Sir,

Neurodevelopmental disorders (NDs) refer to a group of conditions that typically manifest early in development and are characterized by developmental deficits that produce impairments in personal, social, academic, or occupational functioning and the range varies from specific limitations to global impairments. As these problems invariably posit “nonnormative” life-long conditions and are unlikely to change, at least quickly, those evidently mallet the expectations and create parenting stress - an aversive psychological reaction to the demands of being a parent.[1] They set up long-lasting reverberations in their relationship with the child and also between themselves and with others who care for and teach the child. Moreover, the child’s need for special nurturance is often inconvenient to the parents and family members, especially provided the socio-economic scenario and mental health awareness of our country.

Acceptance and commitment therapy (ACT)[2] seems well-suited to address the issue as even widely used behavioral parent training overlook parents’ internal experiences, their ability to learn and implement behavioral parenting techniques and appropriately utilize those in changing contexts. ACT utilizes an eclectic mix of metaphor, paradox, and mindfulness skills, along with a wide range of experiential exercises and values-guided behavioral intervention that aim to undermine the power of experiential avoidance and cognitive fusion. The ACT practitioner targets six sub-processes in order to build psychological flexibility[3] using two main components: Acceptance and mindfulness processes (acceptance, defusion, the present moment, and a transcendent sense of self), and commitment and behavioral change processes (values, committed action, the present moment, and a transcendent sense of self).

This study aimed to see whether intervention through ACT on parents can lead to greater acceptance, increased the psychological flexibility of their children’s illness and lowered the amount of distress in them.

The sample comprised 10 mothers (having continuous contact with their children) of children suffering from NDs (4 children with attention deficit hyperactivity disorder and 6 children with autism spectrum disorder, each having co-morbid intellectual disability), selected from a Tertiary Care Centre through purposive sampling method. The mean age of children was 9.87 ± 4.57 years and the mean duration of illness was 8.77 ± 3.67 years. The mean age of the parents was 38.76 ± 6.76 years and their mean years of education were 12.00 ± 3.00 years.

The study followed a hospital-based before-after study design, categorizing its variables under three dimensions: Outcome variables – wellbeing; process measure – psychological flexibility; parenting variables – quality of life and attitude of parents.

Measures used were sociodemographic and clinical data sheet (developed for the study); General Health Questionnaire 60;[4] Acceptance and Action Questionnaire;[3] the World Health Organization Quality of Life Assessment-BREF[5] and Attitude Questionnaire.[6]

Participants meeting inclusion criteria were assessed using these questionnaires first to get the baseline measures. The therapeutic

| Table 1: The comparison of the change of scores in GHQ (Wellbeing) across time (n=10) |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Pretreatment (X) Posttreatment (Y) | Mean±SD | Mean rank | Wilcoxon signed rank test (Z) | P |
| 47.00±11.50 | 9.90±9.73 | 5.50 | 2.80** | 0.005 |

**Indicates significance at 0.01 level. SD: Standard deviation; GHQ: General Health Questionnaire.

| Table 2: The comparison of the change of scores in AAQ (psychological flexibility) across time (n=10) |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Pretreatment (X) Posttreatment (Y) | Mean±SD | Mean rank | Wilcoxon signed rank test (Z) | P |
| 85.00±9.43 | 29.70±4.94 | 5.50 | 2.80** | 0.005 |

**Indicates significance at 0.01 level. SD: Standard deviation; AAQ: Acceptance and Action Questionnaire.

| Table 3: The comparison of the change of scores in various domains of quality-of-life across time (n=10) |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| WHOQOL-BREF | Pretreatment (X) Posttreatment (Y) | Mean±SD | Mean rank | Wilcoxon signed rank test (Z) | P |
| Physical | 44.28±11.92 | 52.85±8.93 | 2.00 | 1.60 | 0.109 |
| Psychological | 38.33±12.69 | 59.10±5.88 | 5.00 | 2.668** | 0.008 |
| Social | 49.16±17.76 | 56.66±12.91 | 3.75 | 1.44 | 0.149 |
| Environment | 43.33±14.60 | 39.89±13.36 | 5.62 | 0.510 | 0.610 |

**Indicates significance at 0.01 level. SD: Standard deviation; WHOQOL-BREF: World Health Organization Quality of Life-BREF.

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program consisted 9 sessions spread over 6 weeks. The final session (9) was conducted for postassessment, and review of the previous sessions along with feedback and therapy was terminated.

Statistical analysis included nonparametric Wilcoxon signed rank coefficient, mean, and standard deviations using Statistical Package for Social Sciences version 16.0 (IBM, NY). The findings of this study are shown in Tables 1-4.

Results indicated a significant change in well-being, psychological flexibility, quality of life and critical comments from pre- to post-treatment, further indicating clear intervention effect along the selected aspects of the outcome, parenting and process measures.

Avoidance and fusion decreased immediately in posttreatment, implying parents' improved level of comprehension through intervention which led to increasing in well-being and psychological flexibility. We explained our findings in terms of an incubation effect denoting acceptance skills require time to be developed and needs to be practiced.

Change in the critical comments and betterment of quality of life implied impact of ACT intervention on the removal of cognitive and affective barriers (by targeting fusion and avoidance) and increased parent perceptions of their own effectiveness. However, this would acknowledge the existence of effective skills and suggest future integration of ACT with behavioral skills training.

Though the sample size was small and long-term effects of ACT could not be assessed, the findings of our study were highly consistent with the theory and philosophy behind ACT and implied ACT intervention for parents having children diagnosed with NDs.

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Conflicts of interest
There are no conflicts of interest.

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Table 4: The comparison of the change of scores in various domains of attitude questionnaire across time (n=10)

| Attitude questionnaire          | Mean±SD | Mean±SD | Wilcoxon signed rank test (Z) | P     |
|---------------------------------|---------|---------|-------------------------------|-------|
| Pretreatment (X)                | Posttreatment (Y) | Pretreatment (X) | Posttreatment (Y) | Pretreatment (X) | Posttreatment (Y) | Pretreatment (X) | Posttreatment (Y) |
| Critical comments               | 2.40±0.84 | 1.00±1.05 | 3.50 | 2.33* | 0.02 |
| Dissatisfaction                 | 3.80±1.47 | 2.90±2.07 | 3.50 | 1.78  | 0.074 |
| Warmth                          | 3.20±1.87 | 3.90±1.52 | 2.50 | 1.16  | 0.246 |
| Hostility                       | 2.2±2.8  | 0.90±1.28 | 5.70 | 1.49  | 0.135 |
| Emotional over involvement      | 12.90±0.99 | 11.90±1.19 | 3.25 | 1.518 | 0.129 |

*Indicates significance at 0.05 level. SD: Standard deviation

References
1. Deater-Deckard K. Parenting stress and child adjustment: Some old hypotheses and new questions. Clin Psychol Sci Pract 1998;5:314-32.
2. Hayes SC, Bissett RT, Korn Z, Zettle RD, Rosenfarb IS, Cooper LD. The impact of acceptance versus control rationales on pain tolerance. Psychol Rec 1999;49:33-47.
3. Hayes SC, Bissett R, Roget N, Padilla M, Kohlenberg BS, Fisher G. The impact of acceptance and commitment training on stigmatizing attitudes and professional burnout of substance abuse counselors. Behav Ther 2004;35:821-36.
4. Goldberg DP, Hillier VF. A scaled version of the General Health Questionnaire. Psychol Med 1979;9:139-45.
5. The WHOQOL Group. Development of the WHOQOL: Rationale and current status. Int J Ment Health 1998;23:24-56.
6. Sethi BB, Chaturvedi PK, Trivedi JK, Saxena NK. Attitude of family and outcome in schizophrenia. Indian J Soc Psychiatry 1985;1:186-93.
7. Levesque R. SPSS Programming and Data Management: A Guide for SPSS and SAS Users. 4th ed. Chicago III: SPSS Inc.; 2007.
8. Blackledge JT, Hayes SC. Using acceptance and commitment training in the support of parents of children diagnosed with autism. Child Fam Behav Ther 2006;28:1-18.

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