



Parent and clinician perspectives on virtual guided self-help family-based treatment (GSH-FBT) for adolescents with anorexia nervosa

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Abstract

Purpose Guided self-help (GSH) treatments have the capacity to expand access to care, decrease costs, and increase dissemination compared to traditional therapist-directed treatment approaches. However, little is known about parent and clinician perspectives about the acceptability of GSH for adolescents with eating disorders.

Methods This study utilized a mixed methods approach to obtain qualitative and quantitative data regarding clinician and participants' experiences with GSH. Parent participants were enrolled in a randomized trial comparing GSH family-based treatment (GSH-FBT) to family-based treatment delivered via videoconferencing (FBT-V) for adolescents (12–18 years old) with a DSM-5 diagnosis of anorexia nervosa (AN). Parent participants provided qualitative feedback using the Helping Alliances Questionnaire about their experience of treatment. Clinician participants were six master's or PhD-level therapists. These clinicians were trained in and provided both treatments (GSH-FBT and FBT-V). They provided responses to questionnaires and participated in a 1-h focus group about their experience as treatment providers.

Results Regardless of treatment condition, parents listed more improvement than worsening of symptoms in their child with AN. Clinicians reported lower scores on competency and comfort metrics with GSH-FBT compared to FBT-V. Qualitatively, clinicians reported both advantages and disadvantages of delivering GSH-FBT.

Conclusion Further studies are needed to better understand how GSH interventions can be disseminated to patients and families, particularly those with limited access to specialized eating disorder treatment centers.

Level of evidence Level I, data collected as part of a randomized controlled trial.

Keywords Adolescent anorexia nervosa · Guided self-help · Virtual eating disorder treatment · Clinician perspectives

Introduction

Anorexia nervosa (AN) is a psychiatric illness with significant physical, psychological, and psychosocial consequences and life-threatening medical complications if untreated [1]. AN is estimated to impact approximately 1% of the population [2], with lifetime prevalence rates of nearly 0.3% among adolescents [3]. Family-based treatment (FBT) is an

evidence-based treatment with robust data from clinical trials demonstrating effectiveness in targeting symptoms of AN in adolescents [4, 5]. However, FBT does not work for all patients, with remission rates around 40% in treatment outcome studies [4]. Moreover, FBT is not readily available outside of large medical and academic research centers. Dissemination efforts to provide access to this treatment across a variety of settings are needed [4, 6].

Guided self-help (GSH) treatments seek to address this gap by providing evidence-based treatments in a format that requires less clinician time, cost, and specialized training to deliver. Both in-person and online GSH treatments have been developed for adults with eating disorders and demonstrate promising results [7–12]. Adaptations integrating technology such as videoconferencing, online platforms, and mobile applications allow for greater dissemination of evidence-based treatments without sacrificing effectiveness

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[13]. Further, given the cost-effectiveness of GSH treatments and reduction of clinician hours relative to traditional therapy approaches, GSH modalities are easier to administer and utilize in settings outside of specialty clinics and academic medical centers.

It is also important to consider the acceptability of GSH interventions from both patient and provider perspectives. Factors including treatment engagement and provider belief in treatment efficacy may impact clinical care, outcomes, and implementation efforts. A recent study with young adults found clinical outcomes (e.g., eating psychopathology) were related to working alliance scores for the “coach” involved in a GSH online intervention for AN, with higher working alliance scores noted for peer coaches compared to graduate student coaches [14]. Another qualitative study investigated the role of the “guide” in a GSH intervention for adults with disordered eating, gathering data from both patient and provider perspectives, finding overarching themes related to necessity of the guide, impacts on the therapeutic relationship, and patient-specific factors [15]. Relating to patient-specific factors, the authors concluded that GSH may be better suited for patients with binge eating symptoms compared to restrictive disorders based on study results indicating different clinical improvement related to symptom presentation [15]. Patients reporting a positive relationship with their guide tended to have limited or no prior expectations for treatment as well as improved clinical outcomes relative to those who did not report a positive relationship with their guide [15]. Similarly, patients’ perspectives of the treatment modality may impact engagement or other relative factors that could influence not only willingness to engage but also treatment outcomes.

In addition to patient report and clinical outcome, provider perspectives on delivering GSH treatments should also be considered. Providers serving as “guides” in a GSH intervention for adults with disordered eating favorably rated their role as a facilitator rather than a therapist, noting the additional control it provided patients over their treatment progress [15]. If a provider doubts a treatment’s effectiveness or utility, however, they may be less likely to deliver it as intended or may supplement with adaptations that could impact effectiveness [16, 17], akin to the relationship between providers’ attitudes and implementation of evidence-based treatments [18]. It is also possible that clinician-reported levels of comfort and confidence providing a specialized treatment may impact therapeutic alliance. However, studies have not yet examined clinician perspectives in treating adolescents with AN using GSH approaches.

To begin to address these gaps in the knowledge base about GSH, we investigated both patient and clinician perspectives on receiving a parent-only virtual GSH intervention of FBT (GSH-FBT) compared to virtual delivery of standard FBT (FBT-V) for adolescents with AN. In this

preliminary descriptive study, we expected parents and therapists to initially be wary of the GSH model, though anticipated these concerns would dissipate over time with experience with the treatment. We also expected that clinicians would be more comfortable in the traditional role as therapist rather than the novel role of acting as a coach using online materials.

Methods

Participants

Participants for this study were parents from a randomized clinical trial investigating differences in clinical outcomes in GSH-FBT compared to FBT-V (see [19] for detailed information regarding study recruitment and enrollment) and the clinicians who provided treatment in this trial. Clinicians provided both FBT-V and FBT-GSH to research participants. This study was a two-site pilot clinical trial conducted at Stanford University and McMaster University (NCT04957498) from August 2019 to June 2021. Parents of young persons aged 12–18 years who met DSM-5 criteria for AN were eligible to participate. Families were not eligible if they had previously received FBT or were concurrently undergoing eating disorder treatment outside of the research study.

Parent participants

Participants were recruited from across the United States (Stanford site) and Ontario, Canada (McMaster site). All parents of a child with AN, regardless of family composition (e.g., intact, divorced, blended, and single parent), were invited to participate. All participants provided informed consent and assent as approved by the Institutional Review Board to participate in the larger clinical trial. A total of 40 families were randomized but two were withdrawn by the study PI for participating in eating disorder treatment outside of the study. Thus, data were collected on 38 participants (20 families receiving FBT-V and 18 families receiving GSH-FBT).

Clinician participants

A total of six clinician participants provided treatment in this pilot trial. Clinicians were master’s-level therapists ($n=4$) and doctoral-level psychologists ($n=2$) employed in one of two academic medical centers (2 from Stanford University and 4 from McMaster University). Clinicians completed informed consent procedures to participate in the questionnaire and focus group portions of this research study following the provision of treatment in the larger pilot clinical trial.

The clinicians in this study were experienced FBT therapists concurrently utilizing FBT in clinical practice. In addition, clinicians received weekly clinical group supervision (from JL) throughout the duration of the trial.

Treatment modalities

Guided self-help family-based treatment (GSH-FBT)

In this treatment arm, parents received 12 20–30-min sessions over 4 months. Sessions were organized around discussion of online materials and reading from the parent education manual *Help Your Teenager Beat an Eating Disorder* [20]. The online materials consisted of a lecture series of 65 short (5–9 min) videos of an expert clinician explaining the principles of FBT split into 12 weeks of “lessons”. Content from all three phases of FBT were included. Sessions were guided by a “coach” trained in FBT; in line with a GSH modality, coaches pointed parents back to course materials to answer in-session questions rather than providing direct behavioral interventions [21, 22].

Family-based treatment (FBT-V)

In this treatment arm, families received 15 60-min sessions of 3-phase manualized FBT delivered via videoconferencing [23]. Phase I encouraged parental management of renourishment, phase II promoted a developmentally appropriate transition of control of renourishment back to the adolescent, and phase III focused on adolescent development broadly. Each session was led by a therapist and consisted of 10 initial minutes with the adolescent alone followed by 50 min with the entire family.

Measures

Self-report questionnaires

The Helping Alliance Questionnaire (HAQ; [24]) The HAQ is a 14-item self-report measure that seeks to assess patient perspectives of the treatment and therapeutic relationship. The HAQ asks participants to rate improvement in symptoms and includes two free text response questions, with the prompts, “I feel my child has improved in the following ways...” and “I feel my child is worse in the following ways...”. Parent participants completed the HAQ after Session 8 regardless of treatment arm.

Therapist Experience Questionnaire Clinician participants answered an online questionnaire with 39 items regarding their experience delivering both treatment modalities (FBT-V and FBT-GSH) at the conclusion of the study. The list of questions was modeled from previous studies about therapist experiences providing GSH [15] as well as

consultation with experts in the field of GSH for eating disorders. Questions related to comfort and competency/effectiveness in delivering the treatments were rated on a 5-point Likert-type scale from “1 – very uncomfortable/not very competent” to “5 – very comfortable/very competent”. A full list of questions can be found in Appendix 1.

Focus group

Following the completion of the self-report questionnaires, all clinician participants joined a 1-h focus group to further discuss their experience as coaches in the FBT-GSH treatment. The focus group was conducted via videoconferencing software (e.g., Zoom) and recorded. A transcript of the conversation was produced. A complete list of questions can be found in Appendix 2.

Demographics

All participants provided demographic information via online survey collection (Table 1). Parent participants answered demographic questions related to age, ethnicity, race, sex, family status, education level, and income level. Clinician participants provided similar demographic information, including age, ethnicity, race, sex, highest educational degree, and years of clinical experience.

Data analytic plan

Self-report responses from parents and clinicians were reported using descriptive analyses. Percentages and counts were utilized; averages and standard deviations were computed for quantitative variables. Effect size estimates (e.g., Cohen’s *d*) were calculated rather than inferential statistical testing, given the small sample size. Quotes and responses by clinicians from both the focus group and online survey

Table 1 Demographic information for the sample

Sample characteristics	Parent participants (<i>n</i> =59)	Clinician participants (<i>n</i> =6)
Age	47.4 (5.14)	41 (8.90)
Sex (<i>n</i> , % female)	33; 56%	6; 100%
Ethnicity (<i>n</i> , % Non-Hispanic)	52; 88%	6; 100%
Race (<i>n</i> , % Caucasian)	51; 86.4%	4; 67%
Family status (<i>n</i> , % intact)	48; 81.3%	–
Education (<i>n</i> , % graduated 4-year college or higher degree)	38; 64.4%	–
Income level (<i>n</i> , % > \$80,000/year)	36; 61%	–
Clinical experience (years)	–	13.5 (6.95)

Means (standard deviations) reported for sample characteristics unless otherwise noted

are included below. Two independent coders (Bachelor's and Master's level) reviewed qualitative data derived from the free text responses on the HAQ and identified broad themes that emerged utilizing a thematic analysis framework approach [25]. In the initial stage of inferential coding, they worked separately to identify themes present in the parental responses. Once this stage of coding reached a saturation point (where no additional codes could be generated), the researchers reviewed all parental responses to confirm uniform application of all generated themes and met to jointly compare codebooks based on their pre-identified themes. All discrepancies were resolved at this point and a new unified coding system was generated. The researchers independently applied this new coding system to the free text responses and met a last time to compare results, reconcile discrepancies and establish a final set of codes. Interrater reliability was calculated using Cohen's weighted kappa for HAQ improvements, worsening, and externalization codes through SPSS version 28. Across all codes, kappa ranged from 0.37 to 1. For improvements, kappa averaged 0.80; for worsening of symptoms, kappa averaged 0.73; for externalization, kappa was 0.64. Thus, substantial agreement was found among the two coders in this study.

Results

Parent demographics

Across both treatment arms, 59 individual parents (34 dyads) completed questionnaires following session 8 of treatment; 17 families were enrolled in GSH-FBT and 17 in FBT-V. The larger trial consisted of 38 patients and parents (18 in GSH-FBT and 20 in FBT-V); thus, data for the present study were unavailable for 4 families. A total of 34 patients (89.5%) had at least one parent complete the survey after session 8; 25 (73.5%) of patients had more than one parent participate. Parental responses were compiled at the patient level.

Parent perspectives (qualitative)

Several themes emerged among parental responses to the free text questions of the HAQ. Externalization of the illness was mentioned in 3 of the 17 parents' comments from the GSH-FBT group and 4 of the 17 parents' feedback from the FBT-V group. Areas of improvement were noted across both treatment conditions (see Table 2). Only one parent in FBT-V reported no improvements by Session 8 of treatment; all parents in GSH-FBT noted at least one improvement. Common parent-reported improvements included less restriction, less difficulty and anxiety with eating, expanded variety and/or quantity of foods, and increased weight.

Among families enrolled in FBT-V, three parents reported no worsening of symptoms after Session 8. In contrast, nine parents reported no worsening of symptoms in the GSH-FBT treatment condition at this same time point. In describing worsening of symptoms, parents reported increased mood/anxiety symptoms (four parents in each treatment arm) and more patient alignment with the illness (four in FBT-V, two in GSH-FBT) most commonly. Only two families in both treatment arms reported continued or increased mealtime difficulties. Parents overwhelmingly reported more improvements than worsening of symptoms following session 8 of treatment, regardless of treatment condition.

Clinician demographics

A total of six clinicians (31–53 years old; $M \pm SD$: 41 ± 8.9 years) were included in this study. All clinician participants were female and held either a master's degree ($n = 4$; 67%) or doctorate degree ($n = 2$; 33%). Years of clinical practice ranged from 6 to 23 years, with a mean of 13.5 years (SD : 6.95 years). Five of the 6 clinician participants reported a caseload of at least 10 patients per week; 3 reported an average of 20 or more patients per week. Clinician participants were mostly non-Hispanic (100%) and Caucasian (67%). All clinicians were trained and supervised in FBT; four of the six clinicians (67%) had FBT certification credentials as well. The number of families clinicians treated in the GSH-FBT arm ranged from 1 to 6 families and 1–5 families in the FBT-V condition (Table 1).

Clinician perspectives (quantitative)

Comfort

Averaging across all study clinicians, the average comfort rating with acting as a coach in GSH-FBT on average was 2.67 ± 1.03 out of 5.0, with higher scores indicating greater comfort. This was markedly lower than clinicians' report of comfort administering FBT-V in this clinical trial, accompanied by a large effect size [4.5 ± 0.55 ; effect size estimate: Cohen's $d = 2.43$, confidence interval (CI) = 1.99–3.25].

Competency

Clinicians reported higher competency scores in delivering FBT-V (4.17 ± 0.41) compared to GSH-FBT (2.83 ± 0.75 ; Cohen's $d = 2.43$, CI: 2.1–3.03). When asked to directly compare their subjective experience in delivering GSH-FBT and FBT-V, three clinicians said GSH-FBT was harder, two clinicians said easier, and one said the same. Five out of six clinicians reported that the GSH-FBT intervention required the same amount of training as the FBT-V intervention;

Table 2 Parent reports of improvements and worsening symptoms on the HAQ after session 8 of treatment

Themes	FBT-V <i>n</i> (%)	GSH-FBT <i>n</i> (%)	Sample quotes
Externalization of AN	4 (23.5%)	3 (17.6%)	“Anorexia is also making her tell lies, which as far as I could tell she did not use to do”; “able to compartmentalize ED behavior more around the event”; “Anorexia has been getting louder”; “mentally and emotionally ED still has a hold”
Improvements			
Weight gain	6 (35.3%)	8 (47.1%)	“She is eating and gaining weight”; “can eat adequately for weight restoration”
Increased variety in food	4 (23.5%)	5 (29.4%)	“She has been able to eat things that she had previously cut out of her diet”; “eating meat”; “can eat a wide variety of foods”
Less restriction	11 (64.7%)	7 (41.2%)	“Willing to eat more at a meal and more often”; “asking for more”
Flexibility around eating	4 (23.5%)	3 (17.6%)	“Is open to new foods and eating out more”; “treats himself to dessert and late night snacks”; “flexibility around eating times and options”
Eating disorder cognitions	5 (29.4%)	1 (5.9%)	“It has been awhile since she has questioned my ability to judge how much food she needs”; “reduced anxiety about food”
Mealtime behavior	3 (17.6%)	10 (58.8%)	“She now finishes her food without complaining almost all of the time”; “eating most meals without protest”
Reduction in other eating disorder behaviors	1 (5.9%)	2 (11.8%)	“Is no longer rigid about exercise”; “is not purging or hiding food”
Interpersonal	2 (11.8%)	2 (11.8%)	“Being more social with friends”; “improved mood and interaction with the family – is more like himself”
Understanding of AN	4 (23.5%)	4 (23.5%)	“More open about her disease which makes it easier to address”; “he understands inadequate intake has detrimental health impacts”; “has knowledge about her eating disorder”
Body image	1 (5.9%)	0 (0%)	“Less anxiety about eating and body image”
Physical health/energy	5 (29.4%)	7 (41.2%)	“She is physically stronger and no longer has bradycardia or orthostasis problems”; “Medically stable”; “more energy”
Mood/anxiety symptoms	4 (23.5%)	9 (52.9%)	“Happier”; “more cheerful”; “better mood”; “improved affect”
No improvements	1 (5.9%)	0 (0%)	“Hasn’t improved”
Worsening			
Mealtime difficulties	2 (11.8%)	2 (11.8%)	“Moody and argumentative more often around meals”; “some meals have been tougher as I try to feed her larger amounts”; “some meals still cause her to cry”
Increase in eating disorder behaviors	0 (0%)	1 (5.9%)	“The eating disorder drive for exercise e.g., jumping jacks seems more frequent and intense than previously”
Interpersonal challenges	2 (11.8%)	2 (11.8%)	“Still less social”; “relationship with her mom seems more strained”; “still doesn’t want to go outside”; “she is quiet and withdrawn”
Ego-syntonic	4 (23.5%)	2 (11.8%)	“Every meeting/appointment seems to keep perpetuating the condition that she feels she can self-manage”; “she still loves the look of being very lean and thin”; “eating disorder still very much a part of her thinking and views, and resulting anxiety when pushed”
Body image	1 (5.9%)	2 (11.8%)	“My child does not like the look of herself gaining the needed weight in order to reach healing”; “barely shower or do some activities because of the way she feels about her body”; “she is deeply sad about her perception of her appearance”
Mood/anxiety symptoms	4 (23.5%)	4 (23.5%)	“Irritable”; “somewhat depressed”; “underlying anger is coming more to the surface”
Treatment avoidant/refusal	2 (11.8%)	0 (0%)	“Recently, she has started refusing to come to doctors’ appointments sometimes which is new alarming behavior”; “refusing new foods as well as replacement”
Not worse	3 (17.6%)	9 (52.9%)	“In no way has she gotten worse”; “haven’t noticed anything worse”; “I don’t see any ways in which my child is worse”; “she has definitely improved in all areas”

one clinician noted less training was required to deliver GSH-FBT.

Treatment satisfaction

On a 5-point Likert scale from “very unsatisfied” to “very satisfied”, clinicians rated their perception of families’ satisfaction with GSH-FBT and FBT-V equally, with both rated on average as a 3.83 ± 0.41 .

Engagement

In assessing families’ engagement with the treatment materials, clinicians estimated that families watched anywhere from 10 to 100% of the recorded videos within the online platform; level of engagement with the treatment materials appeared highly dependent on individual participant-level factors rather than a function of the treatment structure generally. Most clinicians reported that families assigned to the GSH-FBT condition did not participate in the online chat forum available among parents in this condition; only one clinician reported that 25–50% of their patients participated in the chat forum while all other clinicians estimated this number to be between 0 and 25%. Per clinician report, one commonly reported reason for not participating in the chat forum was parental concerns regarding confidentiality while posting.

Clinician perspectives (qualitative)

Comfort

When asked directly about comfort level delivering the GSH-FBT intervention during the focus group, responses were mixed and ranged from, “*I was fine*” to “*I felt more comfortable in the coach role as I had more experience*” to “*not very on my end*” and “*I really didn’t [feel comfortable or effective]—it really threw me off, I would say, having had a lot of experience with FBT*”. Another clinician noted, “*I think it’s always hard to learn a new treatment*”. Upon continued reflection, one clinician noted, “*I’d say just because I was uncomfortable didn’t mean it wasn’t working. Actually, my first family did brilliantly in terms of weight restoration and treatment of the eating disorder...*” perhaps suggesting that clinicians’ perceived level of comfort did not necessarily translate to treatment efficacy.

Treatment satisfaction

Clinicians were also asked what they thought families did or did not like about the two different treatments. For GSH-FBT, clinicians reported families liked having access to online video content, brief sessions, and the opportunity to

ask questions to an eating disorder treatment provider without their child present. Clinicians reported families appeared to not like the homework assignments, chat forum, parent-only session format, reference to online materials rather than direct answers, and feeling out of sync with the treatment stages referenced in the videos.

Role perception

Multiple clinicians independently reported viewing their role as a coach in GSH-FBT to be more “removed” and “less direct” compared to a therapist in FBT-V. Clinicians highlighted the difference in referencing materials in GSH-FBT compared to actively problem-solving, providing psychoeducation, or facilitating behavior change in FBT-V. One clinician wrote, “*As a guide, I felt more detached from the parent—like a teacher versus a therapist.*” Another clinician stated, “*The GSH guide[role] felt more “coach like” rather than therapist, though initially this was difficult to do!*” When reflecting on their role in GSH-FBT, one clinician reported, “*I initially struggled with the ‘guide role’ as I felt that I was not doing a good job, not helping as much as I could. With practice, I saw the process working and parents taking on the challenge and their own role as learners. This helped me to believe in the GSH model (just as it helped parents).*” Clinicians reported that although some families may not have needed a coach to promote clinical improvements (i.e., dependent on level of commitment, learning style of parents), there were meaningful advantages of including this element in the treatment. One clinician commented, “*I do feel like we played an important role in accountability.*” Others responded similarly, saying, “*Yeah, I think the hope the guide provides – kind of hope and reinforcement – of doing the work and staying the course, so I think two of my families definitely benefited from that*”. In response, a provider stated, “*[...] encouragement and validation of the parents, so that they keep going. I think that’s what would be lacking if there wasn’t a coach*”. Others shared in these reflections, saying, “*Yeah I noticed similarly, my families would look to me to see where they were at. Like they have the materials, they have all of the information, but really wanting to check in with me. Like is my daughter, my son, doing ok....because they don’t have [sic] those markers otherwise... that kind of reassurance and encouragement, but also helping them stay on pace, was helpful.*”

Further comments highlighted how the coach prompted parental alliance in the GSH-FBT treatment and how this differed than FBT-V, noting, “*the other piece I’m just thinking is around that parental alliance – like really asking them ‘have you got a plan, are you working on it, are you watching the videos’. So it’s a little more subtle I think in guided self-help than what we work on in FBT, but I think that piece is actually central to their success as well*”. Parental

self-efficacy—a core therapeutic element in promoting renourishment and decreasing eating disorder behaviors in FBT—was reinforced by the coach role in GSH-FBT. For example, clinicians commented on the usefulness of the coach in promoting parents to take an active role in recovery efforts for their child, stating, “*permission to do this [weigh child weekly].... gave them [parents] some confidence as well to continue to do the treatment...*”. While this may occur more directly in FBT-V, the coach’s reinforcement of the provided materials in GSH-FBT appeared to enhance parental learning and implementation of core treatment concepts.

Therapeutic alliance

Clinicians also commented on perceived therapeutic rapport with families, largely noting that they perceived rapport improved throughout treatment particularly for families of patients who were gaining weight or making clinical improvements. When asked to identify difficulties they felt families had with the FBT-GSH treatment, clinicians reported technology issues, staying up to date with the reading/videos and homework assignments, and the parent-only model. Two clinicians reported experiencing no difficulties among the families they treated. Termination processes largely felt the same to clinicians regardless of treatment arm.

Advantages

Clinicians identified many advantages in offering GSH-FBT compared to FBT-V, including shorter sessions, cost efficiency, ability to see more families, increased access to care, standardized treatment materials with continuous access provided to all families, focus on ED behaviors rather than comorbid conditions, and reduction of therapist burn out. These themes were shared across clinicians and reported in both the online survey and focus groups. Clinicians reported liking the short, structured sessions in GSH-FBT and allowing families continuous access to the online platform materials.

Disadvantages

Disadvantages of GSH-FBT compared to FBT-V were noted as well, such as difficulty sticking to time limit for coaching sessions (e.g., 20–30 min), families’ experience of AN not aligning with treatment materials at predefined time intervals, treatment materials not focusing on comorbid psychological conditions, not having the patient’s perspective on behavioral changes, not being able to directly assess other mental health risks and comorbidities in the identified

patient, and a decreased emphasis on problem-solving with families to promote behavior change.

The components of the GSH-FBT protocol that clinicians liked the least included difficulty keeping within a shorter session time, wanting to provide psychotherapy, and needing to be familiar with the video content to refer families back. One clinician stated, “*GSH was more difficult for me and left me feeling less satisfied as a therapist- even when my patient’s gained weight.*” In reflecting on differences in delivering FBT-V compared to GSH-FBT, clinicians noted, “*I am more familiar with the treatment and I feel more in control*” and “*I felt more comfortable and confident*”. Another clinician reported, “*I was more in my ‘comfort zone’ with FBT-V, and did not have as much of a learning curve as I had with GSH-FBT.*” Clinicians also reported that they liked working with the entire family in FBT-V, including the identified patient and siblings, and felt more effective at enacting core FBT concepts, such as parental empowerment and alignment, in this treatment condition. Three of the six clinicians reported that there was not anything they did not like about providing FBT-V; others noted technology challenges, weighing patient from a distance, and managing patients with suicidality in the context of FBT and virtual care. Of note, none of the disadvantages reported on the questionnaire were shared across clinicians, suggesting that advantages may be experienced similarly whereas disadvantages to the GSH format may be more nuanced and influenced by individual differences in treatment delivery.

Discussion

This study examined parent and clinician perspectives on a GSH-FBT treatment modality for adolescent AN. Parents reported substantially more improvements than worsening of symptoms following eight sessions of treatment, regardless of modality. Parents receiving GSH-FBT more often reported improvements in mealtime behavior and mood/anxiety symptoms, though parents in the FBT-V arm also reported these improvements. Parents receiving FBT-V reported less restriction (11 families) compared to GSH-FBT (7 families), as well as improved eating disorder cognitions (5 families in FBT-V compared to 1 family in GSH-FBT). More parents reported no worsening of symptoms following eight sessions of GSH-FBT compared to FBT-V. Among parents who reported worsening of symptoms, increased mood/anxiety and greater patient alignment with the eating disorder were noted most frequently. All parents in the GSH-FBT arm reported improvement in eating disorder symptoms.

Clinicians reported several logistical differences in providing GSH-FBT compared to FBT-V, including GSH-FBT requiring less clinician resources and positioning

themselves in the role of a coach rather than a therapist. Clinicians reported feeling less comfortable and confident in delivering GSH-FBT compared to FBT-V, though consistent with our hypotheses, their reported comfort with the coach role increased over time. This is not surprising, given that all clinicians in this study were trained first in FBT, whereas no clinicians had experience delivering GSH-FBT prior to the study's start. Despite increased comfort in the coach role, clinicians reported feeling more detached and removed from patients' and their treatment in GSH-FBT compared to FBT-V. However, all parents in the GSH-FBT arm reported improvement in eating disorder symptoms, highlighting the efficacy of this treatment.

Clinicians identified several strengths of the GSH-FBT model, including time efficacy and ability to reach a greater number of patients. Developing treatments that produce comparable clinical outcomes while reducing time, cost, access to care barriers, and therapist burn out are very important, particularly when the need for adolescent AN treatment far exceeds the current available supply of treatment options. In addition, treatments must be disseminated beyond highly specialized treatment centers or academic research settings to increase access for a larger number of patients. Aligned with clinicians' reports of enhanced patient-control over outcomes among adults with disordered eating [15], GSH treatments for adolescent AN may serve to enhance parental self-efficacy, a key factor in prompting clinical improvement early in FBT [26–28]. It is possible that less contact time with a clinician may enhance parents' resourcefulness and promote more direct action from parents in managing eating disorder symptoms and less reliance on clinician direction. This could also contribute to increased efficacy in treatment outcomes, which is important as FBT may not result in remission for all patients and families. Further studies are needed to understand the role of parental self-efficacy in GSH treatments and whether this is enhanced or hindered using such an approach.

The disadvantages that clinicians reported in delivering GSH-FBT should be further investigated and addressed in training and supervision efforts to increase provider comfort, compliance, and effectiveness with regards to this treatment modality. For instance, clinicians' reports of unfamiliarity with online treatment materials could be addressed with additional training and detailed manuals. In addition, given the limited use of the parent chat forum as reported by clinicians, future iterations of this treatment approach may consider removing this feature altogether. It is known that therapist reluctance to adopt a treatment is a major impediment to dissemination and implementation; thus, provider perspectives of treatment are important translational points of consideration in designing treatment studies with real-world applicability.

Strengths and limitations

Strengths of this study include use of mixed methods to elicit clinician feedback and perspectives. This study is the first to investigate both parental and clinician perspectives on the adaptive delivery of FBT to a GSH format for adolescent AN. These findings stand to contribute to optimization of GSH delivery of FBT for adolescent AN to help enhance efficiency when providing evidence-based treatments for adolescents with eating disorders. Limitations include clinicians working on the same randomized trial and sharing joint supervision for the duration of the study, which may have collectively influenced opinions and experiences. Further, the limited sample size of only six clinicians should not be extrapolated to the general population of clinicians treating eating disorders. In addition, only parent perspectives were considered in this study, as adolescent patients did not actively participate in sessions within the GSH-FBT arm. Thus, our findings cannot extend beyond parents/guardians and may not be applicable for GSH treatments that work with the adolescent patient directly. Although this study was initiated prior to the COVID-19 pandemic, it is possible that the collective stress of this global event on clinicians, patients, and families during the study may have impacted treatment delivery and perceptions of virtual care.

Adequately powered clinical trials investigating future uses of GSH-FBT should continue to assess parent and clinician perspectives regarding the intervention and treatment processes to better understand what role therapeutic alliance or important FBT concepts, like parental self-efficacy, may play in treatment engagement, attendance, and clinical outcome. The results of this study may extend beyond adolescent populations and could help better elucidate when and how to use GSH in the treatment of eating disorders. In addition, it is unknown what role clinician demographics may have on therapeutic alliance with patients and/or families, and whether this extends to parent-only or GSH interventions conducted with adolescents. Further research should seek to clarify which patients may benefit the most from GSH compared to traditional treatment approaches as well as determine the necessity of the therapist "coach" in promoting clinical improvements as opposed to purely self-help treatment approaches. The information gleaned in this study may also help to refine training for GSH modalities and help clinicians feel more comfortable and confident in delivering this form of treatment.

What is already known on this subject? GSH interventions provide evidence-based treatments using clinician time, cost, and specialized training to deliver, which can increase accessibility. There are a few studies investigating clinician and patient perspectives on GSH interventions for eating disorders in adults; however, this is the first study to

report on these perspectives for GSH-FBT for adolescent AN.

What this study adds? This study contributes clinician-reported advantages and disadvantages of delivering GSH-FBT using a mixed methods approach as well as provides support for parent-reported clinical improvements following the first eight sessions of GSH-FBT.

Appendix 1: Self-report questionnaire on clinician experiences delivering GSH-FBT and FBT-V

Questions related to GSH-FBT

1. How did your role as a “guide” in GSH-FBT compare to the therapist role in FBT-V?

2. How comfortable did you feel in your role as a “guide”?

Response options: *very uncomfortable* to *very comfortable*.

3. How competent/effective did you feel in your role as a “guide”?

Response options: *not very competent* to *very competent*.

4. How many families did you see in the GSH-FBT treatment arm of the study?

5. What did you like best about the GSH format?

6. What did you like least about the GSH format?

7. From your perspective, what did families like best?

8. From your perspective, what did families like least?

9. From your perspective, how satisfied were families with GSH-FBT?

Response options: *very unsatisfied* to *very satisfied*.

10. What was your biggest challenge as a “guide” in the GSH-FBT treatment arm?

11. Could your patients have followed the intervention without the help of a “guide”? Why or why not?

12. Do you feel that your rapport with parents changed over the course of treatment?

13. How did the families you worked with feel about ending the intervention?

14. Did your families have any difficulties with the GSH-FBT intervention? If so, what were they?

15. Families were provided with videos through the online platform. What percentage of the videos did your families watch on average? Enter a number 0–100.

16. Did your families utilize the chat discussion forum of the online platform? If so, how many?

Response options: 0%, less than 25%, 25–50%, 51–75%, more than 75%, 100%

17a. Was GSH-FBT easier or harder to deliver than standard FBT?

Response options: *easier, the same, harder*.

17b. Why?

18. Does the GSH-FBT intervention require the same, more, or less knowledge and training to deliver than standard FBT?

Response options: *same, more, less*.

19. Was there any content missing from the GSH-FBT videos that you think would improve the intervention?

20. Is there anything about the GSH-FBT videos or online platform that could be improved?

21. In your opinion, what are the advantages and disadvantages of offering the GSH-FBT intervention compared to standard FBT?

Questions related to FBT-V

1. How did your role differ as a therapist in FBT-V compared to the “guide” role in GSH-FBT?

2. How comfortable did you feel in your role as a FBT therapist?

Response options: *very uncomfortable* to *very comfortable*.

3. How competent/effective did you feel in your role as an FBT therapist?

Response options: *not very competent* to *very competent*.

4. How many families did you see in the FBT-V treatment arm of the study?

5. What did you like best about the FBT-V format?

6. What did you like least about the FBT-V format?

7. From your perspective, what did families like best?

8. From your perspective, what did families like least?

9. From your perspective, how satisfied were families with FBT-V?

Response options: *very unsatisfied* to *very satisfied*.

10. What was your biggest challenge as a therapist in the FBT-V treatment arm?

11. Do you feel that your rapport with parents changed over the course of treatment?

12. How did the families you worked with feel about ending the intervention?

13. Did your families have any difficulties with the FBT-V intervention? If so, what were they?

14a. Was FBT-V easier or harder to deliver than GSH-FBT?

Response options: *easier, the same, harder*.

14b. Why?

15. Does the FBT-V intervention require the same, more, or less knowledge and training to deliver than GSH-FBT?

Response options: *same, more, less*.

16. In your opinion, what are the advantages and disadvantages of offering FBT-V compared to GSH-FBT?

Appendix 2: Clinician focus group questions and prompts

1. How did your role as a guide in GSH-FBT compare to a therapist in FBT-V? Please highlight the similarities and differences in your experience.
 2. Please describe your comfort level in your role as a guide.
 3. What were the most helpful aspects for families of working with a guide? The least?
 4. Could families have completed the treatment without the help of a guide? Why or why not?
 5. Describe your relationship with families at the beginning of the intervention.
 6. Anything enhance your relationship?
 7. Did your relationship change as you went through treatment?
 8. How did families feel about ending GSH-FBT?
 9. Any factors that seem to influence treatment adherence?
 10. Is there anything else related to your experience delivering GSH-FBT treatment that you would like to share?

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Declarations

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Consent to participate Informed consent was obtained from all participants in this study.

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