MAMA STUDY

Psychological intervention to reduce maternal anxiety

THERAPISTS' MANUAL

Final Version (iv)

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Introductory and Overview Section for

Therapists' CBT Manual: Notes

Psychoeducation in this manual involves two quite different components. The first is an introduction to the concept of the function of anxiety; the participants are told that "a little bit of anxiety can be a good thing"...but "too much...can spoil your enjoyment of life". This in fact serves as a rationale to participants for the psychological

intervention.

The second component of psychoeducation is along more traditional medical lines, imparting a short piece of information. Participants are told that the real risk of their child dying from food allergy in a year is "30 fold less than the risk of dying in an accident". Possible benefits of this include increased engagement in the intervention due to a sense of relief at this point.

Graded muscle relaxation was included at the end of the psychological intervention, after cognitive restructuring (see below). We included it because of its high face validity in an intervention for high anxiety levels in parents, because of very positive feed-back from the participants who received it during the pilot phase of the study, and because of its apparent efficacy in other single- session treatment studies for physical illness-related anxiety. For instance Thom and Sartory [1] used stress management training and imaginal exposure to effectively treat dental phobia, without any named cognitive intervention.

In our manual, participants are instructed to rate their initial anxiety levels on a 10point Likert scale and then repeat this at the end of the relaxation section, which is designed to last about 10 minutes. They are then instructed in progressive muscle

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relaxation, deep breathing, and imaginal exposure, while in a relaxed state, to the feared scenario (involving a recent allergic event in their child which they will have discussed earlier in the session).

Cognitive restructuring has been shown to be the "active ingredient" of CBT for anxiety disorders [2] since it helps the sufferer to re-appraise the meaning of an anxiety-provoking event and their own ability to cope with it in a lasting, different way. In this manual, as it was designed as a single-session intervention rather than the six or twelve-session intervention often used for a psychiatric population, the emphasis is on the participants being taught "positive self-talk". This is achieved in three ways. First, the mothers are given an analogy of the thoughts of a man attacked by "the burglar in the night". The trainee therapists are instructed to teach the mothers that thoughts, feelings and behaviours are all linked up in a sort of vicious circle, and that "how you think affects how you feel". Secondly, the mothers are encouraged to identify their own anxious, "hot" thoughts during a recent episode of food allergy in their child. The trainee therapists were taught to identify and record cognitions, with associated feelings and behaviours. Thirdly, the participant mothers were encouraged to think of alternative "cool coping thoughts" which they could use more helpfully next time, e.g. what someone they know who is a "good coper" might think in this situation.

The mothers were encouraged to use their own words and also to do their own writing directly onto copies of the manual. This then served as a personalised thought record and an aide memoire, which the participants took away at the end of the study and which formed the basis of the standardised phone-call at two weeks and the six-week booster session.

• The whole manualised intervention is designed to last between 45 minutes to one hour, as evidenced by the average recording-time of the 93 audiotapes.

EACH SECTION SHOULD TAKE YOU ROUGHLY THIS LONG:

- Psycho-education re effects of anxiety and estimate of child's 5 mins chance of dying, corrected.
- 2. The "burglar in the night" model or "how you think affects how you feel."
- 3. The mothers' own worst case scenario and her thoughts, 5 mins feelings and body sensations that went with this (or might go with this).
- Introducing Cool Coping thoughts and filling in a Thought 10mins
 Record.
- 5. Graded muscle relaxation followed by brief imaginary 5mins exposure to "worst case scenario."
- **6.** Summary and agreement to phone in 2 weeks. **5mins**

Total time approx: 40 minutes

Before you take the mother and child into the study room you will need:

Two coloured pens (for "hot thoughts" and "cool coping thoughts");

DVD player working, with age/gender appropriate DVD;

Other activities for the child e.g., felt-tips and paper, etc.

1. Psycho-education re risks of excess anxiety

You have been randomly allocated to receive a short, one off treatment session designed to improve your confidence in managing anxiety. This will last about half an hour, and will be followed up with a short phone-call at a convenient time in 2 weeks. We will then meet again in 6 weeks to see how you are getting on.

This does not mean that we have worries that your anxiety is particularly high! It just means that you will receive some counselling which may be helpful to you and your child in managing anxiety to do with the food allergy over the next few months. Does that sound okay?

A little bit of anxiety is useful. You probably wouldn't be very careful crossing the road if you weren't a bit anxious about the cars; and children probably wouldn't do their homework if they weren't a bit anxious about what their teacher might say. So a little bit of anxiety can be a good thing or even a life saver, helping you to respond in a crisis. But too much anxiety can stop you doing things, or spoil your enjoyment of life. There is evidence that being

anxious too much of the time can have bad effects on your health, and that constant high-levels of anxiety in parents can also have bad effects on their children. So let's think about excessive worrying or anxiety a little bit more.

Psycho-education re risk of death due to allergy

What do you think is the chance of your child dying because of a serious allergic reaction? I know you were shown this just a minute ago with the questionnaires. I think you'll be interested to know that in fact the mark should go here - The risk of a food allergic child like yours dying from food allergy in the next year is about 30 fold less than their risk of dying in an accident in the next year.

Fig 1 here

2. The "burglar in the night" model

Imagine a man who lives on his own in a large house full of expensive things.

One night he is woken by an enormous crash in the early hours of the morning and the sound of breaking glass. The immediate thought that pops into his head is "Oh no it's a burglar!" Let me draw this burglar for you in his bed.....

Figure 2 here

Now, what sort of **feelings** do you think the man who has been woken up will have? (For example, happy, sad, nervous etc.) And for each one of those

feelings, for instance, "anxious" what number would you rate this out of 10, where 0 is the man does not feel this emotion at all and 10 he feels it absolutely maximum as much as he possible can?

Now I'm going to ask you about the sort of changes in his body which this man might notice as he gets more and more anxious thinking about the burglar. (These are likely to include faster heart beat, faster breathing, feeling dizzy, churning stomach, headache, tunnel vision and more.) This is because the body is getting ready for action, ready either to fight or run away from danger whether it is to tackle the burglar or run away as fast as possible!

So we have talked about the sort of thoughts the man might be thinking, the sort of emotions he might have, the sort of bodily changes he might notice, and finally I'm going to ask you about his behaviour, what do you think the man in the bed would do? (Encourage thinking about any type of avoidance e.g. hiding under the bed, under the bed covers, in the cupboard, shutting eyes and keeping completely still etc.)

That's excellent. Now I would like to see if you and I can join up these 4 components of anxiety using some coloured arrows. What do you think would happen to the man's feelings of worry the more he thought about the burglar? And the more he got worried what do you think would happen to the body changes which we have written above? And as he avoided looking to see if it was a burglar or not, what do you think would happen to his belief in that thought, "it is a burglar"? Can you link anything else by any arrows, for instance

do you think the more the man's heart beats fast that this might make him more worried? That the more he feels certain it is a burglar this will make him even more likely to avoid going to have a look? That's fantastic. So how would you sum up what we have drawn? (Prompt until the parent says something like a vicious circle, a spiral, a cycle etc.)

Now I'm going to ask you one last question. Imagine the man is lying in bed at night and hears exactly the same noise but knows for definite that it is his naughty cat. What effect do you think that the thought "it's that stupid cat" would have on his feelings? Do you think he would still feel anxious to the same extent? And what about his bodily changes, will they be as intense? And do you think his behaviour would be the same, that he would be likely to avoid checking? Fantastic. So what does that tell you about how our thinking influences how we feel and how we behave? (Prompt until the parent says something like "if we think differently we feel and act differently". If they don't spontaneously say this say it for them.)

3. Introducing the idea of a thought record

Now we have completely forgotten that we are here to take part in a study about food allergies! After all that talking about a man's thoughts in the middle of the night, I would like to ask you about some of your own thoughts if that's okay with you. I'm going to jot them down on this piece of paper and at the end of this session this paper will be for you to take away and I will keep a copy for

our study. The copy will be kept anonymously as part of the trial and will not be shown to anyone outside of this trial. I hope that's okay.

I'd like you to think about a recent incident when your child had some symptoms of their food allergy. It could be a serious event or a recent minor reaction such as getting flushed or feeling sick. If this has never happened, could you please imagine in your head a situation you particularly dread, or a "worst case scenario", concerning an allergic reaction in your child?

Can you think of a situation now? Could you describe that situation to me and I will write it in this first column, "situation".

So in the situation you've just described to me I'm going to write down just one or two words to remind us both what was going on at that time. Now could you tell me any thoughts that you remember popping into your head? I don't mean the sort of long thoughts about the meaning of life that you might write in an ordinary diary but just short thoughts of a few words which we could also call "hot" thoughts because they are associated with strong emotions. I am going write these in the next column.

What about any feelings or emotions that you remember experiencing at this time? How would you rate each of these out of 10?

Finally, what was your behaviour, what did you do? And what happened after that?

(**Note** if it has been an extremely distressing or unpleasant event it is important that you stress that everything was alright at the end by saying for instance "and here we are now sitting in clinic on a Wednesday morning and your child is fine" or something like that. However, don't become too digressed at this point!)

Table 1 here

4. Introducing coping thoughts

With practice, it is possible to train yourself to think in a more coping way. This is not the same as "thinking positive" or thinking happy thoughts all the time which is obviously not possible in a real life! Some thoughts are just more useful that others. I wonder if we can work through a short example together. In the situation we discussed earlier on can you imagine how somebody you really admire or look up to might have thought at that time? Do you have a mother, a God-mother, an auntie, a nurse, a best friend or somebody who is particularly good in a crisis? Of course we never really know what someone else is thinking but just for this exercise could you guess what kind of coping thoughts they might have? Excellent. I'm going to write this in the "cool coping thought" column. It is useful to come up with as many as you possibly can even if some of them seem like you would never really believe them. Another way of getting some coping thoughts is to think about your old self before your child developed their food allergy or if you have an older child, how you would have thought about them if they don't have a food allergy. In the

same situation might you have thought in a more coping way? How might you think in the future? What advice would you give a friend?

This technique is called cognitive restructuring and it is not easy. However, there is excellent evidence that people who master this technique are more able to cope with anxiety and indeed may cope better in difficult situations in all areas of their life.

5. Graded muscle relaxation

We have nearly finished this psychological intervention and you are doing very well. I promise that it will all make sense at the end! Have you ever done any muscle relaxation, meditation, yoga or anything like that? There is a particular type which has been shown to be useful in treating anxiety, if it is practiced on a daily basis. It is called **progressive muscle relaxation with slow abdominal breathing**.

Before we start, could I ask you to rate how stressed you feel right now? Where "0" is completely relaxed and calm, and "10" is very anxious or stressed? Thank you.

I would like us all to sit comfortably in our chairs and place our chairs so that we can see each other but we are not directly looking at each other. The best thing for this exercise is if you shut your eyes, but if you do not feel comfortable doing this right now don't worry at all. I would like you first to become aware

of your breathing and breathe in slowly through your nose and out through your mouth. As you breathe in I would like you to be aware of your tummy going up. This means that you are drawing air in, in the best possible way. Let's practice some slow breaths together, breathing in through the nose and out through the mouth.

Good. Now I would like you to concentrate on your feet first of all. Please can you screw up your toes as tightly as you can inside your shoes and then release that tension feeling your toes and feet lovely and relaxed. I would next like you to do the same with your calf muscles, tensing them up as much as you can, and then letting go. Now tense up the big muscles in your thighs and your bum, hold as tense as you can and then relax. Continue to breathe in slowly through your nose and our through your mouth and try to breathe out as you relax the muscles. Now let's try tensing up the muscles in your tummy, holding as tight as you can and then breathe out and relax. Now do the whole of your toes, calf, ankles, buttocks and tummy all together and relax.

Next moving up to your hands, I would like you to scrunch your hands into angry fists and hold the tension, then release and breathe out. I would like you to tense the muscles in your arms, your biceps and then relax. Now feel the tension in your shoulders as you raise your shoulders towards your ears, hold it tense and then relax. Finally screw up your face and your eyes as tight as you can, hold that tension and then relax. Now I would like you to take a deep breath in and feel the relaxation spread from the top of your head, all the way down to

your toes. Finally I would like us all to take 3 more breaths in and out, in and out, in and out.

Keep breathing. I will shortly ask you to open your eyes and to come back to London on a Wednesday morning and to be aware of the sounds all around us and of what you can see in this room. How are you feeling? What would your rating of your stress level be now, on a scale of 0-10?

Introducing imaginary exposure to feared situations

I would now like you to think back to that unpleasant situation we were discussing earlier on which we recorded in the thought diary. I want you to start thinking about that a bit, and when you become aware of your body getting anxious, instead of letting the anxiety take hold of you, I would like you to practice breathing and relaxing your muscles at the same time as having this image in your mind. You will be able to control your anxiety by actively relaxing your muscles and by slow abdominal breathing as you practice this technique. It is very important to practice every day even if just for a few minutes, when you are **not feeling anxious** as with all other skills like learning to ride bike or cook a meal, new skills take practice.

6. Summary:

You have been extremely helpful in concentrating after such a long morning. I think we should also reward your child. Just before you go, I would like us to sum up together what we have learnt. Now what was the point of that story about the man in the night with the burglar? (The way you think affects the way

you feel and behave.) And then we went on to talk about a situation from your own life. What did you take away from this exercise? (How to separate thoughts and feelings and how to write down hot thoughts, feelings, and bodily sensations.) Finally we introduced the idea of thinking alternative coping thoughts. Can you remember what sort of questions might be useful to help you find those thoughts?

Then we did some graded muscle relaxation and deep abdominal breathing. How would you describe this to a friend or your partner when you get home? Now I have said that both techniques we have learnt will require practice and I'm afraid that's true. Between now and your next visit to this clinic, do you think you will be able to practice the relaxation and the breathing every day? I will also be phoning you to check how it's going. As I said earlier it is important to practice it when you are already relaxed, such as in the bath, or before going to sleep. Hopefully over time you will then be able to use these techniques when you are feeling more anxious.

I would like to stress that of course it would **not be appropriate** to do this type of anxiety management technique in the middle of a **crisis** such as when your child is actually having a bad allergic reaction. In that situation your "fight or flight" response which we talked about right at the beginning of the session will be very useful and you will need to use all the knowledge and skills, and relaxation will be for afterwards when it is all over.

If you feel able, it would also be really helpful if you could keep a record of your thoughts, feelings and bodily changes when you get anxious. This might

not happen every day. You could practice trying to introduce different coping

thoughts and see what effect this has on your anxiety, using the rating scale of

0-10.

Which do you think you would find more useful, the relaxation or the coping

thoughts? And which coping thoughts do you think would be best for you?

I would like to thank you very much indeed for taking part in this trial, and I

hope that it will be beneficial for you and for your family. I am now going to

photocopy these notes so that you can have them to take away and look at

whenever you feel like it.

With your permission, I would like to phone you in 2 weeks to see how you are

getting on with what we have discussed today. The call should last no more than

about 10 minutes.

(Check you have their correct phone number, and make a date and time to call-

after the child/ren are in bed is probably best).

Then we will see you again in 6 weeks from now.

Thank you again.

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References

- 1 Thom A, Sartory G, Johren P: Comparison between one-session psychological treatment and benzodiazepine in dental phobia. J Consulting Clin Psychol 2000; 68: 378-387.
- 2 Grey N, Salkovskis P, Quigley A, Clark DM, Ehlers A: Dissemination of cognitive therapy for panic disorder in primary care. Behav Cog Psychother 2008: 36: 509-520.

APPENDIX I: STANDARDISED PHONE-CALL AT 2 WEEKS

"Good evening. Thank you for speaking to me- this call should last about 10 minutes.

I wanted to ask you how you have been coping with anxiety about food allergy, since we met 2 weeks ago?

What has your own anxiety level been like?

Have you had a chance to practice any of the techniques we talked about? (If parent does not spontaneously volunteer....). Which has been more useful, thinking Coping Thoughts or using the relaxation technique?

When is it easiest for you to practise relaxation?

Have you been able to write down any of the situations, feelings, hot thoughts and coping thoughts? That's great! (Praise any attempt to write anything down, or evidence of any thinking about the role of thoughts in maintaining anxiety).

Is there anything about these techniques that you're stuck on, or you wanted help with? (try to AVOID giving advice about medical matters; the purpose of the phone-call is to help with learning CBT skills only!).

It would be great if you could practice these techniques some more over the next 4 weeks. I look forward to hearing how things are going then, and which- if any- of this has been useful.

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Thank you very much for your time.

Have a good evening".