

SERVICE MODELS, FORMS OF DELIVERY AND CULTURAL ADAPTATIONS OF CBT

Blended individual and group CBT for OCD in adolescents: model description and a feasibility study

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Abstract

Cognitive-behavioural treatment for obsessive-compulsive disorder (OCD) is effective across the lifespan but is not widely available across the range of services. Delivering CBT as a *blended treatment* combining individual and group-based treatment with flexible parental involvement, adapted to the operational style of any particular service, is a promising option which we aimed to examine in OCD with adolescent samples. In a young people's service based in a University Hospital, we evaluated the impact of a blended treatment combined with flexible parental involvement with adolescents (age 14–18 years of age). The CBT model used with OCD sufferers was a formulation driven approach, emphasising the importance of providing an alternative account linked to the way responsibility beliefs lead to compulsive behaviour. Six consecutively referred adolescents with their parents participated in a treatment group. Intervention consisted of eight individual meetings, eight group meetings and two meetings with parents. Five of six adolescents carried out the whole intervention. Of all participants, 5/5 scored in the clinical range for OCD at baseline, and 5/5 were no longer in the clinical range by the end of treatment; 5/5 were in the clinical range on general psychiatric problems at baseline, and 4/5 were rated as recovered at the end of treatment. Comparable changes were noted in measures of responsibility linked to intrusive thoughts. Use of a blended individual/group treatment based on a CBT model is feasible, with the results obtained being consistent with previous work on individual CBT treatment.

Key learning aims

- (1) Delivering CBT to adolescents with OCD as a blended treatment combining individual and group-based treatment with flexible parental involvement is a promising option which merits further evaluation.
- (2) OCD symptoms and general psychiatric symptoms were reduced during and after treatment.
- (3) Use of a blended treatment based on a CBT model is feasible.

Keywords: Adolescents; CBT; Group intervention; OCD

Introduction

Obsessive-compulsive disorder (OCD) is characterised by symptoms of intrusive and unwanted cognitions (*obsessions*, regarding e.g. contamination, aggression, sexual content) linked to repetitive *compulsions* (regarding e.g. need to wash, checking, repeating). Epidemiological studies suggest OCD prevalence is from 0.25% in children of 5–15 years of age (Heyman *et al.*, 2001), rising to 4% in adolescents of 18 years of age (Douglass *et al.*, 1995). Untreated OCD symptoms in

children and adolescents often become chronic, as increased duration of OCD and earlier onset of disease seem to predict later persistence of OCD symptoms (Stewart *et al.*, 2004). Piacentini *et al.* (2003) have noted also that OCD causes significant functional impairment across home, school, and social life in up to 90% of young people with OCD.

According to British National guidelines (NICE), CBT including exposure with response prevention (E/RP) should be offered to all young people with OCD and should be the first-line treatment in mild to moderate cases of OCD (NICE, 2005). Both CBT and selective serotonin re-uptake inhibitors (SSRIs) have been found to be effective in treatment of OCD in the adolescent years (Watson and Rees, 2008). There is some evidence that individuals who received CBT had better outcomes relative to those who received medication alone (Franklin *et al.*, 2011), with some evidence that the combination of CBT and medication was superior to medication as a monotherapy in a sample of children with OCD between 7 and 17 years of age.

It has been noted that children are less likely to have insight into the irrationality of their obsessions and compulsions. Geller *et al.* (2001) found that children with OCD were more likely to have poor insight relative to adolescents with OCD, suggesting that insight is developmentally sensitive, and children may have a limited ability to cognitively process their obsessional ideation, self-evaluate their compulsive behaviour, or adequately articulate their OCD symptoms. In CBT approaches based on cognitive models such as those emphasising exaggerated beliefs regarding danger (Foa, 2010) and inflated beliefs regarding responsibility for harm (Salkovskis, 1999) there is a requirement for cognitive processing abilities. Such abilities are mostly already present in young children (7–10 years old; Doherr *et al.*, 2005), and are fully developed at adolescence.

Previous research thus suggests that young people are capable of undertaking the tasks required in CBT, and that such treatment is effective. There is also some preliminary evidence that group CBT treatment reduces OCD symptoms in children and adolescents (Whiteside *et al.*, 2018), but with somewhat smaller effect sizes than individual treatment. The study here was intended to assess the feasibility of offering formulation-based CBT based on the model described by Bream *et al.* (2017) where individual and group treatment are blended and combined with flexible family involvement to deal with the adverse effects of family accommodation (Peris *et al.*, 2008). The development of a formulation and transforming that to a shared understanding is difficult in a group setting and follows more naturally from individual treatment. However, group treatment brings advantages in terms of group cohesion, peer support, and normalisation through shared experience. The blended approach evaluated here in a feasibility study conducted in a clinical setting allows the advantages to be exploited within a cost-effective framework. In adolescent psychiatric services, drop-out from treatment can be a major issue which can significantly delay effective treatment. Developing models to more effectively engage young people in effective treatment and involving families with the treatment is therefore a priority.

In Finland, where the present study was conducted, young people with OCD are typically offered counselling, self-help materials and online therapy as the first line treatment. Even in secondary care, CBT is not usually offered to young people with OCD, but instead treatments range from pharmacological treatment to individual meetings focusing on OCD, depending on the professional's individual psychotherapeutic skills. Some CBT is offered in private practice, but this can vary considerably in terms of quality and adherence to evidence-based protocols. A demonstration of treatment delivery in secondary care is needed so that other services can consider adopting properly conducted CBT. The aim of this study was thus to test how a CBT model could be applied in the context of a blended individual and group approach (incorporating flexible family involvement) with adolescents with OCD seen in a general adolescent psychiatry unit where training in CBT had been undertaken.

Method

Procedure

The group treatment for adolescents with a diagnosis of OCD was delivered as a hybridised model, including a combination of group, family and individual sessions. The hybrid model was experimental, informed by our previous experience of running OCD groups, where we found that a number of additional individual appointments were needed. The content of the treatment was based on the cognitive behavioural model of OCD (Bolton *et al.*, 2011; Salkovskis, 1999; Salkovskis *et al.*, 2000). Central to treatment is the interactive development of a shared understanding of how the appraisal of intrusive cognitions as indicating responsibility for harm motivates and drives responses such as anxiety, compulsive behaviour, selective attention, and so on. This alternative, destigmatising understanding of how OCD works is used to manage responsibility meanings through discussion and behavioural experiments, which often (but not exclusively) involve exposure and response prevention.

Meetings were scheduled on a weekly basis, consisting of one initial assessment interview, seven group meetings and eight individual meetings, one feedback meeting, and two meetings with parents. Group meetings lasted 90 minutes, and individual meetings ranged from 60 to 90 minutes. The treatment programme also involved a therapy dog trainee who attended almost all appointments. Despite the COVID-19 pandemic restrictions, meetings with adolescents were carried out face-to-face at an out-patient clinic.

The therapists were certified OCD therapists. Therapists received initial in-person workshop training followed by video supervision once a month throughout the intervention by Paul Salkovskis. The therapists were trained nurses and had worked several years in adolescent psychiatry units. They had both completed aggression replacement training. One of the therapists had 7 years of practical experience working in adolescent psychiatry. She had completed Social Cognition and Interaction Training (SCIT). She was also a trained Public Health Nurse and had a Bachelor's degree of Health Science (BHA) from the University of Tampere. The other therapist had 8 years of practical experience working in adolescent psychiatry. She also studied to become a cognitive psychotherapist for children and adolescents. They both had several years of experience in facilitating different CBT-based group treatments, for example The Cool Kids Anxiety Program for adolescents, MYmind – group treatment and social anxiety group treatment model by David M. Clark.

Participants

All adolescents were referred through the standard referral system in a Finnish University Hospital, Department of Adolescent Psychiatry. Inclusion criteria were ICD-10 OCD diagnosis (F42). Each adolescent and their parents were interviewed prior to acceptance into the treatment by two therapists. The interview assessed the ability to recognise the meanings they give to their thoughts, the motivation and opportunity to commit. Everyone who was interviewed, a total of six adolescents, were invited to participate in treatment, so this was a consecutive case series.

Group meeting structure

The treatment was conducted as an alternation of group and individual meetings. The group meeting structure is shown in Table 1. Treatment started with group meetings with the aim of normalising symptoms. Group meetings started with group members updating each other about their last week, and generally were designed to create a safe, 'supportive' and participatory atmosphere based on the therapists' own modelling and development of a playful atmosphere.

In the first group sessions, psychoeducation regarding OCD and CBT was offered, and individual goals were set collaboratively with the clients for their treatment. Where possible

Table 1. OCD hybrid treatment model by single meetings and their content

Interview	Psychoeducation about CBT model, life situation review, OCD symptoms and motivation, including costs and benefits of change
1. Group session	Introduction, group rules, psychoeducation and normalising around intrusions (metaphor: pink elephant), homework, and questionnaires (Child OCI, CRIQ, CRAS, YP-CORE)
2. Group session	Psychoeducation, core beliefs and responsibility beliefs using vicious flower example, how much OCD has taken over life (pie 0–100%) short-, medium- and long-term goals Homework: develop goals
3. Individual meeting	Vicious flower formulation, theory A/theory B, Homework: individual
4. Group session	Psychoeducation about anxiety, reassurance vs constructive inner speech, good-bad scale
5. Individual meeting	Responsibility pie Introduce metaphor: hands on the wall Homework: individual
Online group meeting for parents	Psychoeducation about OCD, theory A/B conceptualisation (vicious flower model) and how to support the adolescent during treatment with A/B conceptualisation
6. Individual meeting	Setting up a behavioural experiment and doing them in-session, planning own behavioural experiments Homework: planned behavioural experiments
7. Individual meeting	Behavioural experiments in-session Homework: planned behavioural experiments
8. Group session	Documentary: The House of Obsessive Compulsives (OCD Woman Can't Touch Others Finally Hugs Her Son) In small groups: tell each other about the behavioural experiments which they have done and plan new behavioural experiments for each other and for themselves Homework: planned behavioural experiments
9. Group session	Introduce and explore metaphor: OCD as a bully Reassurance seeking vs choosing uncertainty, behavioural experiments
10. Individual meeting	Review progress with therapy goals, new therapy goals rest of the group process
11. Individual meeting	Online meeting or meeting in out-patient clinic BES at home with the support of a therapist or trip field
12. Group session	Online meeting Psychoeducation about emotions, memory training (stressful situation OCD) and planning BES
13. Group session	Own values, mindfulness: self-compassion Homework: BES
14. Individual meeting	Review progress, current situation response belief – how it changed during the treatment Behavioural experiments in-session if needed
Online group meeting for parents	Psychoeducation of behavioural experiments, and how to support the adolescent with behavioural experiments Questions about treatment
15. Individual meeting	Online meeting Blueprint: which background factors influenced the development of OCD, perception of oneself and the surrounding world at the time. The change that occurred during the treatment and planning for the future
16. Group session	Forms (Child OCI, CRIQ, CRAS; YP-CORE), own rules, a plan for the future (blueprint)
Individual feedback	End of the therapy progress review Questionnaires: noticing the change, goodbyes

psychoeducation involved experiential components, for example by modelling a cognitive conceptualisation ‘vicious flower’ in the role-play of therapists and by involving the group in exercises about the ‘power of thoughts’ such as ‘turning off the lights’ or ‘causing an illness to the therapist’ by the power of thoughts. The aim was to create an active and collaborative atmosphere within the group. At the beginning of group therapy, group participation was more tentative, and adolescents seemed to benefit from an open and curious ‘non-knowledgeable’ dialogue between therapists. As group therapy progressed, adolescents’ participation increased, and the active role of therapists was less prominent.

To support the treatment, the adolescents were given written material and workbooks, which included psychoeducation as well as various experiential exercises. After two group meetings, individual meetings were held in the presence of two therapists to construct a conceptualisation ('vicious flower') incorporating theory A/B (A problem is real danger/B problem is intrusion misinterpretation resulting in anxiety and fear) (Bream *et al.*, 2017). The aim was for the young person to be aware of how their beliefs about responsibility for harm motivated their compulsions and thus worsened their problems; this approach was used to support them in better understanding and confronting their fears in a safe context. The aim was also for the adolescents to outline how their beliefs of responsibility maintain rituals just for them in A/B. Group meetings continued with further psychoeducation and sharing of formulations, after which they moved on to the training phase. The adolescents practised separating reassurance and inner self-talk through examples and also thought–action fusion. Adolescents were encouraged to share their insights in the group, the emphasis being on sharing solutions rather than problems.

Individual meetings set out to progress to behavioural experiments, sometimes linked to a previously constructed 'responsibility pie' with each adolescent. At this point, a parents' group meeting was held, the content of which largely mirrored the psychoeducation offered to adolescents. In the meeting was also discussed how to support the young person during treatment and how to manage issues such as reassurance and other requests from their child for accommodation to their OCD. In addition to psychoeducation, parents were also supported to be actively involved in sharing their own observations, concerns about their children, and how OCD affected their family life. The aim was to help parents be more involved in the treatment of their children and to support their treatment, e.g. by helping them with exposure exercises and practice. Some of these meetings were conducted online.

Following this, the focus of meetings shifted again to individual sessions and the collaborative setting and running of behavioural experiments (BE). In the beginning, adolescents were asked to consider the possibility that they might be able to find out 'how the world really works' rather than accepting what OCD told them. They were encouraged to reflect on this through additional questioning, such as what would be the opposite reaction to what the OCD says you should do, and what would the effect of doing that be? Before conducting the BEs, the adolescents filled out forms (behavioural experiment form) for specific predictions and belief ratings. Where possible, behavioural experiments were first modelled by the therapist, progressing as naturally as possible to conduct the behavioural experiments *in vivo*. The first behavioural experiments were conducted together with their therapists in individual sessions. The adolescents then answered questions (BE form) thus: 'what happened, did the predictions come true and the conclusions what they make of this? Does it fit best with theory A or B (A real danger/B anxiety and fear)?'. Subsequently, the BEs were active and embedded in all meetings (individual, pair, group, and homework). The adolescents also learned to design BEs for each other and to support each other's performance and help reflect on outcomes. Adolescents were encouraged not only to continue BEs, but also, on a day-by-day basis, to drop their safety-seeking behaviours and to carry out spontaneous BEs if and when the opportunity arose.

Measurement

Self-reported OCD was assessed using the Obsessive-Compulsive Inventory (Child OCI; Waite and Williams, 2009). The instrument has 42 items with a range of 0–168, using a 0- to 4-point Likert distress scale. A cut-off score of 40 on distress accurately identifies 80% of patients with OCD and 80% of the participants without OCD (Foa *et al.*, 1998). The child's appraisals of intrusive thoughts involving responsibility were assessed using the Child Responsibility Interpretation Questionnaire (CRIQ) (Waite and Williams, 2009). The child's beliefs about responsibility more generally were assessed using the Children's Responsibility Attributions Scale (CRAS) (Waite and Williams, 2009). General psychological well-being was measured by

Table 2. Raw scores by instruments and participants P1–P5 at baseline and follow-up in a group of adolescents treated with CBT model designed for OCD

	P1	P2	P3	P4	P5
Age	16	14	18	16	14
Gender					
Girl	×	×		×	×
Boy			×		
Child OCI baseline	104	67	62	54	41
Child OCI follow-up	24	19	32	15	17
CRIQ intrusive thoughts baseline	46	35	28	30	27
CRIQ intrusive thoughts follow-up	22	10	1	9	4
CRIQ beliefs baseline	1110	940	770	760	640
CRIQ beliefs follow-up	569	520	20	180	20
CRAS baseline	33	55	37	69	79
CRAS follow-up	111	99	79	116	116
YP-CORE baseline	31	16	16	17	18
YP-CORE follow-up	12	9	12	8	18

Table 3. Raw scores of Child Obsessive Compulsive Inventory subscales by participants P1–P5 at baseline and follow-up

	P1	P2	P3	P4	P5
Child OCI total score baseline	104	67	62	54	41
Child OCI total score follow-up	24	19	32	15	17
Washing subscale score baseline	34	30	3	19	28
Washing subscale score follow-up	10	10	0	7	15
Checking subscale score baseline	0	3	21	3	0
Checking subscale score follow-up	0	2	9	2	0
Doubting subscale score baseline	4	4	8	6	2
Doubting subscale score follow-up	1	2	5	1	0
Ordering subscale score baseline	24	12	11	7	2
Ordering subscale score follow-up	1	1	5	0	0
Obsessionality subscale score baseline	28	13	14	10	9
Obsessionality subscale score follow-up	11	3	9	4	2
Hoarding subscale score baseline	8	2	0	4	0
Hoarding subscale score follow-up	1	0	0	0	0
Neutralising subscale score baseline	6	3	5	5	0
Neutralising subscale score follow-up	0	1	4	1	0

YP-CORE (Twigg *et al.*, 2009), 10 items, range 0–40 points. The clinical cut-off point has been identified as ≥ 15 points.

The questionnaires were completed at the baseline prior to the intervention and at the follow-up at the end of the intervention.

Results

Five of six adolescents carried out the whole intervention; together with the information of therapists' impressions and reflections of the treatment described below, it was possible to clearly establish that the programme could be integrated into the service's general operating strategy. One adolescent dropped out of treatment because she was unable to commit to treatment and she wanted to concentrate on her studies. She also was seen by another therapist during the group meetings. The therapists got the impression that her parents were unable to support her in engaging in treatment and that they wanted to protect her from COVID-19 infection. Background information and individual symptom measurements of participants are shown in Table 2 and Table 3. Age range was 14–18 years and 4/5 were girls. All participants had decreases in symptom severity between baseline and follow-up. With OCD symptoms, measured by Child OCI, 5/5 were

Table 4. Means and standard deviations between baseline and follow-up measures of participants in a group of adolescents treated with a CBT model designed for OCD

	<i>n</i>	Min	Max	Baseline mean (<i>SD</i>)	Follow-up mean (<i>SD</i>)
Age	5	14	18	15.6	
Gender					
Girls	4				
Boys	1				
Child OCI				65.60 (23.607)	21.40 (6.804)
Baseline		41	104		
Follow-up		15	33		
CRIQ intrusive thoughts				33.20 (7.791)	9.20 (8.044)
Baseline		27	46		
Follow-up		1	22		
CRIQ beliefs				844 (183.112)	261.80 (266.770)
Baseline		640	1110		
Follow-up		20	569		
CRAS				54.60 (19.870)	104.20 (15.707)
Baseline		33	79		
Follow-up		79	116		
YP-CORE				19.60 (6.427)	11.80 (3.899)
Baseline		16	31		
Follow-up		8	18		

in the clinical range at baseline and 5/5 were no longer in clinical range at follow-up. Measured with YP-CORE, 5/5 were on the clinical range on general psychiatric well-being at baseline and 4/5 were recovered from the clinical range at the end of treatment. Improvements were observed on the measures of responsibility commensurate with those in previous studies including randomised trials of CBT. Table 4 shows additionally at group level means and standard deviations with all measurements at baseline and follow-up.

In terms of ‘therapist reflections’ (i.e. personal observations of the therapists involved in the study), we identified a few important issues. First, we considered that group therapy alone was not sufficient, as development of the conceptualisation/shared understanding may remain at too general a level in the group setting. Therefore, individual meetings were intended to focus on a person-specific conceptualisation model to reach a shared understanding. It seems that the ‘vicious flower’ conceptualisation maintenance model contributes to the formation of a collaborative relationship and is a helpful focus for further purposeful work. Questionnaires measuring responsibility beliefs (CRIQ, CRAS) seemed to be helpful in examining beliefs (when reviewed as part of therapy as opposed to simply being measures). Participants filled out the forms and discussed with therapists before making the conceptualisation. Second, sharing goals and going through homework was built into group work so that adolescents had the opportunity to hear experiences from others and get encouragement for their own work. Other group members in similar situations seemed to benefit from hearing that another adolescent had coped with and overcome problems in situations previously believed to be difficult and found that they had gained the means to adopt a more functional and free everyday life. The adolescents also commented that the motivation to complete the behavioural experiments was supported by an urge to keep up with the group. We believe that we observed that the young people became committed to sharing solutions (rather than sharing problems) as part of their group membership. Third, among the participants in the group, many of the compulsive symptoms were focused on magical thinking, fear of contamination, and checking, which allowed for ready sharing. Fourth, the ability of adolescents to conduct behavioural experiments and share their progress and discoveries with each other in the group seemed to strengthen the young people’s learning experience, providing them with mutual support. Through positive learning experiences, adolescents began to take more responsibility for OCD and therapists were able to take a more ‘coaching-role’. Hence, according

to the feedback received from adolescents, the most useful intervention method was the behavioural experiments. Fifth, parents taking part in the intervention was an important way to engage the family to support the treatment. As a group meeting, family members got support from each other and were encouraged to work towards destigmatising the illness and generally support their family members to engage with the treatment. Finally, our impression of the meetings was that the presence of the therapy dog also relaxed the participants, providing a helpful non-pathological focus from time to time in otherwise quite intense sessions.

At the beginning of group therapy, young people's participation in joint discussions was relatively sparse, and the agenda was largely dependent on the activity of the therapists, especially in group situations. Previous experience using CBT methods allowed the therapists to trust the process, especially as the blended model was new to them in this form. Initially, the change in involvement of the young people seemed to happen 'below the surface', but once the positive change started, it quickly gained momentum. The experience of being able to influence one's own behavior began to reward young people, and thus independent work and the further clarification of goals became possible as a more active and involved process. We think it also provided useful models to the others in the group.

The presence of a second therapist was experienced as important, as the therapists were able to maintain a positive dialogue with each other by establishing an open contact, sharing experiences in relation to each other and the young people. In particular, modelling uncertainty with behavioural experiments seemed meaningful and put the therapists on an equal footing with the young people. In addition, the therapy dog's soft and playful nature created situational humour, offering natural relief during serious discussions.

Leading the group was an exciting and creative and at the same time challenging process that required constant dialogue between the co-therapists. Previous training in CBT and experience in the treatment of OCD in young people, as well as specialist supervision, enabled the process to be carried out in a creative and flexible way.

The therapists were concerned that working exclusively in a group might not allow OCD treatment to focus adequately on an individual formulation which seemed consistent with the results. Disorder-specific and individual conceptualisation seemed to be the heart of the work. Individual meetings focused on a shared (with their therapist) understanding of their OCD and associated safety-seeking behaviour helped therapists to encourage young people to face their worries and fears. Theory A/B was included in the conceptualisation. Actively offering options with young people seemed to be important. The reformulation helped young people to understand their own symptoms and to find a more accepting relationship with their own thoughts.

Case example (with permission from the young person and their parents)

Maria (pseudonym) is a 15-year-old adolescent whose compulsive symptoms started during COVID-19. She had magical thoughts about her body parts and thoughts of her body parts becoming disgusting. Maria also thought she was becoming seriously ill. At bedtime, Maria had obsessive and formulaic rituals. Her symptoms were triggered by sleeping on her right side and writing with her right hand. The symptoms had a restrictive effect on her schooling and peer relationships. Maria received eight sessions of group therapy and eight of individual therapy, two group therapy meetings with her parents, and one feedback meeting provided by two nurses in an adolescent psychiatric care setting. Treatment initially involved psychoeducation, development of a shared formulation of the vicious circles that perpetuate the problem, problem reframing (Theory A/B technique), and the development of exposure tasks. Maria's treatment goals included a desire to be able to write fluently, wear all her clothes, eat a variety of foods, walk casually, and sleep well. Maria wanted to feel free and be able to take risks in her life.

Vicious flower formulation

Trigger: Going to bed at night. Thought: 'I have to do certain rituals, otherwise I'm missing something important'. Attention: On the ceiling, in my own steps. Feeling: fear, anxiety, irritation. Belief: 'The right side of my face would be paralysed; a limb would be broken. I would lose my hair and become ugly, disgusting, and isolated. I would be in pain and die alone and ugly, from brain disease or some other illness'.

Ritual: I jump over the threshold with my left foot on an even number, jump onto the bed with my eyes closed and push the bed against the wall, clean the soles of my feet by multiplying the even number I jumped by four.

Avoidance: I don't look at mirrors or reflective surfaces.

Theory A: 99%; this is a real danger; I will become ugly, get seriously ill and lose my zest for life.

Theory B: 70%; I have become sensitive to worry and fear that certain body sensations are a sign that I am in danger of losing my attractiveness and health.

Exposure tasks included: Behavioural experiments in-session: right side lying modelled by two therapists. Therapists and adolescent performed a behavioural experiment in which the therapists and adolescent lay on their right sides. Checking in the mirror how the world works: whether the face has changed and being with the sensations of the body. There was also imagery exposure: when your worst fear is realised.

Immediately after the exposure tasks, Maria's belief was 40% and she felt it fitted better with theory B. Physical sensations are not a sign that the body is changing or becoming paralysed.

By the end of treatment, Maria achieved the goals she had set at the beginning of treatment. She noticed that her mood was better, and she was more active in her friendships. Maria was supportive and encouraging to others in the OCD group. She was able to go to bed without completing rituals and she slept more relaxed. Her writing normalised and her general well-being improved.

When Maria started treatment, her CHILD-OCI scale score was total 111 (washing 34, organising 24 and obsessive 28). After treatment, her CHILD-OCI scale score was a total of 28 (washing 10, organising 1 and obsessive 11).

Discussion

In this research we wanted to assess the feasibility of full cognitive behavioural therapy delivered as a blend of individual sessions, group therapy and flexible family involvement. Although the CBT model used typically incorporated E/RP, it was based on conceptualisation and formulation/shared understanding focused on exaggerated responsibility beliefs focused on threat. The main finding was that (a) mixed model of delivery was accepted well by most of the adolescents and parents, (b) adolescents were able to conceptualise their OCD symptoms with a cognitive model regarding biased safety and responsibility thoughts, and (c) symptoms and biased responsibility thoughts reduced substantially during the treatment as anticipated by other previous studies. We consider it possible that the good treatment outcomes obtained here may be due to symptom similarity amongst this particular group of adolescents; future research might consider the role of such homogeneity where group treatment is deployed.

Even though it has been suggested that children are less likely to have insight into the irrationality of their obsessions and compulsions (Geller *et al.*, 2001), suggesting that children may have a limited ability to cognitively process their obsessional ideation and self-evaluate their compulsive behaviour, our findings indicate that adolescents aged 14–18 were capable of undertaking such therapy including cognitive processing and development of cognitive flexibility. Moreover, as there is some previous evidence (Peris *et al.*, 2008) that parental involvement in OCD rituals may be associated with higher levels of child OCD severity, our results suggest that young people living at home with parents were able to benefit from the integration of family intervention to deal with accommodation issues. Similar flexible family involvement was used in the study conducted by Bolton *et al.* (2011), which also utilised the self-help workbooks

incorporated in the present study. There is also previous evidence that group treatment reduces OCD symptoms in a sample of children and adolescents (Whiteside *et al.*, 2018). Our findings are consistent with the idea that OCD treatment in adolescents can helpfully include cognitive conceptualisation, and there were some informal signs that the blend of individual and group meetings, and integrated parent meetings, was a helpful approach.

A potential benefit is that a smaller total number of hours of therapy may be required for the hybrid model compared with individual treatment, due to peer support and family meetings. Adolescents at psychiatry out-patient units with OCD symptoms usually have a lot of comorbidity and are at risk of becoming drop-outs of treatment. It is noteworthy, however, that the hybrid model requires more therapy hours than group therapy alone. Therapists made extensive use of their experience of deploying cognitive methods for various group therapies, such as imagery work and work with values and goals. Therapists had years of shared work history in guiding groups and were excited to implement the CBT treatment model used here. The way therapists applied specific cognitive-behavioural techniques as well as the enhanced interactive effectiveness and good collaboration created a good base for the therapeutic work. It is possible that in the blended model individual attention was more broadly possible than in the usual group model. The training and regular work supervision received from Paul Salkovskis supported an experimental and creative way to implement the hybrid treatment model. Under this guidance, therapists understood how to support group discussion in line with goals and to transform 'OCD speech'. Good treatment outcomes may also have been influenced by the motivation of the group participants to get help for their obsessive-compulsive symptoms but also to support each other, which is not possible to get in traditional individual psychotherapy. The presence of the therapy dog also relaxed the participants and may have had in that way a positive influence on therapy, even though the true effect of presence of the therapy dog cannot be verified.

Furthermore, in adolescent psychiatric services in Finland, there are no widely available pathways to structured CBT treatment for OCD, and CBT treatments for OCD are almost always offered by private psychotherapists who offer long and individually tailored psychotherapies in the stage of rehabilitation, not in the acute stage of being a patient in an adolescent psychiatric out-patient unit. The national health insurance system funds long-term rehabilitation psychotherapies in Finland, but this is at the stage of rehabilitation, after treatment in the adolescent psychiatry out-patient unit has finished. Adolescent psychiatry is funded by communities and health care districts, and in adolescent psychiatry there is a clear need to develop cost-effective CBT-based treatment models, for example for OCD, as it would be right to time treatment to intervene as fast as possible, hence, not at the stage of rehabilitation. Hence, this presented treatment model for adolescent OCD could be disseminated in the context of secondary care of adolescent psychiatry in health care systems where CBT interventions for OCD are lacking.

The exploratory nature of the study, and hence, obviously small sample size was a limiting factor in generalising findings. It is also important to note, that 5/6 of the participants were female. Moreover, we could not compare the blended model described here with traditional individual CBT treatment for OCD, which further limits the presented findings. However, the outcomes of deploying this blended model in a consecutive case series of adolescent OCD sufferers offers encouraging results for the treatment of obsessive-compulsive disorder in adolescents. In sum, a mixed model in adolescent OCD treatment seems to be a promising approach to develop and study further in the future.

Key practice points

- (1) Adolescents with OCD benefit from focusing on responsibility beliefs.
- (2) Adolescents with OCD benefit from working with parents.
- (3) Adolescents with OCD benefit from group intervention.

Further reading

Bream, V., Challacombe, F., Palmer, A., & Salkovskis, P. (2017). *Cognitive Behaviour Therapy for OCD*. Oxford University Press.

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