ophthalmological adverse effects. Risk factors may be assessed, and a baseline ophthalmological evaluation may be helpful in those with multiple risk factors. Also, future studies can investigate the serotonergic effect on the occurrence of secondary closure glaucoma.

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Letting Go of Grudges: An Intervention-Based ERP Study Among Patients with ADS

To the Editor,

Due to traumatic experiences such as physical and emotional abuse, those with alcohol addiction are more susceptible to negative emotional states such as anger, anxiety, and guilt.[1] Although the existing cognitive behavioral model of therapy used to treat addiction addresses negative emotional states through cognitive restructuring and anger management, working on the root causes of the anger can bring deeper healing and improve the overall functioning.[2] In such cases, positive psychology constructs like "forgiveness" can be used to let go of grudges against the transgressor and other negative emotions. In forgiveness therapy (FT), when used in substance use, patients are encouraged to address the core emotional pain and use forgiveness as an emotion-focused coping strategy.[3] We aimed to examine the changes in semantic and emotional processing of forgiveness among patients with alcohol dependence, after FT, using event-related potential (ERP), with an open-label design. The research was conducted in a tertiary-care psychiatric facility after the approval of the Institutional Ethical Committee. Fifteen participants aged 18 to 50 years, diagnosed with alcohol dependence syndrome (ADS), were selected on the basis of the pseudo-forgiveness score of <20 and the Clinical Institute Withdrawal Assessment for Alcohol–Revised (CIWA-Ar) score of <10. A low pseudo-forgiveness score indicates that the participants perceive painful events in their life as substantial and unresolved issues. Informed consent was obtained before enrolment. Baseline assessments of forgiveness, anger, shame, guilt, empathy, N400, and late positive potential

TABLE 1.

Changes in N400 and LPP Amplitudes After Six Weeks of FT(N = 15).

	Amplitude			Amplitude		
Stimulus	N400 (LF) Baseline (M&SD)	N400 (LF) Post-test (M&SD)	Z	LPP(RP) Baseline (M&SD)	LPP (RP) Post-test (M&SD)	Z
Forgiveness	2.6 (3.9)	0.07 (3.2)	1.9*	0.47 (4.5)	3.08 (4.5)	1.98*
Other	0.68 (3.6)	0.38 (3.9)	0.57	0.19 (6.5)	2.88 (5)	2.1*
Revenge	1.6 (3.05)	0.2 (3.5)	0.12	0.43 (3.31)	3.4 (4.3)	1.93
Self	0.97 (3.4)	0.53 (3.61)	0.65	0.65 (3.5)	3.8 (4.6)	2.2*

*$P < 0.05$, **$P < 0.01$. Wilcoxon signed ranks test, LF = left frontal, LPP = late positive potential, RP = right parietal.

(LPP) were conducted before administering two sessions of FT per week over six weeks. Post-assessments on the same variables were done after the completion of the therapy. A semi-structured data sheet was used to collect sociodemographic variables. Other variables such as forgiveness, anger, shame, guilt, and empathy were assessed by the Enright Forgiveness Inventory Short Form (EFI 30), State-Trait Anger Expression Inventory, Personal Feelings Questionnaire-2 (PFQ-2), and the Toronto Empathy Questionnaire, respectively. To elicit N400 and LPP waves during ERP, the Forgiveness Implicit Association test was used. For therapy, we used Enright's process model of forgiveness.[4] Data were analyzed by IBM SPSS Statistics 25.0 for Windows.

The mean age of the subjects was 33.4 years (SD = 5.9). More than half (53%) were separated or unmarried. The mean age of onset of alcohol use was 22.3 (SD = 4.8), and the mean years of dependency was 6 (SD = 3.8). Participants reported to have experienced moderate to severe interpersonal hurt in the past (M = 7.8 and SD = 3.1) in the forgiveness screening scale. Paired *t*-test was used to see the differences in self-reported clinical variables between baseline and post-assessment. A significant improvement was noted in the total score (baseline M = 87.9, SD = 15.3, Post M = 113.8, SD = 9.1, P = 0.001) and all the domains of forgiveness after six weeks of therapy. State anger 21 ± 3.4 (P = 0.001) and feelings 18.8 ± 3.9 (P = 0.01) and expression 35.5 ± 5.1 (P = 0.001) of trait anger significantly reduced with therapy, and trait anger "control" significantly improved (Baseline M = 35.2, SD = 7.1, Post M = 40.6, SD = 5.5, P = 0.001). The scores of both shame and guilt scales also showed a significant reduction (P < 0.001). However, scores for empathy did not show a statistically significant improvement between baseline (M = 49.6, SD = 7.5) and post-test (M = 51.4, SD = 9.5, P = 0.4). **Table 1** shows changes in N400 and LPP amplitude after therapy. In the left frontal region, N400 amplitude for "forgiveness" stimulus significantly reduced from baseline to post-test score. In the right parietal region, compared to baseline, LPP significantly increased for forgiveness stimuli during post-assessment.

In the present study, significant changes in the levels of forgiveness and anger were noted after FT, which was congruent with the findings of other studies.[5,6] These improvements could be due to the addressing of core emotional pain in FT in which the motive of the transgressor is reframed.[5] Higher levels of empathy present in these participants could also have helped them take a different perspective toward the transgressor, thus aiding in the letting go of resentment.[7] Reduction in negative affects like shame and guilt can be explained based on the person's capacity to cope with negative self-evaluations by forgiving oneself for failing to live up to one's expectations.[8]

We found that the N400 amplitude in the left frontal region was reduced significantly post-treatment, which can be explained by the emotional duality model, as it deals with automatic and reflective processing of an affective stimulus.[9] When participants were exposed to reflective stimuli with conceptual incongruence, a peak N400 from the frontal region (FN400) was seen.[10] In our study, after FT, the participants may have processed forgiveness stimuli reflectively but with more conceptual congruence, resulting in a less negative peak in N400.

An increase in the amplitude of LPP at the right parietal region was noted in the post-assessment. Increased positive amplitudes reflect an enhanced motivated attention to emotional stimuli.[11] FT is also a form of emotion regulation intervention. However, our results of enhanced LPP amplitude in post-assessment differed from other studies, which rather showed an attenuation in LPP amplitude after emotion regulation intervention.[12] This difference could be due to the complex implicit task used in those studies, where unpleasant picture stimuli were simultaneously presented with reappraisal instructions.[13]

Our study sheds light on the process of letting go grudges through forgiveness in patients who had undergone interpersonal hurt, after exposing them to FT. To the best of our knowledge, there is a paucity of studies that delineate the process backed by ERP-based evidence. Our results imply that FT is effective among patients with ADS who have a history of pre-existing interpersonal hurt in alleviating their negative emotional state. However, further studies are warranted to establish long-term stability and its effectiveness in reducing relapse.

Author Contributions

LTD conceptualized and conducted the study and wrote the manuscript. NG conceptualized and supervised the study and reviewed the manuscript. SB supervised the study and reviewed the manuscript. MB reviewed and provided final approval to the manuscript. US conceptualized and supervised the ERP-related aspects. JR assisted and supervised in ERP task creation and ERP analysis.

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Hybrid Tele-cognitive Behavioural Therapy (Ht-CBT) for Obsessive-compulsive Disorder: An Innovation Integrating In-person and Online Psychotherapy

Obsessive-compulsive disorder (OCD) is a prevalent, chronic mental illness with a substantial negative impact on the quality of life.[1] Pharmacotherapy and Cognitive Behavioural Therapy (CBT) are effective first-line treatments for OCD.[2] In practice, the two are often used simultaneously, specifically in patients with severe OCD.[2]

Compared to pharmacotherapy, CBT demands greater involvement from patients, carers, and treaters alike. Behavioural interventions such as Exposure and Response Prevention (ERP)[3] are integrated within the CBT framework, aiming at the extinction of learned compulsive responses and habituation to anxiety while facilitating guided discovery and correction of cognitive distortions.[4] CBT's resource- and time-intensive nature makes it less accessible outside large metropolitan cities. This may result in a substantial burden to patients who must travel long distances.

The coronavirus disease (COVID-19) pandemic has accelerated the adoption of online platforms for delivering diverse healthcare services, including tele-mental health and tele-psychotherapy.[5] There is limited research from resource-constrained settings on the effectiveness of delivering psychotherapy using online platforms.[6] In this *letter,* we seek to report the successful delivery of CBT for OCD using a hybrid approach consisting of 1:3 fixed-ratio in-person and online psychotherapy sessions.

A young female presented with a two-year history of repeated hand washing