mid-treatment, and post-treatment phases. The results indicated a significant reduction in the outcome measures for all the participants. These findings suggest that UP may be a useful treatment for depression and anxiety in low- and middle-income countries.

***Keywords*—** Anxiety, Depression, Emotion Regulation, Evidence-Based Treatment, Transdiagnostic

I. Introduction

Major depressive disorder and anxiety disorder are two of the most common mental health disorders in the world, affecting over 280 million people each [1], [2]. They are among the most commonly co-occurring psychiatric disorders [3, 4], and are sometimes referred to as emotional disorders [5]. Studies suggest that shared vulnerabilities may explain the high comorbidity rates between depressive and anxiety disorders. Empirical research supports this, as negative affectivity is a significant factor in emotional disorders and is elevated in individuals with depression and anxiety disorders [5]-[7]. This form of co-occurrence is associated with a more severe and protracted clinical course, greater disability, and a higher risk of suicide [4], [8], [9]. Thus, efforts to improve treatment programs for these disorders in mental health services are necessary.

Disorder-specific manualized cognitive behavior treatment (CBT) is effective for anxiety and depression [10], [11]. However, disorder-specific treatments may not be enough to adequately address co-morbidity [12], do not work for a considerable number of patients, and are difficult to disseminate since it is costly and time-consuming to train therapists in a range of different protocols [13],[9]. The problem is more pronounced in treatment settings with a scarcity of resources.

A transdiagnostic approach has emerged with the goal of better explaining and treating comorbidity. It hypothesizes that shared cognitive and behavioral processes contribute to the development and maintenance of symptoms across different psychological disorders [6]. Likewise, this approach targets common factors across disorders to treat multiple disorders simultaneously [14]. One such transdiagnostic treatment approach is the Unified Protocol for Transdiagnostic Treatment of Emotional Disorders (UP) [15] which is equally efficacious as disorder-specific CBT protocols for anxiety disorders and more efficacious for depressive disorders [16], [17], and the impact of comorbid disorders is sustained at follow-up [18]. UP is an adaptable, module-based, and low-complexity treatment that can be used to treat multiple problems in resource-limited settings [19].

Given these advantages of UP over disorder-specific treatments, the present study aimed at the preliminary examination of UP for treating depression, anxiety, or comorbidity of both conditions in Pakistan. The present study hypothesizes that the adapted UP treatment will lead to a decrease in depressive and anxiety symptoms, impairment in work and social functioning, difficulties in emotion regulation, and experiencing negative affect, and an increase in positive affect after the treatment.

II. METHOD

The present study employed a single group pre-post study design using quantitative measures with descriptive and statistical analysis.

A. Sample and Procedure

A total of 22 potential participants responded to the study flyers shared on social media platforms. After screening through the Beck depression inventory (BDI-II) and Beck Anxiety Inventory (BAI), 19 participants met the inclusion criteria (age ≥ 18, anxious or depressive symptomatology) and exclusion criteria (suicide risk, comorbidity of pervasive developmental disorder, psychotic disorders, or severe physical illness, concurrent psychotherapy, psychopharmacological treatment). However, 1 participant was excluded due to bipolar disorder and medication, and 1 participant was excluded due to suicide risk after making

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appropriate referrals. 2 participants refused to participate, leaving a final sample of 15 participants aged between 21 and 45 years (M = 27.53 years, SD = 9.15). The demographic breakdown was as follows: 11(74%) were female, 4(26%) male; 6 (40%) married, 9 (60%) unmarried; 13(87%) had bachelor's degrees, 2(13%) master's degree or above; 8(53%) unemployed, 7(47%) employed. All research participants underwent 14 weekly individual sessions of 50-60 minutes each using the adapted UP. They completed three assessment phases: baseline, mid-assessment (after 7 sessions), and post-treatment.

B. Treatment

The current researchers adapted the Unified Protocol (UP) treatment and used the adapted version in this study. UP outlines two complimentary modules for goal setting and psychoeducation followed by five core treatment modules: mindful emotion awareness, cognitive flexibility, countering emotional behaviors, awareness and tolerance of physical sensations, and emotion exposures, and an optional relapse prevention module to help people maintain their gains after treatment. The therapist that delivered the treatment was a certified UP therapist and has more than 5 years of clinical experience.

C. Measures

The study used the following outcome measures:

Demographics Questionnaire: To collect information about the participants' age, gender, educational qualification, job employment, and marital status.

Beck Depression Inventory-II (BDI-II) [20]: It is a 21-item self-report questionnaire to assess depressive symptoms with scores ranging from 0 to 3. Higher scores indicate worse depressive symptoms. The reliability of the Urdu version for the current study is (α=0.92).

Beck Anxiety Inventory (BAI) [21]: It is a 21-item self-report questionnaire to assess the severity of anxiety symptoms with scores ranging from 0 to 3. Higher scores indicate worse anxiety symptoms. The reliability of the Urdu version for the current study is (α=0.90).

Work and Social Adjustment Scale (WASA) [22]: It represents a simple measurement of impairment of functioning and consists of 5 items, each rated on an 8-point severity scale adding up to a maximum severity of 40 points. It is validated for use across the full spectrum of psychiatric disorders. The reliability of the Urdu version for the current study is (α=0.89).

Difficulties in Emotion Regulation Scale (DERS) [23]: It is a 36-item scale with 6 subscales that measure emotion dysregulation and emotional self-regulation strategies. The subscales are non-acceptance of emotional responses, difficulty in performing purposeful behavior, difficulty controlling impulse, lack of emotional awareness, limited access to emotion regulation strategies, and lack of clarity of emotion. The items are scored on a scale of 1 to 5, with higher scores indicating more severe difficulties in emotion regulation. The reliability of the Urdu version for the current study is (α=0.87).

Positive and Negative Affect Schedule (PANAS) [24]: It is a self-report measure that assesses the two broad dimensions of affect: positive affect and negative affect. It is a 20-item scale, and items are rated on a 5-point scale, with higher scores indicating higher experience of those emotions. The reliability of the positive and negative affect is (α=0.84) and (α=0.86) for the current study, respectively.

D. Data Analysis

Statistical analysis was performed using SPSS. Descriptive statistics were used to analyze demographic characteristics. One-way repeated measures ANOVA was used to estimate the effect size of mean differences in outcome measure scores across pre-, mid-, and post-assessment.

III. RESULTS AND DISCUSSION

The aim of this study is to investigate the preliminary effects of UP in reducing anxiety and depression in individuals with emotional disorders. A repeated-measures ANOVA was performed to evaluate the effect of UP on depression, anxiety, difficulties in emotion regulation, and negative and positive affect at pre-, mid-, and post-treatment phases. The means and standard deviations are presented in Table 1. The results revealed statistically significantly difference between time points (BAI: $F[1.43,20.05]=8.79$, $\eta 2=0.38$, $P=0.004$; BDI: $F[2,28]=8.48$, $\eta 2=0.37$, $P=0.001$; WASA: $F[2,28]=74.28$, $\eta 2=0.84$, $P<0.001$; DERS: $F[2,28]=14.21$, $\eta 2=0.50$, $P<0.001$; PANAS (positive): $F[1.14,16.07]=199.72$, $\eta 2=0.93$, $P<0.001$; and PANAS (negative): $F[2,28]=303.68$, $\eta 2=0.95$, $P<0.001$).

The result of pairwise comparisons with Bonferroni test indicated a non-significant reduction in dependent variables' means from pre- to mid-treatment for (BAI: 4.00 P= .43; BDI: 9.40 P=.12; 17.80, P=.01; WASA: 2.00, P=0.84); and DERS: 2.46, P=1.00) but significant for positive PANAS (12.26, P<0.001) and negative affect (16.00, p<0.001). Mean change scores showed that the treatment group achieved a significantly greater magnitude of change from pre- to post-treatment for all variables (BAI: 15.00, P=0.003; BDI: 17.80, P=.01; WASA: 9.80, P<0.001; DERS: 40.73, P<0.001; PANAS Positive: -18.86, P<0.001; PANAS Negative: 23.80, P<0.001.

The initial results show that UP is able to significantly reduce anxiety and depression, and an improvement in work, and social functioning at the post-assessment. This finding is consistent with the underlying theories and therapeutic goals of UP, as well as previous studies [7], [25]. These results provide further empirical evidence to support the usefulness of UP in the treatment of emotional disorders. The results also indicate that UP can reduce difficulty in emotion regulation, providing support for the application of emotion regulation in promoting adaptive emotion regulation among patients with mental disorders [26]. The improvement of emotion regulation has been associated with an improvement in depression and

anxiety symptoms [27].

TABLE I
STATISTICS FOR PRE, MID, AND POST-ASSESSMENT OUTCOME MEASURES FOR ADAPTED UNIFIED PROTOCOL TREATMENT (N=15)

Outcome Measures	Pre		Mid		Post	
	M	*SD*	*M*	*SD*	*M*	*SD*
BAI	33.66	2.61	32.65	3.99	21.66	21.66
BDI	38.20	4.01	28.20	1.49	2.47	2.47
WASA	18.20	.41	16.20	.75	20.40	20.40
DERS	120.53	7.75	118.06	3.54	2.60	2.60
PANAS(P)	16.46	.44	28.73	.62	8.40	8.40
PANAS(N)	40.20	.92	24.20	.64	.43	.43

Note: BAI, Beck Anxiety Inventory; BDI, Beck Depression Inventory; WASA, Work, and Social Adjustment; DERS, Difficulty in Emotion Regulation Scale; PANAS_P, Positive, and Negative Affect Scale-Positive; PANAS_N, Positive, and Negative Affect Scale-Negative

Statistically significant mean differences were found in negative and positive affect at both mid- and post-assessment phases. These findings are consistent with previous randomized controlled trials (RCTs) of UP in emotional disorders samples, which have shown changes in negative affect after the application of UP [28]. Some studies have also found differences in positive affect [29]. The reduction in negative affect scores is consistent with the theory of UP as an emotion regulation intervention that specifically targets negative affect [7], a psychopathology mechanism associated with the etiology of emotional disorders [5].

The present study provides a baseline for the design of pilot and definitive randomized controlled trials to investigate the effectiveness of the adapted Unified Protocol (UP). This may allow for more effective dissemination of empirically-supported treatments for clinicians as they need to learn only one treatment protocol, which will, in turn, provide greater access to these services for patients in resource-limited settings. However, the study had several limitations, the small sample size and lack of a control group limit the reliability and generalizability of the results. A larger study with a control group is needed to confirm the findings. Future research using randomized controlled trials with larger samples could add more power, credibility, and meaning to the results of studies investigating the role of UP.

Acknowledgment

We would like to express our sincere gratitude for the participation of patients in our research.

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