Evidence-based cognitive behavioural therapy for eating disorders: Principles and practice

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Outline

- CBT – efficacy and effectiveness
- Therapist drift/stampede
- Recovery goals
- The need for two brains
- Principles of CBT for the eating disorders
- Skills of CBT for the eating disorders
- Recovery goals revisited

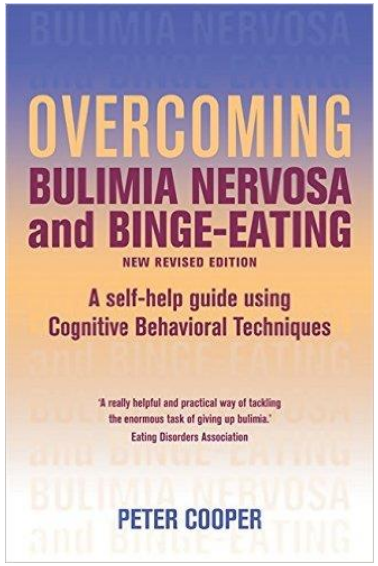
First, the shape of things to come

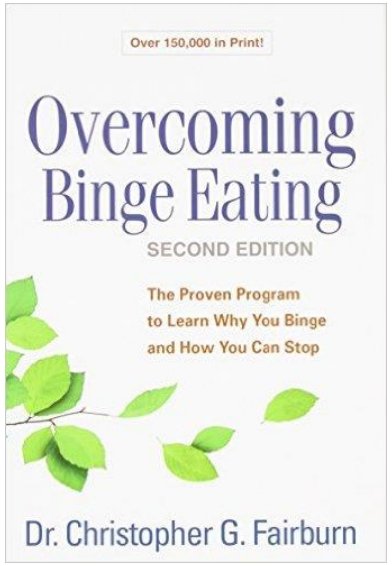
- NICE guidelines are under revision (due in May)
- Cannot talk about what will be in there, as they are not out yet
- But I can comment on the draft that has been out for consultation
  - a general idea about what the evidence base says
- CBT in a strong position

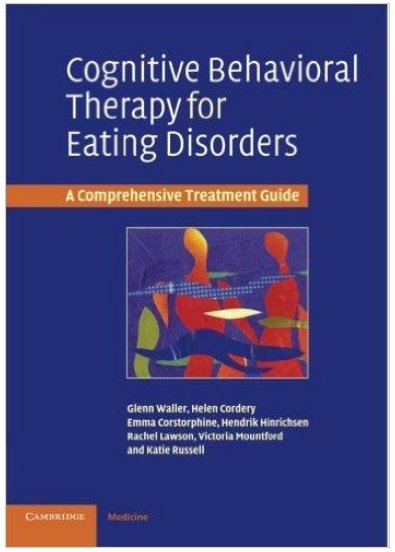
First, the status of CBT-ED

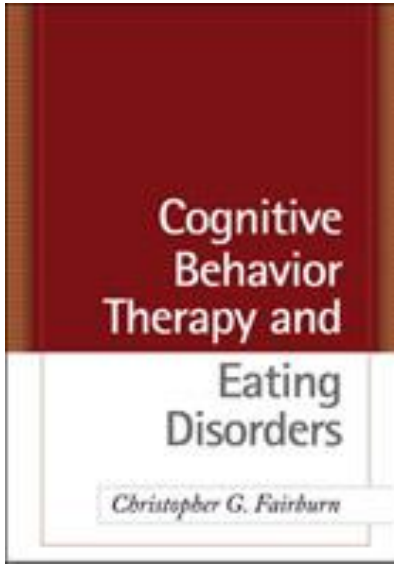
- Where is CBT being recommended, based on the evidence that NICE has examined?
  - adults with non-underweight eating disorders
  - adults with underweight eating disorders
  - adolescents with eating disorders
- More extensively recommended than any other therapy
  - no adjustments for comorbidity, duration, etc.
- But it needs to be the appropriate form
  - **evidence-based CBT-ED**
  - there are several of these, with similar outcomes

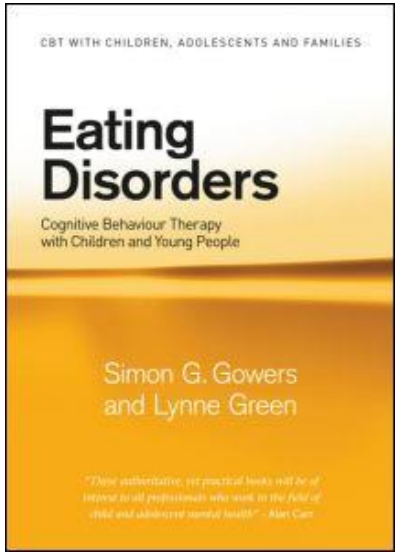
Evidence-based CBT-ED protocols

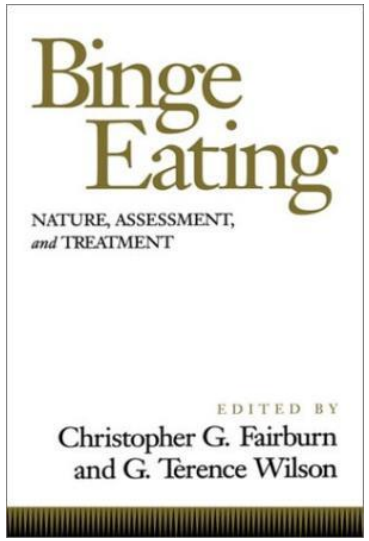












- Two things to remember...
- Protocols are <u>not</u> rigid
  - they set our what is to be done, with appropriate flexibility
  - Wilson (1996) puts it rather well...
- They do not work by osmosis (sadly)

CBT-ED as an efficacious and effective treatment for eating disorders (a brief tour)

CBT works...

- ‘Efficacy’
- CBT-ED works in research settings
  - e.g., Fairburn et al. (1995); Fairburn et al. (2009)
- More effective than other approaches for non-underweight cases
  - e.g., Poulsen et al. (2014); Fairburn (2017)
- At least as effective as other approaches for underweight cases
  - e.g., Byrne et al. (2016)
- Works just as well when there is comorbidity
  - and reduces that comorbidity
  - Karačić et al. (2011)

CBT works...

- ‘Effectiveness’ in routine clinical settings
- Works just as well as in regular outpatient clinics, with all the complexity that implies...
  - Ghaderi (2006) – case series of bulimic cases
  - Byrne et al. (2011) – transdiagnostic group
  - Peterson et al. (2011) – atypical bulimics
  - Waller et al. (2014) – normal-weight cases
  - Turner et al. (2015, 2016) – transdiagnostic group
  - Knott et al. (2015) – normal-weight cases
- Slightly higher attrition rate

CBT works...

- ‘Effectiveness’ in routine clinical settings
- Unaffected by severity or duration
  - Calugi et al. (2017); Raykos et al., (in preparation)
- Reduces comorbidity
  - Byrne et al. (2011); Turner et al. (2015)
- Works with inpatients
  - Dalle Grave et al. (2013)
- Works with non-underweight adolescents
  - Dalle Grave et al. (2015)
- And it can be done effectively in half the time...
  - Waller et al. (2016)

What stops clinicians using CBT-ED for eating disorders?

So what is the problem...why not just do it...?

- Therapist drift
- Failure to deliver the best therapy for our patients
  - though omission, commission or ignorance
  - Waller (2009); Waller & Turner (2016)

- Proportion of therapists who report delivering any single evidence-based treatment for eating disorders = c. 6%
  - Tobin et al. (2007)

- More likely to stay on track if we are younger, endorse CBT, etc.
  - von Ranson et al. (2011)

Therapist drift, or stampede?

- Why do we drift?
- Ignorance/lack of training/dislike of ‘constraint’
  - Addis & Krasnow (2000); Meehl (1986); Royal College of Psychiatrists (2013)
- Clinician anxiety
  - Turner et al. (2014); Waller et al. (2012)
- Overinflated perception of our own abilities and clinical judgement
  - Grove et al. (2000); Walfish et al. (2012)
- Overreliance on therapist effects
  - such as the therapeutic alliance

Defining recovery

But assuming that we want to do our best for our patients...let's aim for recovery

- Recovery goals
- Broad agreement on these
  - Noordebos & Seubring (2006); Emanuelli et al. (2012)

- Aims are (in order of importance):
  1. Reduce overevaluation of one's own appearance
  2. Reduce weight control behaviours
  3. Reduce psychological, emotional and social impact
  4. Reduce life-threatening consequences
  5. Reduce non-life threatening consequences

Defining ‘recovery’

- So we are going to consider all of these
  - but not in that order

- Linehan (1993)
  - life-threatening behaviours first and always
  - then the therapy-interfering behaviours (patient’s and therapist’s)
  - then the therapy

- Weight regain and reduce weight control behaviours
- Psychological, emotional and social consequences
- Body image and self-esteem

Why are we defining recovery this way?

- It is about true recovery – not relapsing and not hoping that the patient will just ‘get better somehow’ after the therapy

- The patient is less likely to recover/more likely to relapse if the following are true at the end of therapy:
  - Still underweight
  - Poor body image
  - Still using any bulimic behaviours
  - Very negative eating, weight and shape cognitions

- So treatment is going to aim at all of these…
  - and more

The need for two brains: Principles plus Practice

Making the brain work at two levels at once

- Principles
- The stuff that we need to keep running in the back of our brains to remind us what we are doing and why we are doing it

- Practice
- The front of our brains that handles the actual delivery of therapy

- Combining these two makes us more likely to be effective therapists
  - directed, but flexible

Key principles in delivering CBT-ED

1. The eating disorders are not that special...

- We can learn a lot from CBT for other disorders, e.g.:
- Overlaps with anxiety
- The importance of early change and sudden change
- Behavioural change is the lead factor in recovery
- Necessity of risk-taking
- Tackle the central problem and the comorbidity reduces

2. Define the core cognitive target

- Following Clark's approach to CBT…
  - understand what is broken before trying to repair it
  - shape your therapy around that problem

- Two cognitive patterns to address:
  1. Overvaluation (Fairburn, 2008)
  2. Broken cognition (Waller & Mountford, 2015)
     - assumption that even small amount of eating will lead to disproportionate weight gain
     - assumption that any weight gain will be uncontrollable and unstoppable
     - so we are working to rebuild that link

3. CBT-ED is a ‘doing’ therapy (not a ‘talking’ therapy)

- The evidence about CBT for most anxiety and mood disorders?
  - it is the behavioural elements that are most powerful, or even sufficient
  - little benefit of the cognitive, in most disorders (not social phobia, though)

- The same applies in eating disorders
  - start with behavioural change (exposure, behavioural experiments, etc.) and keep on going...
  - the purely cognitive element is not that big

- Cognitive-behavioural therapy, rather than cognitive therapy

4. It is all about food...(initially, at least)

- Start with dietary change, for maximum effect
  - cognitive capacity (less rigid, etc.)
  - emotional stability (serotonin matters)
  - overcoming anxiety (exposure work)
  - enhances quality of life

- Later, use dietary change to shape cognitions
  - behavioural experiments

- Patient accounts back up the initial fear of eating differently, but also the early and longer-term benefits
  - Waller et al. (2013)

5. Start behavioural change early

- Very clear evidence that early change and sudden change are the best predictors of outcome
  - normalisation of eating/early weight gain
- Some early evidence that nearly all change in outpatients happens in the first 10-12 sessions
- So do not waste the patient's time with early motivational enhancement therapy blocks
  - hint: they do not work anyway

6. The alliance matters, but does not lead

- Necessary for change to happen
  - keeps the patient in therapy (Beck et al., 1979)
- Not sufficient to create change?
  - Raykos et al. (2014); Turner et al. (2016)
- Actually a *consequence* of symptom change in CBT-ED
  - Graves et al. (2017)
- CBT-ED approach to the alliance (Wilson et al., 1997)
  - “A judicious blend of empathy and firmness”
  - *Firm empathy*

7. Stop trying to be a therapist

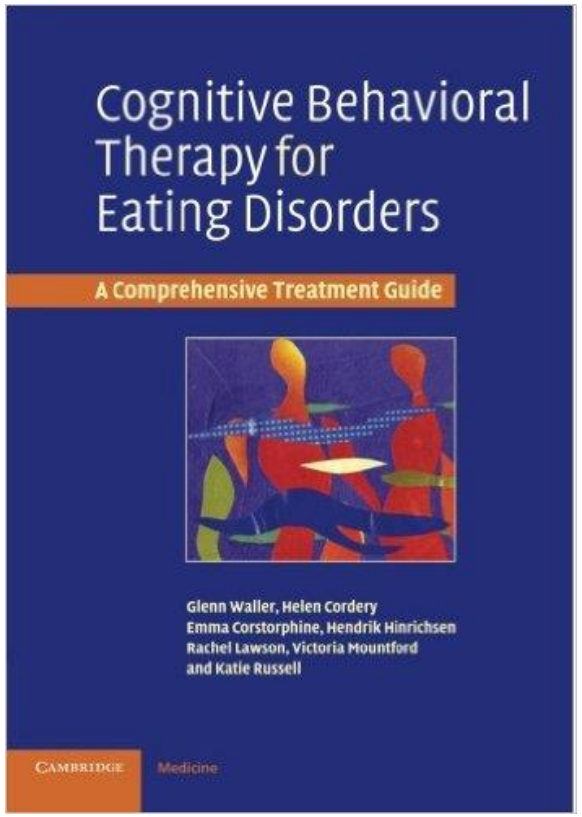
- Our job - deliver CBT-ED at the maximum dose
- Yet we meet the patient for an hour a week…
  - unlikely to be effective
- Aim to get the patient to take on the therapist role
  - our role is to be a coach
  - 168-hour a week therapy
- And if patients do no work between sessions?
  - what would a coach say to an athlete?

8. Endings matter

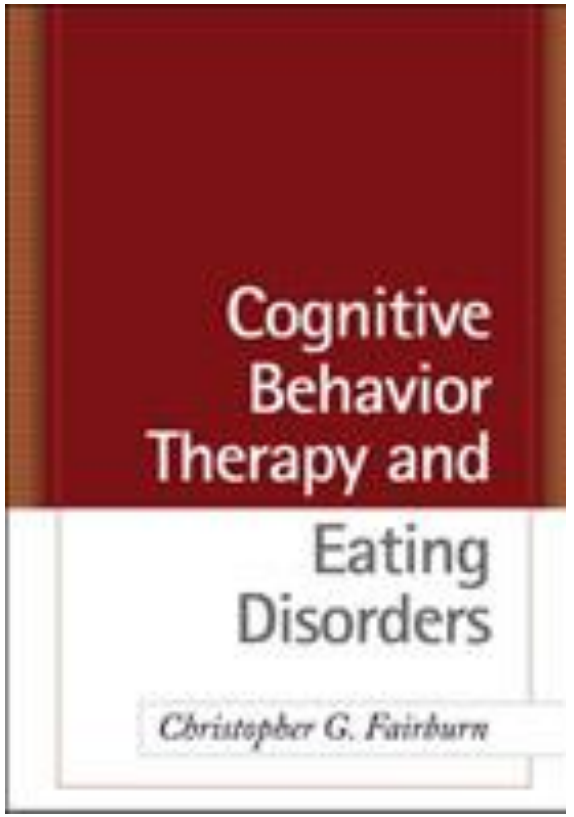
- If we do not have a clearly stated plan, then therapy that is not going well will go on and on without getting better

- So how long do we go on offering CBT for a patient who is <u>not</u> doing well…? (Cowdrey & Waller, 2015)

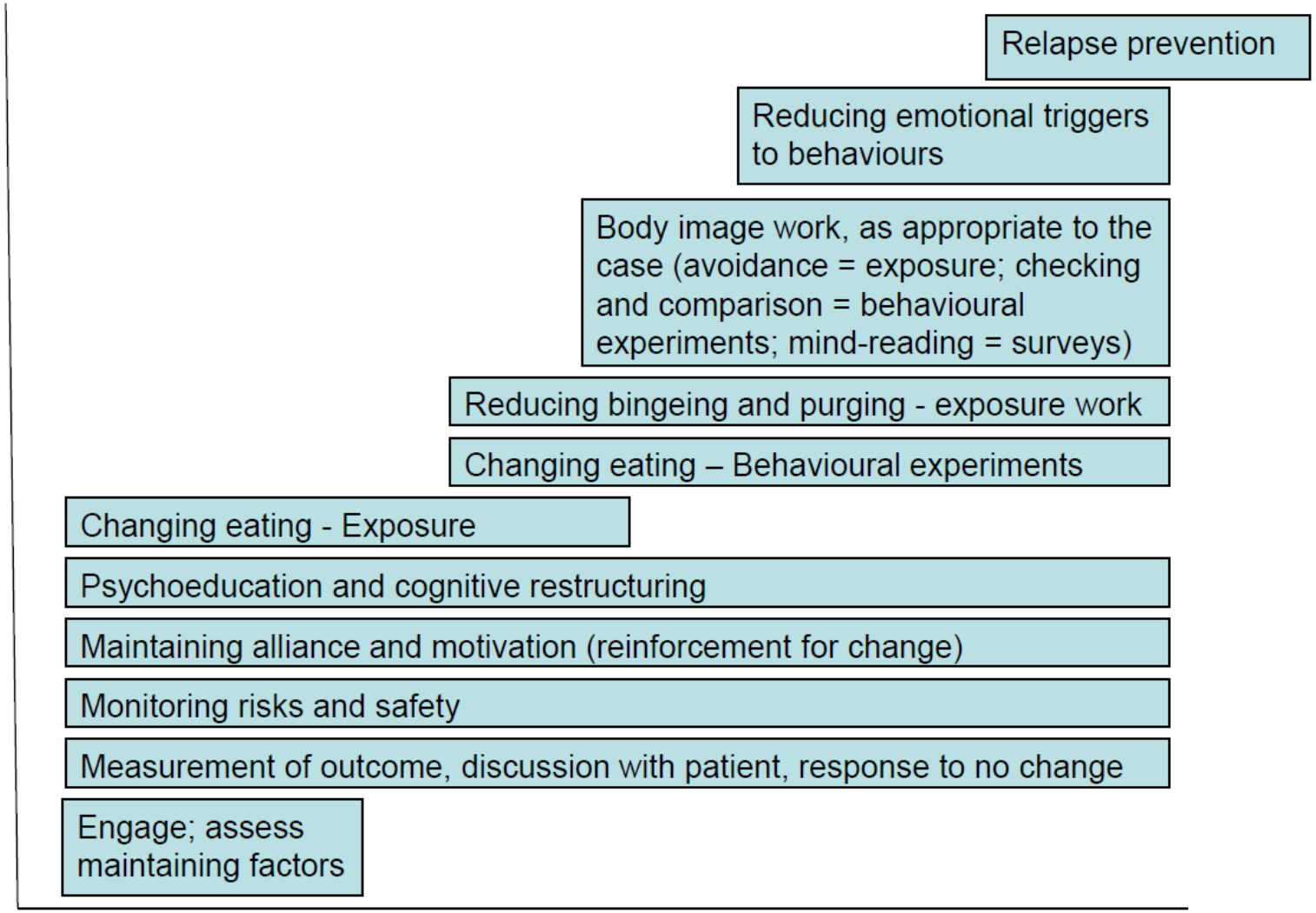
- Make therapy continuation dependent on actually doing therapy
  - e.g., review at 4-6 sessions, and only extend if the patient has actually made substantial progress
  - otherwise, we train the patient to believe that therapy failed



Skills in delivering CBT-ED



Have a structure in mind – you will need it...



What to aim for, en route to recovery?

- Early on (first six sessions)
  - physically stable
  - dietary change
  - reduction in purging behaviours
  - getting past therapy interfering behaviours
    - e.g., attendance, recording intake, other homework

- By the end
  - normalization of weight (avoid magic numbers…)
  - cessation of behaviours
  - normalization of cognitions
    - especially body image
  - all contribute to lowered risk of relapse

Risk assessment and management

- This is NOT ‘somebody else’s problem’

- Important issues to look out/test for
- Severe restriction of food/fluid
- Electrolyte imbalance
- Bone deterioration
- Physical damage
  - e.g., tears to oesophagus; blood in vomit
- Alcohol/drug intake

Risk assessment and management

- Urgent signs to look out for in the session
- Muscular weakness
  - SUSS test
- Problems in breathing/deterioration of consciousness
- Cardiac signs
  - ectopic beats, tachycardia, bradycardia, low blood pressure
- Rapid weight loss
- Not low weight per se
- Risky behaviours
  - e.g., suicidal intent; risk to others (e.g., driving)

Keeping the patient on track

- Always focus the patient on doing the basics
  - Food diaries
  - Being weighed
  - Making changes (especially early in therapy)
  - Doing homework
  - Attending on time
  - Taking responsibility for the therapy

- Any failure to do these makes the therapy less likely to work
  - go in hard and fast
  - be open about the low chance of success
  - shift responsibility to the patient for making treatment work
    - that shift becomes an asset at the end of therapy

Weighing: Why is it vital?

- *See Waller & Mountford (2015) for detail on this*

- Assessing and managing risk

- Repairing the broken cognitive link
  - testing out predictions about changes in weight with changes in eating

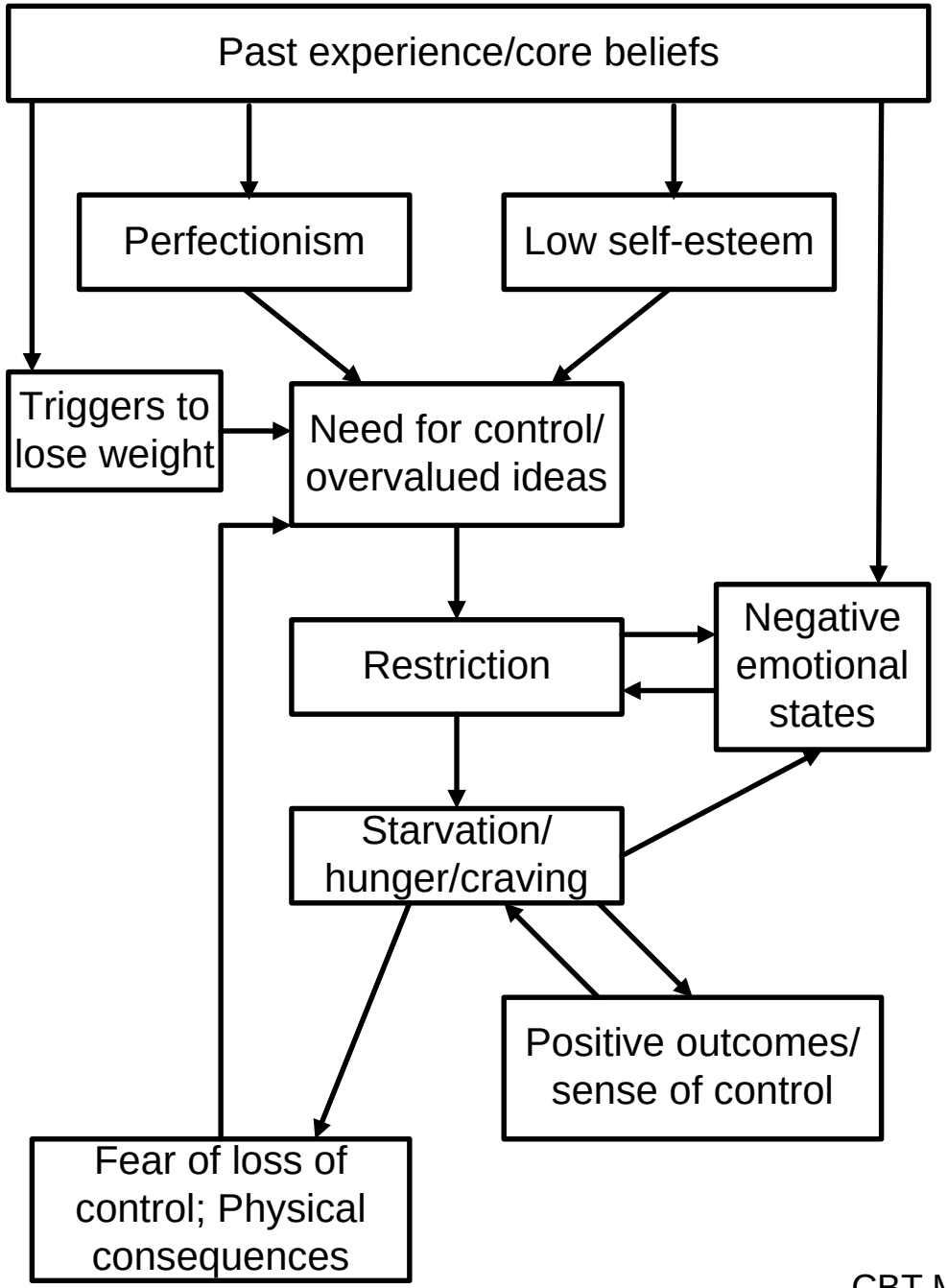
- No weighing = not CBT-ED

- Ask patient to predict change in weight
  - plot cumulative change
  - plot four-week median line
  - don’t attach importance to changes over short periods

Diaries and measures

- Early: to discover patterns
  - e.g., restriction during day followed by bingeing in evening
  - emotional triggers to ED behaviours
  - emotional consequences of ED behaviours

- Later: repairing the broken cognitive link
  - tracking dietary changes, and their impact on weight
  - in combination with weight changes
  - test predictions
    - e.g., ‘If I eat 1 rice cake extra per day, I will gain 3kg in a week’



Develop a formulation?

- Useful to engage the patient and to tell us if we are missing something
- Not clear that it helps with therapy outcomes
- Can use this template?
  - Slade (1982)

Changes in eating

Preliminary changes in eating

- Aim for biological stabilization and exposure
  - aid thinking and mood stability
  - allow the individual to learn to tolerate anxiety without using safety behaviours (e.g., restricting)

- Deal with our own anxiety about this stage
    - e.g., patients do keep coming; refeeding syndrome is very rare

- <u>Sequencing of change</u>
- Start with structure, then move on to content
- Amount depends on anxiety levels and aims
  - weight stability or gain?

Eating as a skill

- This element of CBT is sometimes neglected
  - while it is included in exposure and in behavioural experimentation, remember that it is a skill
- Need to teach the patient basic rules and how to operationalize them in their lives
- Tools needed:
  - a healthy eating plan
  - an ‘Eatwell’ plate or equivalent
  - experience of shopping, meal planning, etc.
  - knowledge of the approximate number of calories needed to gain weight…

Eating as a skill

- What sort of food to eat?
  - food groups rather than specifics
  - never be fazed by specific food preferences
    - veganism; clean eating; etc.
  - but challenge the general ones…
  - macronutrients, rather than micronutrients

- How much to eat?
  - rigidity of rules tends to cause fights, but common purposes get alliance

- And always be ready to answer the ‘Why’ question
  - Katie – “I don’t see why I need to eat carbohydrates”

Exposure (with response prevention)

Exposure

- Two elements, each of which is essential
  - elevation of anxiety
    - cannot learn if there is no anxiety
  - avoidance of safety behaviours
    - to reduce escape/avoidance conditioning
    - and this takes time…

- Beware of methods that are intended to reduce the anxiety or to make it more tolerable
  - relaxation, distraction, mindfulness work

- These can have the effect of making the exposure less effective
  - works more rapidly when the anxiety is higher
  - but that makes us more anxious, so...

Examples of exposure

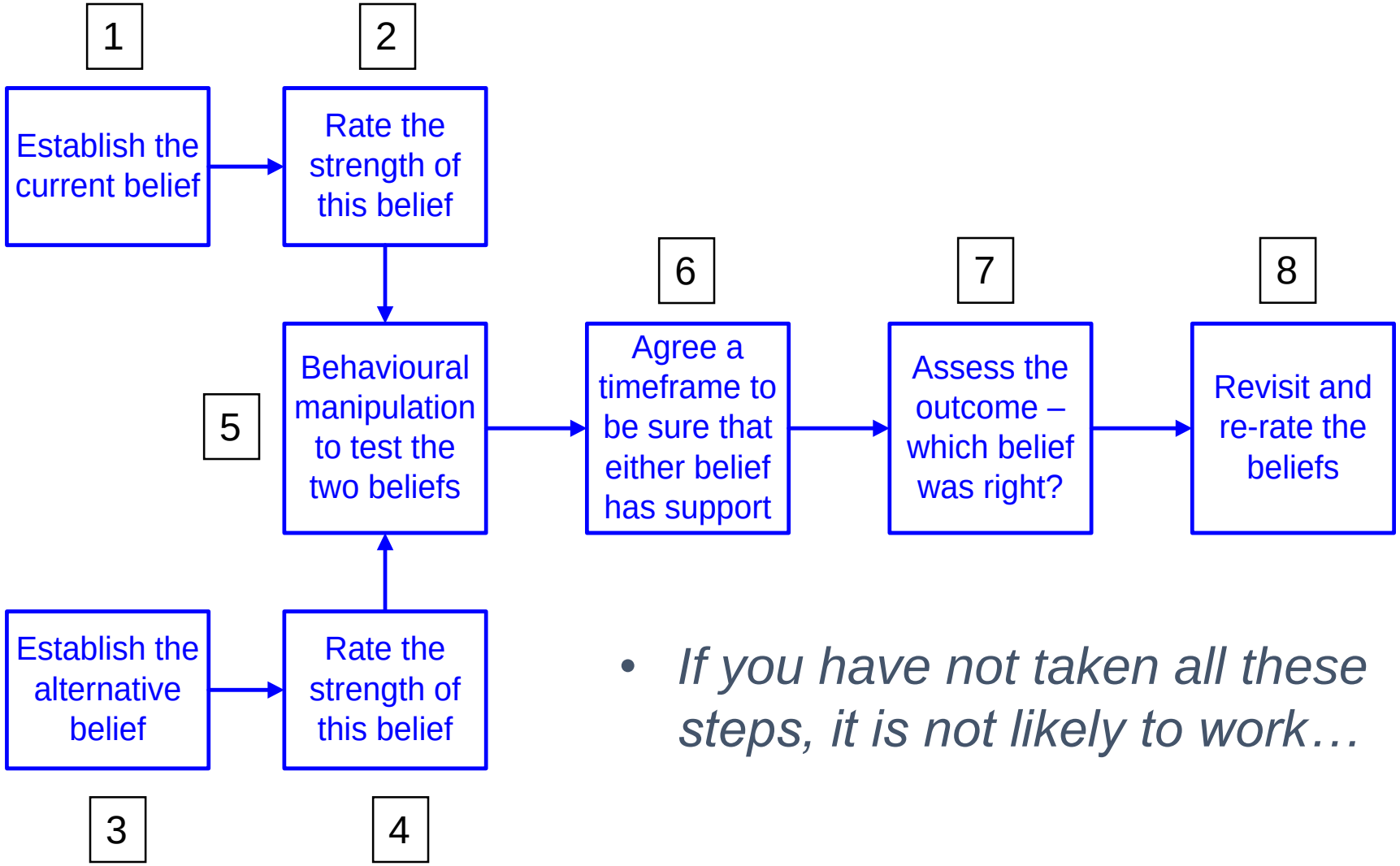
- Change in pattern and content of eating
  - needs to start early in treatment
  - eating ‘forbidden’ foods
- Body image work using mirror exposure
- Testing out body checking, comparison, etc.
- Fill in the diary when you get the urge to binge
  - make bingeing an active choice
- Reducing compensatory behaviours
  - waiting for 30-40 minutes after eating to allow the anxiety to subside

Behavioural experiments

What is a behavioural experiment?

- Trying out changes in a systematic way, to learn the outcome
- Use of planned behavioural change to:
  - test existing beliefs about the self, others and the world
  - develop and test more adaptive beliefs
- The purpose – change in cognitions (Beck, 1979)
- Commonly used to address eating, weight and shape cognitions
  - e.g., weight gain if I change eating; impact of body checking
  - also valuable in working with other cognitions
    - e.g., interpersonal issues, perfectionism and failure

Going through the steps



- *If you have not taken all these steps, it is not likely to work…*

Vignette: Eating, weight and shape

Belief to test out

- “If I don’t weigh myself three times a day, my weight will go out of control’’ (100%)

Alternative belief

- “Maybe weighing myself is not affecting my weight, but is making me more anxious” (5%)

Possible methods

- *Reduce weighing frequency, and see if my weight goes up as a result, or if my weight stays the same, but I get less anxious*

Cognitive restructuring

Preliminary work

- Nutritional adequacy (ignore this and fail…)
  - free up the thinking
  - stabilise the mood
- Psychoeducation, e.g.:
  - role of vomiting
  - difficulty of weight gain
  - energy requirements
  - normal weight fluctuations
- Basics of self-monitoring
  - food diaries and regular weighing

Explaining the role of safety behaviours

- Explaining the reason that the patient holds onto her behaviours
- Doing the behaviour used to be seen as an asset
  - e.g., positive ‘buzz’ from weight loss
- Now, afraid of the consequences of not doing the behaviour
  - e.g., restricting because of fear of weight increase
- Use that example of playing the lottery
  - what stops people from stopping?

Change the strength of the belief first

- Aim to enable the patient to amend her initial (distorted) thought
  - based on a review of the evidence
- Generate an alternative, balanced thought
  - not ‘positive thinking’
- Change is unlikely to be immediate
  - introducing a seed of doubt
  - possible the initial thought may not be 100% accurate
  - facilitate behavioural change (experiments, etc.)

Working with beliefs about weight

- Address beliefs about the accuracy of weight estimates
  - also see body image/body checking

- Graph cumulative weight estimates
  - get predictions and strength of predictions

- Is the patient any good at estimating whether her weight has gone up or down?
  - consider with her why she is poor at this

Working with beliefs about food

- Forbidden foods vs OK foods
- Consider the origins of ‘forbidden foods’
  - e.g., parental rule; peer pressure?
  - Consider whether the rule has to apply now

- Change the headings
  - ‘Liked’ vs ‘Disliked’ vs ‘Don’t know’
  - this task on its own can cause a lot of confusion
    - confusion is a good thing here…

- Then save those lists for more behavioural experimentation...

What about body image?

Already addressed some key skills here

- Psychoeducation
  - do this early on, e.g.:
  - function of body
  - accuracy of body image

- But we also need to address body-related safety behaviours
  - checking
  - comparison
  - avoidance
  - mind-reading

- What ones to address? Depends on what ones the patient uses...

Behavioural experiments

- Used to address body checking and body comparison
- Each behaviour is used to relieve anxiety in the short term
- Each makes body image worse in the medium to long term
- So we address the belief that checking/comparison is a good thing
  - one week on the behaviour, one week off
  - determine how each makes the patient feel
  - usually, one experiment is plenty...

Exposure with response prevention

- Used to reduce body avoidance
- Full length mirror exposure for about 40 minutes
- Scary at the time (for patient and therapist), but a very rapid drop in distress over the next couple of times
- Single strongest tool that we have in CBT-ED for addressing body image disturbance

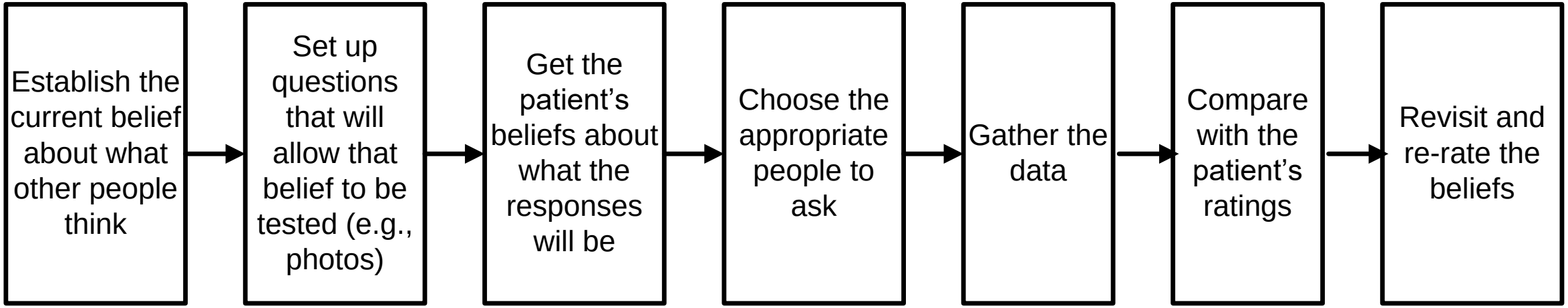
Surveys

- Used to address mind-reading
  - e.g., “I know that they think I am fat, but they would never tell me that”
- Test patients’ beliefs about what other people consider important
  - particularly useful where the individual has a lot of social anxiety
- Collecting data through:
  - observation of events
  - interviewing other people
- Technique adapted from CBT for social phobia

Cognitions to look out for

- Anything that involves vulnerability cognitions regarding how others see/judge the patient, e.g.:
  - “They think I look fat”
  - “People will notice my belly/double chin/etc.”
  - “I am always going to be seen as the ugly one in my group of friends”
  - “People think I look normal now, so I cannot possibly put weight on”
  - “People admire me for my skinny body”
  - “They will think I looked much better last year before I put all this weight on”

Going through the steps



- *If you have not taken all these steps, it is not likely to work…*

Ending therapy

Recovery goals revisited

- Kept the patient alive
  - medical and psychiatric monitoring and intervention
- Kept the patient on track
  - addressed therapy-interfering behaviours
  - put the patient in charge
- Normalised eating and weight
  - psychoeducation
  - structure and content of intake
  - exposure
  - behavioural experiments

Recovery goals revisited

- Improved psychological, emotional and social functioning
  - reduced starvation effects
  - cognitive restructuring
  - exposure
  - behavioural experiments

- Normalised body image
  - cognitive restructuring
  - exposure
  - behavioural experiments
  - surveys

Finishing off and saying goodbye

- Final sessions
- Handing over the responsibility and power to the patient

- The **therapy blueprint**

- Used at follow-up sessions to review how the patient is progressing
    - problem-solving, own therapy sessions, etc.

Therapy blueprint: Headers

- What were my problems when I was first referred?
- What did I do to change?
- What changes do I still want to make, and how will I achieve them?
- What might lead to a setback in the future?
- What will be the symptoms of a setback?
- How will overcome the setback?
- What if that doesn’t work?

Background reading

- Fairburn, C.G. (2008). Cognitive behavior therapy and eating disorders. New York NY: Guilford
- Fairburn, C., Cooper, Z., Doll, H. A., O'Connor, M. E., Bohn, K., Hawker, D. M., Wales J. A., & Palmer, R. L. (2009). Transdiagnostic cognitive-behavioral therapy for patients with eating disorders: A two-site trial with 60-week follow-up. American Journal of Psychiatry, 166, 311-319.
- Waller, G. (2009). Evidence-based treatment and therapist drift. Behaviour Research and Therapy, 47, 119-127.
- Waller, G., Cordery, H., Corstorphine, E., Hinrichsen, H., Lawson, R., Mountford, V., & Russell, K. (2007). Cognitive-behavioral therapy for the eating disorders: A comprehensive treatment guide. Cambridge, UK: Cambridge University Press.