Child Psychiatry & Human Development
https://doi.org/10.1007/s10578-020-01082-6

ORIGINAL ARTICLE

The Feasibility of a Parent Group Treatment for Youth with Anxiety Disorders and Obsessive Compulsive Disorder

Idit Dekel[1,2] · Shirel Dorman-Ilan[1] · Claudia Lang[1] · Eva Bar-David[3] · Hadas Zilka[1,3] · Tal Shilton[1,2] · Eli R. Lebowitz[4] · Doron Gothelf[1,2,5]

Accepted: 9 October 2020
© Springer Science+Business Media, LLC, part of Springer Nature 2020

Abstract
Cognitive behavioral therapy (CBT) is an effective treatment for children and adolescents with anxiety disorders and obsessive-compulsive disorder (OCD). Yet CBT is insufficiently effective in approximately half of cases in clinical trials and in a substantial number of cases children refuse to participate in CBT sessions altogether. Parent training offers a promising alternative to direct child therapy. The present study examined the feasibility of a group implementation of SPACE (Supportive Parenting for Anxious Childhood Emotions), a novel parent training approach aimed at reducing parent's accommodation of children's anxiety symptoms. Based on parent reports (N = 25), following treatment there was a significant decrease in parental accommodation, in family power struggles and in parental sense of helplessness, as well as a significant reduction in anxiety and OCD symptom severity. Results support the promise of group SPACE treatment and underscore the need for additional clinical trial research.

Keywords Anxiety · Obsessive compulsive disorder (OCD) · Children · Supportive parenting for anxious childhood emotions (SPACE)

Introduction

Anxiety disorders are highly prevalent among children and adolescents [1]. Cognitive behavioral therapy (CBT) is considered an effective treatment for children and adolescents with anxiety disorders or obsessive compulsive disorder (OCD) [2]. Though a widely used treatment, up to 50% of children treated with CBT do not attain remission [2]. One possible explanation for these findings is the need for active collaboration between the therapist and the child required in CBT. Some children are too anxious or otherwise unwilling to cooperate with CBT. Furthermore, the efficacy of CBT for younger children remains uncertain, since a degree of cognitive maturity is required [3].

Parent training offers a promising alternative to CBT. Previous studies investigating the efficacy of parent-only interventions for child and adolescent anxiety disorders have shown promising results [4, 5]. However, taking into account the typically long waiting lists and the limited resources available for mental health treatment [6], recent studies have highlighted the importance of group parent interventions for anxious children. Such parent-group interventions, based on CBT protocols, have been shown to be efficacious in treating externalizing disorders, while the effect size for internalizing disorders is relatively modest [7].

Supportive parenting for anxious childhood emotions (SPACE) is a novel parent-based treatment, aimed at reducing parental accommodation of the child's anxiety or OCD symptoms [8, 9] and increasing supportive parental responses to the child. A recent randomized clinical

Idit Dekel and Shirel Dorman-Ilan have contributed as first authors.

✉ Idit Dekel
dekel.idit@gmail.com

[1] The Child Psychiatry Division, Edmond and Lily Safra Children's Hospital, Sheba Medical Center, Tel Hashomer, Ramat Gan, Israel

[2] Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

[3] The Psychology Department, Tel Aviv University, Tel Aviv, Israel

[4] Yale Child Study Center, New Haven, USA

[5] Sagol School of Neuroscience, Tel Aviv University, Tel Aviv, Israel

Published online: 17 October 2020

trial compared SPACE with child focused CBT and found SPACE to be as efficacious as child focused CBT for childhood anxiety disorders [9]. The present study is the first to assess the feasibility of SPACE for school-aged anxious youth in a *group* format. We hypothesized that a group intervention based on the SPACE protocol would be feasible and acceptable and would reduce the severity of child anxiety or OCD symptoms, decrease parental accommodation and family struggles, and reduce parental sense of helplessness.

Material and Methods

Participants

Parents of 30 children (19 boys) who met the *Diagnostic and statistical manual of mental disorders* [10] criteria for the diagnosis of an anxiety disorder (n = 22) or obsessive compulsive disorder (OCD, n = 6) or both (n = 2) were recruited from a child psychiatry clinic at a tertiary medical center in Israel. Most participants (22, 88%) were offered the SPACE parent-group intervention due to long waiting lists for individual CBT in our clinic. Another smaller portion of participants (N = 3, 12%) were offered the parent-group intervention because the child refused to participate in individual CBT or previously did not respond to CBT.

Mothers participated in the treatment in most cases (28 out of 30, 93%) and only 2 participants (7%) were fathers. Four children (13%) had at least one additional comorbid anxiety disorder diagnosis. 18 children met diagnostic criteria for other psychiatric disorders including attention deficit hyperactivity disorder (ADHD, 14 children, 46%) and oppositional defiant disorder (ODD) (4 children, 16%; see Table 1 for distributions of psychiatric diagnoses and psychiatric medications prescribed to study participants).

The study was approved by the Institutional Review Board of Sheba Medical Center, Tel Hashomer, Israel, and the Israel Ministry of Health, and was conducted according to the Declaration of Helsinki.

Table 1 Demographic and clinical characteristics of study sample (n = 25)

Age, mean (SD)	11.14 (3.15)
Sex (%)	
Males	14 (56%)
Females	11 (44%)
Primary psychiatric diagnoses	
Obsessive compulsive disorder	6 (24%)
Generalized anxiety disorder	6 (24%)
Separation anxiety disorder	8 (32%)
Specific phobia	2 (8%)
Social phobia	2 (8%)
Selective mutism	1 (4%)
Comorbid diagnoses	
Attention deficit/hyperactivity disorder	32 (36%)
Oppositional defiant disorder	4 (16%)
Tic disorder	1 (4%)
Nocturnal enuresis	1 (4%)
Psychiatric medications	
Methylphenidate	2 (8%)
Lisdexamfetamine	1 (4%)
Aripiprazole	1 (4%)
Fluoxetine	1 (4%)

Measures

Parent satisfaction—parent treatment satisfaction was assessed retrospectively by an independent senior psychologist. The assessments were based on well-documented summaries from the child's medical file using 5-point Likert rating scale (1 = 'very low satisfaction', 5 = 'very high satisfaction').

Family Accommodation Scale-Anxiety (FASA) [11] is a self-report questionnaire used to assess the degree to which parents change their behavior in order to help their child avoid or alleviate distress caused by anxiety. FASA consists of 13 items that query parents' active participation in symptomatic behaviors (items 1–5), modifications to routines and schedules (items 6–9), distress related to providing accommodation (item 10) and negative short-term child consequences of not being accommodated (items 11–13). All items are scored on on a 5-point Likert-type scale (0 = 'not at all'; 4 = 'everyday') and the first nine items are summed to derive the Total accommodation score. Higher scores represent a higher degree of parental accommodation. The FASA questionnaire was translated into Hebrew following standard procedures including back-translation, and the Hebrew version was approved by Globus translations and by the instrument's author.

Family Power Struggles Questionnaire [12] is a self-report instrument used to assess the frequency and characteristics of situations involving a power struggle between parents and children. It includes 16 items that query three types of power struggles: struggles involving arguments, resistance and violence (items 1–2, 5, 13–15), struggles involving clinging, dependence and emotional blackmail (items 3–4, 6–7, 10, 16) and struggles involving distancing or separating from the parent (items 8–9, 11–12). Items are scored on a 5-point Likert-type scale (0 = 'never'; 5 = 'very often') and are averaged to derive the total score. Higher scores represent greater frequency of power struggles between child and parents.

Parental Sense of Helplessness Questionnaire [13] is an 18-item instrument that assesses parental sense of helplessness in response to a child's verbal or physical aggression

(items 4, 8–11, 16, 18) and/or the child's disrespectful behavior (items 2–3, 5–7, 13–15). Items are scored on a 6-point Likert-type scale (0 = 'not at all'; 6 = 'very much') and are averaged to derive a total score. Higher scores represent greater sense of parental helplessness.

The Clinical Global Impressions-Anxiety/OCD symptom severity. The retrospective evaluation of improvement in child anxiety or OCD symptoms was conducted using the Clinical Global Impressions scale (CGI) [14] and was completed independently by two senior child psychiatrists (ID and DG). In case of disagreement between assessors, discussions were held until consensus on the scoring was reached. The assessments were based on well-documented summaries from the child's medical file. The CGI-severity (CGI-S) subscale requires the assessor to rate the severity of the patient's illness at the time of assessment, relative to the clinician's past experience with patients who have the same diagnosis. The CGI-S rates severity of illness from 1 (normal) to 7 (severely ill) [15] and was completed twice, at baseline and post-treatment. Based on prior studies (i.e., [16, 17]) The CGI-improvement (CGI-I) scale was completed post-treatment and assessed improvement in anxiety symptoms relative to baseline, with a score of 1 being very much improved, 2 much improved, 3 minimally improved, 4 no change, and 5–7 representing minimally, much and very much worse, respectively, based on documented interviews with the parents.

The Treatment Protocol

SPACE [11, 18] is a 10- to 12-week parent-based intervention for childhood anxiety and OCD that does not require child participation and can be delivered as a standalone treatment. SPACE focuses exclusively on modifying parental behaviors, rather than on directly modifying child behaviors. Parents are guided to increase supportive responses to their anxious child, by conveying both acceptance of the child's genuine distress and confidence in the child's ability to tolerate distress, and to systematically monitor and reduce family accommodation of the child's symptoms. Diminishing the child's reliance on parental accommodation affords the child opportunities to develop and practice more independent self-regulation capacities and children may discover themselves more capable of self-regulation than they or their parents previously believed (For a more complete description of SPACE procedures see [19]). The SPACE protocol was translated to Hebrew following standard procedures including back-translation, and the Hebrew version was approved by Globus translations. Consistent with the original protocol, each group met for between 10 and 12 sessions, with each session lasting 1 h. Each session began with participants being asked to share with the group how they implemented the previous week's assignments. Sessions then focused on identifying accommodating behaviors, instructing parents on how to inform their child that they will be working to change their behavior in the targeted domain, and crafting and implementing specific plans for changes to the targeted parental behaviors. Over the remainder of treatment additional target problems were addressed and parents were encouraged to increasingly take initiative in choosing problems and formulating the plans.

Some specific cultural issues arose during the process of adapting SPACE to local Israeli culture. For instance, some participants belonged to large families (more than 4 siblings). In some of these cases we found that siblings, especially the older ones in the family, engaged in family accommodation of the patient's anxiety or OCD symptoms. For these cases we modified the protocol, specifically assessing and identifying sibling accommodating behaviors. Likewise, we encouraged encourage parents to provide psychoeducation to the accommodating siblings, focused on the principles of SPACE and the role of accommodation, and we and to encourage the siblings to to minimize their own accommodation.

Participants

Three groups of parents participated in the study and groups were led by trained clinical psychologists and/or psychiatrics. Each group averaged 10 participants (SD = 2.16; group 1: N = 12, group 2: N = 11, group 3: N = 7). Most participants were mothers (group 1: 10 mothers, 83.33%; group 2: 9 mothers, 81.81%; group 3: 5 mothers, 71.42%). Parents' attendance in the group sessions was high, the mean attendance was of 77% (SD = 0.15) of the group sessions.

Statistical Analyses

Descriptive statistics were used to examine treatment adherence and feasibility (dropout and attendance of sessions) and satisfaction. Paired-sample t-tests, executed in SPSS (Statistical Package for the Social Sciences, version 20.0 for Windows), were used to compare pre-treatment and post-treatment scores on the outcome measures (i.e., CGI-S, child anxiety/OCD symptom severity, parental accommodation, family power struggles, and parental sense of helplessness). Kolomogorov-Smirnov tests were performed to determine whether parental accommodation, parental helplessness and family power struggles were normally distributed.

Results

Treatment Integrity, Attendance, Dropout, and Satisfaction

Five participants (16%) dropped out during treatment (mean = 7.60 weeks, *SD* = 2.33 from treatment initiation).

Therefore, the baseline to endpoint comparisons were conducted on parents of 25 children (14 boys, mean age = 11.14 years, *SD* = 3.15). Two participants dropped out following the psycho-education stage and prior to implementing the first plan for reducing family accommodation (weeks 4 to 6). These parents cited their fear of struggles with their child and potential difficulties in implementing the treatment steps as main reasons for drop out. Three additional participants dropped out following the implementation of the first accommodation reduction plan (weeks 8–10), and prior to the second one, because they felt their child had already improved to a degree that allowed them to proceed independently without additional therapy.

Parents' attendance in the group sessions was high, the mean attendance was 77% (SD = 0.15) of the group sessions. Parents' average satisfaction from the group treatment was high (mean satisfaction = 3.88, SD = 1.01).

Clinical Outcomes

Compared with baseline, at endpoint there were significant decreases in parental accommodation [mean ± SD, 14.43 ± 12.05 vs. 9.43 ± 8.87 respectively, $t(22) = 2.48$, $p = 0.02$], family power struggles [mean ± SD, 2.53 ± 0.66 vs. 2.24 ± 0.63 respectively, $t(22) = 3.04$, $p < 0.01$] and parental sense of helplessness (mean ± SD, 2.19 ± 0.96 vs. 1.78 ± 0.80, respectively, $t(23) = 2.70$, $p = 0.01$]. All three of these variables fit the assumption of normality [accommodation: $D(24) = 0.17$, $p = 0.07$; helplessness: $D(24) = 0.14$, $p = 0.20$; power struggles: $D(24) = 0.15$, $p = 0.16$], and internal consistency for the measures in the current sample was good (Cronbach's alpha: accommodation = 0.95; helplessness: 0.92; power struggles: 0.91). There was also a significant decrease in the severity of child anxiety/OCD symptoms, based on the CGI. The CGI-S scores significantly decreased from baseline to endpoint [mean ± SD, 4.35 ± 0.57 vs. 3.22 ± 1.16, respectively, $t(22) = 6.24$, $p < 0.001$] and clinically significant improvement, based on the CGI-I, was noted in 19 (79.1%) out of 24 children (8 children very much improved, CGI-I = 1, and 11 children much improved CGI-I = 2).

Discussion

This study demonstrates the feasibility of applying SPACE, a parent-based treatment for childhood anxiety and OCD, in group format. This intervention integrates the cost effectiveness and other advantages of group therapy, with the principles of SPACE. Our primary hypotheses were supported. Clinician assessments revealed significant improvement in the children's' anxiety or OCD symptom,s and parent ratings demonstrated significant decreases in parental accommodation, family power struggles, and parental sense of helplessness following the SPACE group intervention.

Health systems worldwide are struggling to meet the mental health needs of children and adolescents [20]. Group treatments, which efficiently use the scarce resource of trained therapists, are often used in clinical practice settings for a wide range of psychopathologies. Group parent training programs may enhance the effectiveness of treatment and provide parents with increased peer support and reassurance, normalizing individual parental experiences, with an opportunity for peer modeling and feedback [21, 22]. A meta-analysis of parent group interventions for school aged children [7] demonstrated that parent group treatments are efficacious both for externalizing and internalizing disorders.

Most parent-based interventions for childhood anxiety disorders, in individual and in group settings, are aimed at training parents as lay CBT therapists, and at enhancing other parenting skills such as problem solving [4, 5]. Clinical experience with time-limited CBT-based parent training groups for anxious children, suggests that in some cases the outcomes are limited due to children's reluctance to cooperate with active elements of treatment, such as exposures. Moreover, some parents are hesitant or inconsistent in implementing the CBT tools acquired at group training, especially when confronted with their child's distress. In contrast to CBT-based parent training, SPACE focuses on modifying *parental* responses related to the child's anxiety symptoms and includes tools for helping parents to cope with the children's externalizing or otherwise difficult behaviors that occur during treatment [19]. Hence, the SPACE protocol is particularly well suited for children who refuse or are resistant to direct therapy. In our sample, 3 participants (12%) were offered the SPACE intervention specifically because the child refused to participate in, or failed to respond to, CBT**.** Notably however, SPACE is not intended exclusively for treatment-refusing children, but rather is intended as an alternative intervention for children with anxiety disorders and OCD. In the largest published clinical trial of SPACE to date [9], participants were children with anxiety disorders in general, and not only those who refused treatment. Indeed, in that study [9] children were randomly assigned to receive either SPACE or child focused CBT, and thus all children consented to either treatment. Results of that study showed that SPACE is as efficacious as direct child-based CBT.

The results of the current study indicate that it is feasible to implement the principles of SPACE in the context of a parent group and suggest that doing so can yield beneficial outcomes for anxious children and those with OCD.

In the current feasibility study, parents who participated in the group SPACE treatment also reported significant reductions in family accommodation. We also assessed the effects of the SPACE group on family struggles and on parental sense of helplessness and found significant

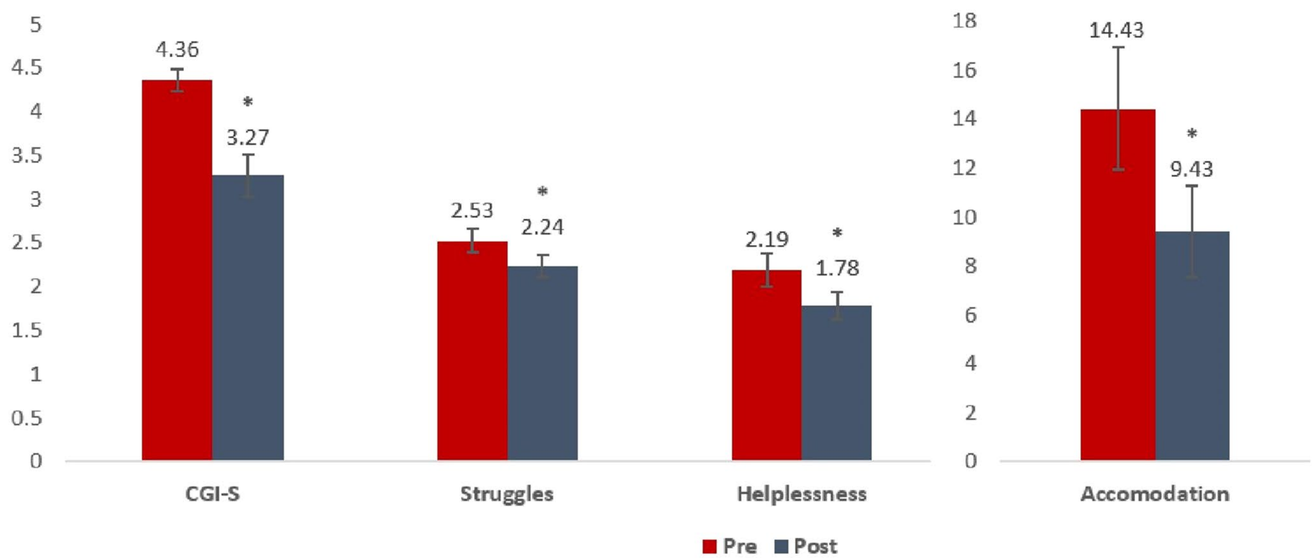

Fig. 1 The effects of the SPACE intervention on parent's sense of helplessness, family power struggles, children symptoms' severity and parental accommodation. $^*p \leq .01$

improvement in both, following the intervention. These findings suggest that parent-training for parents of children with anxiety disorders and OCD, based on SPACE, is useful in increasing the effectiveness of parents in handling difficulties with their child and in attenuating their feelings of helplessness as they reduce their accommodation behaviors [23]. Notably, a common complaint of parents confronting children's anxiety-driven behaviors, is the feeling that they have lost their voice, influence, self-reliance, and even their place in the home [12]. Some of the modules of SPACE directly address these issues. For example, SPACE includes a module for increasing collaboration between parents, while addressing their differing point of view, in maintaining a unified stance towards the child's behaviors and symptoms. The results of this study also support the feasibility and acceptability of the group SPACE intervention. Dropout rates during this treatment were low, attendance was high, and parents reported high satisfaction with the treatment.

Limitations of our study include a modest sample size, and the lack of control group. In addition, outcome measures relied on parent and clinician's reports and not on direct assessment of the children's symptom severity. Thus, the ability to draw conclusions about the efficacy of the group SPACE intervention is limited. Despite these limitations, this study is unique in reporting on a novel, cost-effective parent group intervention for anxiety disorders and OCD in children and adolescents. Future randomized-controlled studies, possibly comparing the SPACE parent group intervention to family based CBT are justified by these promising preliminary findings.

Summary

The present study examined the feasibility of SPACE [8], a novel parent training approach aimed at reducing parental accommodation of children's anxiety symptoms, in a group format. Group treatments, which can efficiently use the scarce resource of trained therapists, are used more often in clinical practice and may enhance the effectiveness of treatment, providing parents with increased peer support and reassurance, with an opportunity for peer modeling and feedback [21, 22]. SPACE focuses on modifying *parental* behaviors related to the child's anxiety symptoms and includes tools for helping parents to cope with the children's externalizing or otherwise difficult behaviors that occur during treatment [19]. The results of the current study indicate that it is feasible to implement the principles of SPACE in the context of a parent group and suggests that doing so can enhance the effect of group interventions for anxiety disorders. Following treatment there was a significant decrease in parental accommodation, in family power struggles and in parental sense of helplessness as well as a significant reduction in anxiety and OCD symptom severity. Results support the promise of group SPACE treatment and underscore the need for additional clinical trial research (Fig. 1).

Funding None.

References

1. Costello EJ, Egger HL, Angold A (2005) The developmental epidemiology of anxiety disorders: phenomenology, prevalence, and comorbidity. Child Adolesc Psychiatr Clin N Am 14(4):631–648, vii
2. James AC et al (2015) Cognitive behavioural therapy for anxiety disorders in children and adolescents. Cochrane Database Syst Rev 2:CD004690
3. Kendall PC, Stark KD, Adam T (1990) Cognitive deficit or cognitive distortion in childhood depression. J Abnorm Child Psychol 18(3):255–270
4. Monga S et al (2015) Comparison of child-parent and parent-only cognitive-behavioral therapy programs for anxious children aged 5 to 7 years: short- and long-term outcomes. J Am Acad Child Adolesc Psychiatry 54(2):138–146
5. Thienemann M, Moore P, Tompkins K (2006) A parent-only group intervention for children with anxiety disorders: pilot study. J Am Acad Child Adolesc Psychiatry 45(1):37–46
6. Sheppard R, Deane FP, Ciarrochi J (2018) Unmet need for professional mental health care among adolescents with high psychological distress. Aust N Z J Psychiatry 52(1):59–67
7. Buchanan-Pascall S et al (2018) Systematic review and meta-analysis of parent group interventions for primary school children aged 4–12 years with externalizing and/or internalizing problems. Child Psychiatry Hum Dev 49(2):244–267
8. Lebowitz ER, Shimshoni Y (2018) The SPACE program, a parent-based treatment for childhood and adolescent OCD: The case of Jasmine. Bull Menninger Clin 82(4):266–287
9. Lebowitz ER et al (2020) Parent-based treatment as efficacious as cognitive-behavioral therapy for childhood anxiety: a randomized noninferiority study of supportive parenting for anxious childhood emotions. J Am Acad Child Adolesc Psychiatry 59(3):362–372
10. American Psychiatric Association (2013) Diagnostic and statistical manual of mental disorders, 5th edn. American Psychiatric Association, Washington, DC
11. Lebowitz ER et al (2013) Family accommodation in pediatric anxiety disorders. Depress Anxiety 30(1):47–54
12. Bar- David E (2009) Helplessness and violent behavior of parents and functional problems of their children: the interactive influences of parental attributions, relationship between the parents and power struggles, in the psychology department. Tel Aviv University, Tel-Aviv
13. Cohen-Yeshurun C (2001) The relationship between parental helplessness, parental self efficacy and parental authority styles. Department of Psychology, Tel-Aviv University, Tel-Aviv
14. National Institute of Mental Health (1985) CGI (Clinical Global Impressions Scale)-NIMH. Psychopharmacol Bull 21:839–844
15. Hedges DW, Brown BL, Shwalb DA (2009) A direct comparison of effect sizes from the clinical global impression-improvement scale to effect sizes from other rating scales in controlled trials of adult social anxiety disorder. Hum Psychopharmacol 24(1):35–40
16. Mosheva M et al (2016) Do antidepressants induce psychosis in children and adolescents? A naturalistic study in ambulatory pediatric population. J Child Adolesc Psychopharmacol 26(5):478–484
17. Shilton T et al (2020) A retrospective case series of electroconvulsive therapy in the management of comorbid depression and anorexia nervosa. Int J Eat Disord 53(2):210–218
18. Lebowitz ER, Omer H, Hermes H, Scahill L (2014) Parent training for childhood anxiety disorders: the SPACE program. Cognit Behav Pract 21:456–469
19. Lebowitz ER, Scharfstein LA, Jones J (2014) Comparing family accommodation in pediatric obsessive-compulsive disorder, anxiety disorders, and nonanxious children. Depress Anxiety 31(12):1018–1025
20. Kataoka SH, Zhang L, Wells KB (2002) Unmet need for mental health care among U.S. children: variation by ethnicity and insurance status. Am J Psychiatry 159(9):1548–1555
21. Goodier GH et al (2014) Parent skills training treatment for parents of children and adolescents with eating disorders: a qualitative study. Int J Eat Disord 47(4):368–375
22. Shilling V et al (2013) Peer support for parents of children with chronic disabling conditions: a systematic review of quantitative and qualitative studies. Dev Med Child Neurol 55(7):602–609
23. Storch EA et al (2007) Family accommodation in pediatric obsessive-compulsive disorder. J Clin Child Adolesc Psychol 36(2):207–216

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.