Cognitive Behaviour Therapy for Psychosis

Dr Rahil Sanatinia
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- A condition which impairs the ability to recognise reality, to communicate and relate to others
- Lose touch with reality
- Unable to distinguish between reality and their imagination
- Classical characteristics: impaired reality testing, hallucinations, delusions

Reality...









- 'A delusion is a false, unshakeable idea or belief which is out of keeping with the patient's educational, cultural and social background; it is held with extraordinary conviction and subjective certainty' (Sims, 1995)
- 'A delusion is a belief that is firmly held on inadequate grounds, is not affected by rational argument or evidence to the contrary, and is not a conventional belief that the person might be expected to hold given her educational, cultural, and religious background' (OTP, 2006)

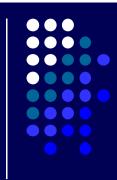




 Hallucinations are defined as perceptions in a conscious and awake state in the absence of an external stimulus



Causes of Psychosis:



- Mental disorders
 - > Schizophrenia
 - Bipolar disorder...
- General medical disorders
 - Parkinson's disease
 - Brain tumour....
- Drugs
 - > Alcohol
 - Cannabis...

Schizophrenia and Related Psychotic Disorders



- Enormous burdens for sufferers, their carers, the mental health services, and for society at large
- Very poor social outcomes (80% unemployment rates)
- Have been stigmatized and misunderstood
- 5% Lifetime risk of committing suicide
- Persistent positive symptoms such as hallucinations and delusions can be severely distressing and disruptive of daily functioning

20the Century and Psychosis



 Scientific explanations emphasized its "otherness"

Biological causation

Focus on biological treatments

Psychosis- end of 20th century



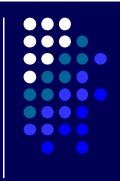
- Medication remains the first line treatment but not wholly effective
 - Not taking medication reliably
 - Treatment resistant despite adequate dose
 - Side effects impair optimal treatment
- Social and psychological mechanisms
- Psychosis as existing on a continuum with normal experience

Stress Vulnerability Model (Zubin & Spring, 1977)



- Model for onset of psychotic symptoms
- Individuals have personal threshold of vulnerability (genetic/psychological/social)
- When exposed to stress that exceeds this threshold they can develop psychotic symptoms

Stress Vulnerability Model



Vulnerability Genetic

Early experiences

Social factors

Stress
 Life events

Drug/ Alcohol abuse

Social withdrawal

Lack of sleep

Cognitive Model of Psychosis (Garety et al. 2000)



- Vulnerable predisposition (of biopsychosocial origin)
- Onset follows life events, adverse environments, illicit drug use, or periods of isolation
- Emotional changes
- <u>Disruptions in cognitive processes</u> (attention, perception, or judgement)
- At onset, its most prominent symptoms are delusional beliefs and hallucinations

Predisposition, Trigger, and Cognitive Disruption



 A triggering event gives rise in a predisposed person to a disruption of cognitive processes (Garety&Hemsley, 1994)

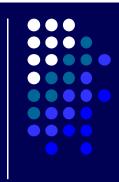
Anomalous conscious experiences*



Basic cognitive disturbance leads to *

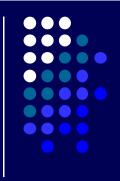
- heightened perception,
- actions experienced as unintended,
- racing thoughts,
- thoughts appearing to be broadcast,
- thoughts experienced as voices,
- two unconnected events appearing to be causally linked





- Occur, in direct response to the triggering event and in response to the anomalous experiences
- Feed back into the moment-by-moment processing of anomalous experiences and influence their content
- For example, if anxiety and depression result from a job loss, and further anxiety directly from the experience of voices, the person's voices may develop a threatening and critical content: `You're useless, you won't get another job now. We're after you, we've got you marked'.

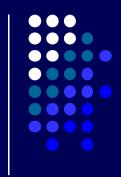
Appraisal of Positive Symptoms



- Anomalous (puzzling) experiences trigger a search for explanation as to their cause (Maher,1988)
- Biased conscious appraisal processes: crucial
 - Contribute to a judgement that these confusing experiences (which feel external in any case) are in fact externally caused

Biases in cognitive processes

Garety & Freeman (1999)

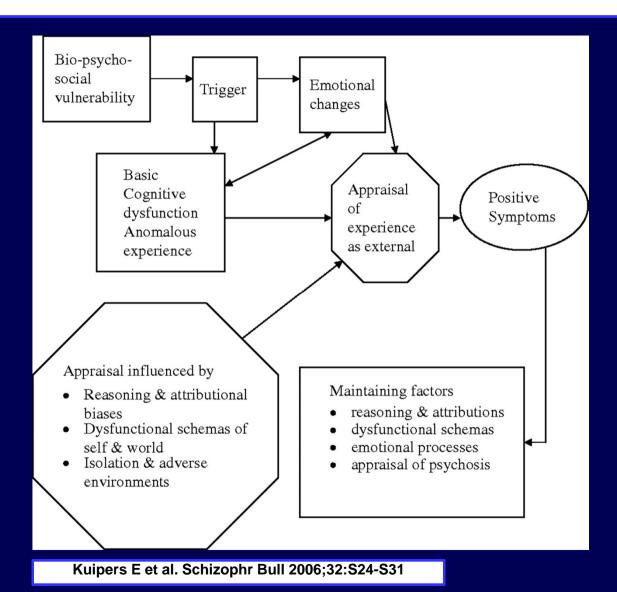


Information gathering cognitive style characterized by:

- jumping to conclusions,
- externalizing attributional biases,
- and deficits in understanding social situations and the intentions of others

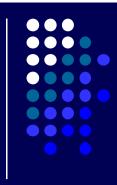


A Cognitive Model of the Positive Symptoms of Psychosis (Discussed in Garety et al. 2001)





COGNITION (WRIGHT, 2006)



- Three levels
 - Full consciousness rational decisions
 - Automatic thoughts autonomous may or may not be assessed for relevance (errors of logic in disorder)
 - Schema core beliefs, fundamental rules or templates for information processing *
 - *Major role in regulating self-worth and coping strategies

Psychosis &Traumatic Experiences



- Victims of sexual abuse, combat veterans and refugees (e.g., Ensink, 1992; Butler, Mueser, Sprock, & Braff, 1996; Kinzie & Boehnlein, 1989)
- Development of faulty self and social knowledge
- Faulty nature of interpretations of intrusions
- Others cannot be trusted, which would make paranoid interpretations of ambiguous events
- Striking congruence between a patient's life events and early experience and the content of their symptom

Analysis to the Maintenance of Auditory Hallucinations (Morrison1998)

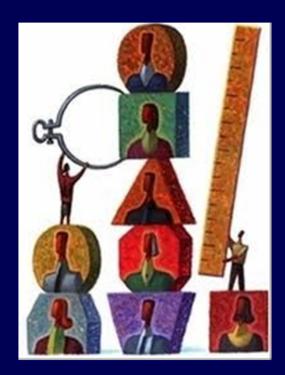


- An internal or external trigger results in a normal auditory hallucination that is then misinterpreted as threatening the physical or psychological integrity of the individual (such as "I must be mad", "The devil is talking to me" and "If I do not obey the voices they will hurt me").
- These misinterpretations produce an increase in negative mood and physiological arousal, which produce more hallucinations, leading to a vicious circle.
- Simultaneously, the misinterpretation of the hallucination elicits safety seeking behaviours (including hypervigilance), which can both increase the occurrence of auditory hallucinations and prevent the disconfirmation of the misinterpretation (therefore maintaining it)

Chadwick and Birchwood's Approach (1994)



• It is the <u>appraisal</u> of auditory hallucinations that results in distress and disability



Interpretations of intrusionsKingdon and Turkington (1993)



What does a person say to himself? (Meaning invested in hallucinations)

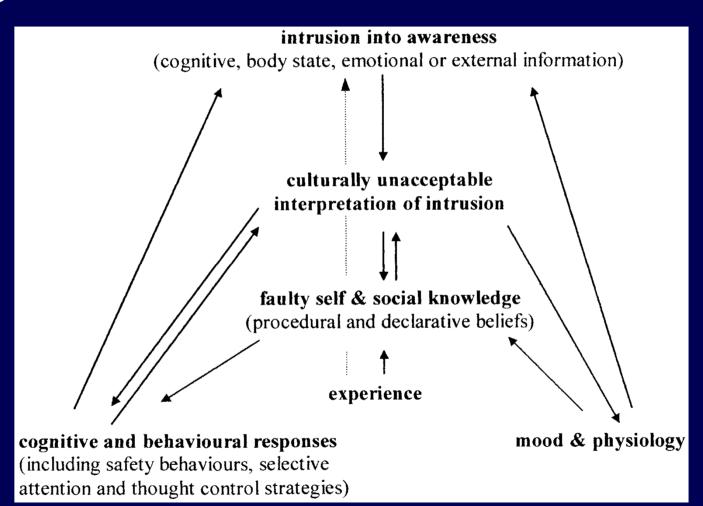
'The devil is talking to me', 'I must be going crazy'

OR dismissively

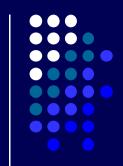
'That was a strange sensation, I must have been overtired"

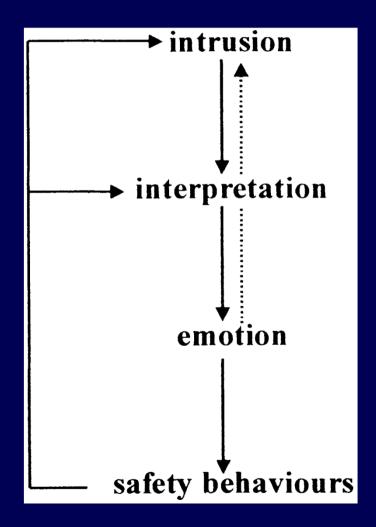
Interpretation of intrusions in psychosis





Interpretation of intrusions in psychosis





Misinterpretation of Intrusions into Awareness: Psychotic Phenomena



- · The nature determined by a combination of their experience, beliefs and knowledge
 - Intrusive thoughts as evidence of alien thought insertion
 - > Intrusive impulses as evidence of alien control over one's body
 - Auditory hallucinations as evidence that the devil is trying to make you kill your neighbour
 - > The mention of one's first name on television as evidence that everyone is talking about you or that the media are communicating directly with you
 - A visit from a television license inspector as evidence of a government conspiracy against you
- Interpretations will have been influenced by people's experiences and beliefs

"experiences of genuine persecution such as racism or bullying, holds beliefs about the untrustworthiness of people and governments"

Cognitive Behavioural Therapy



- CBT is based on the premise that there is a relationship between thoughts, feelings and behaviour
- Albert Ellis first developed CBT in the 1960s
- Most present CBT has its origins in the work of Aaron T.
 Beck
- Beck developed CBT for the treatment of depression in the 1970s (Beck, 1979)
- Effective treatment in a wide range of mental health problems including anxiety disorders, obsessive compulsive disorder, bulimia nervosa and post-traumatic stress disorder

Application of CBT for People with Psychotic Disorders



- In the early 1990s
- Increased understanding of the cognitive psychology of psychotic symptoms (Frith, 1992; Garety & Hemsley, 1994; Slade & Bentall, 1988)
- Early CBT trials particularly symptom focused, helping service users develop coping strategies to manage hallucinations (Tarrier et al., 1993)
- CBT for psychosis now tends to be formulation based

CBT: MODEL



• The way that we interpret events will have consequences for how we feel and behave and that such interpretations are often maintained by unhelpful thinking biases and behavioural responses. It also suggests that these interpretations are influenced by our core beliefs, which are formed as a result of life experience. (Morrison & Barratt, 2009)





Over-generalisation:

Applying a conclusion drawn from a specific event to a range of unrelated situations

Arbitrary inference:

Coming to conclusion without complete evidence

Catasrophizing:

Thinking of the worst possible outcome and overestimating how likely it is to happen





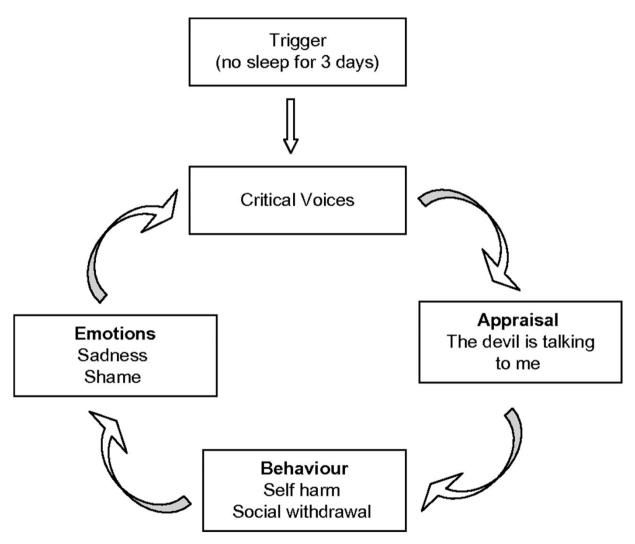
- To help the individual normalise and make sense of their psychotic experiences
- To reduce the associated distress and impact on functioning

Psychotic Symptoms Amenable To CBT



- Positive Symptoms
 - Delusions
 - Hallucinations
 - > Thought disorder
- Negative symptoms

Mini-formulation of Hallucination Maintenance.

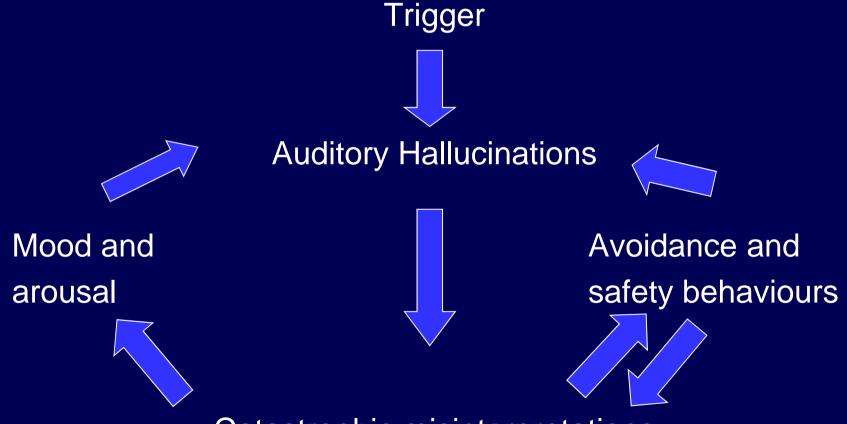


Tai S, Turkington D Schizophr Bull 2009;35:865-873



CBT Model For Hallucinations (Morrison, 1998)





Catastrophic misinterpretations

Normalising Rationale For Voices

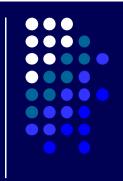


- Voices in non-psychotic populations
 - a) General population (Tien, 1991)
 - b) Voice hearers (Romme et al, 1992)
- Common during stressful times

(Kingdon and Turkington, 1994)

- a) Sleep deprivation
- b) Sensory deprivation
- c) Bereavement
- d) Solitary confinement
- e) Hostage situations

Voices: Normal Psychological Phenomenon



Potentially experienced by anyone (Morrison, 1998)

- Following bereavement (Grimby, 1993)
- Being held hostage (Siegel, 1984)
- Sleep deprivation (Oswald, 1974)
- Sensory deprivation (Vernon, 1963)
- Solitary confinement (Grassian, 1983)

Voices Diary

When you heard the voices:

What was happening? What were you doing? Where were you? Who else was there?

The voice

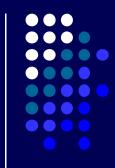
What did the voice say? How loud was it? How clear was it?

Emotion

How did you feel when you heard the voice?

Rational Responses

What kind of things did you say to yourself to try and minimise the effects of the voices? How effective was this?



Dysfunctional Thinking Styles In Delusions



Jump to conclusions

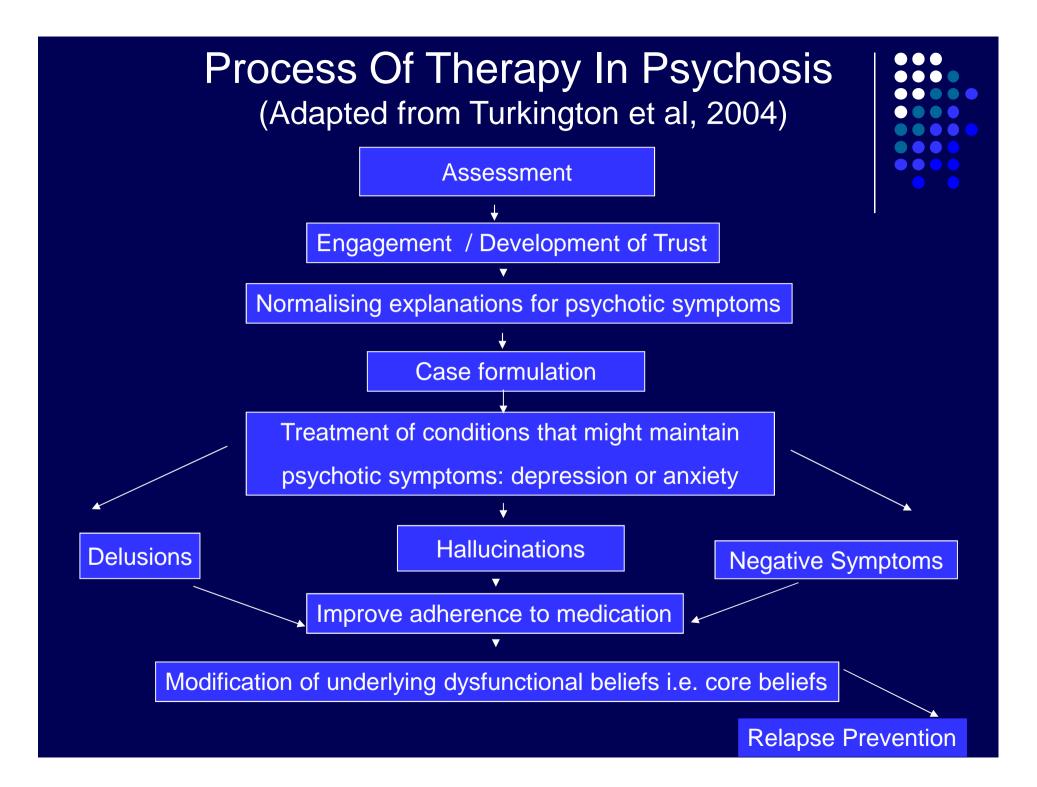
Ignore contradictory evidence

 Hold their conclusions with greater conviction than people with culturally acceptable beliefs





- Identification of patients' <u>Explanations</u> for their delusions
- Generate <u>Alternative explanations</u>
- Examine the <u>Evidence</u>
- Reality testing
- Inference chaining
- Schema work



SOCRATIC QUESTIONING



- Questioning that draws answers out of client
- The purpose is to challenge the accuracy and completeness of thinking in a way that moves people toward their ultimate goal

SOCRATIC QUESTIONING

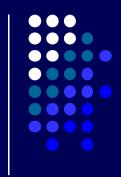
Contd.



- Conceptual clarification "What exactly does that mean?"
- Probing assumptions encouraging thinking about unquestioned beliefs – "How could we check that out?"
- **Probing reasons & evidence** "What is the evidence for...?"

- Questioning perspectives opening up alternate points of view
 "How would [your sister] explain that?"
- **Probing implications** are the consequences desirable?

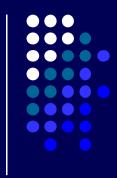




CBT trials have investigated a range of outcomes

- Symptom reduction (positive, negative and general symptoms) (Rector et al., 2003)
- Relapse reduction (Garety et al., 2008)
- Social functioning (Startup et al., 2004)
- Insight (Turkington et al., 2002)
- Changes in distress and problematic behaviour associated with these experiences (Trower et al., 2004)
- First episode psychosis (Jackson et al., 2005, 2008)
- Schizophrenia and comorbid substance use disorders (Barrowclough et al., 2001)





Clinical Evidence Summary

- Reducing rehospitalisation rates and the duration of hospitalisation
- Reducing symptom severity
- Reductions in depression
- Some evidence for improvements in social functioning
- Some effect for total hallucination measures
- Some limited but consistent evidence for symptomspecific measures including voice compliance, frequency of voices and believability
- Inconsistent evidence for any effect on delusions





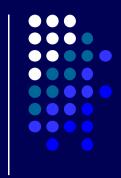
 The systematic literature review and the economic modelling indicate that providing individual CBT to people with schizophrenia is likely to be cost effective in the UK setting, especially when clinical benefits associated with CBT are taken into account.





- Offer CBT to all people with schizophrenia
- Can be started either during the acute phase or later, including in inpatient settings
- Should be delivered on a one-to-one basis over at least 16 planned sessions

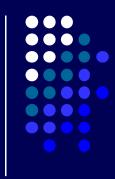
How to deliver CBT?



Follow a treatment manual so that:

 People can establish links between their thoughts, feelings or actions and their current or past symptoms, and/or functioning





At least one of the following components:

- People monitoring their own thoughts, feelings or behaviours with respect to their symptoms or recurrence of symptoms
- Promoting alternative ways of coping with the target symptom
- Reducing distress
- Improving functioning





 Offer CBT to assist in promoting recovery in people with persisting positive and negative symptoms and for people in remission.

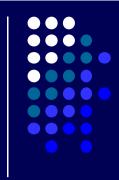
CBT FOR PSYCHOSIS: APPROACH & GOALS



Structured, pragmatic and focused on reduction of distress related to symptoms (not deep personality restructure)

- Emphasise adaptation and adjustment Relapse prevention or management
- Increase 'understanding' promoting insight and self management
- Improvements in wellbeing and mood

Tasks for therapist & client - Formulation



- Collaboratively construct a model that makes symptoms and distress understandable and explainable
- Develop an alternative, non-psychotic model of experiences that is acceptable and non-stigmatising
- Develop a plausible 'biases-in-psychological-processing' explanation of experiences
- Connect up seemingly unconnected factors beliefs, life events, emotions, thoughts, behaviours and symptoms

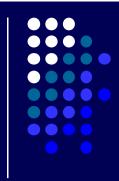


Tasks for therapist & client - Cognition

Identify, understand and analyse key cognitions such as.....

- 'These voices are uncontrollable'
- 'My illness is uncontrollable, the medication is pointless'
- 'Schizophrenia means I have a lifetime of illness ahead'
- 'All this mental torture is coming from others not me'

Tasks for therapist & client - Behavioural



- Address and reduce 'safety behaviours' strategies that are used to prevent harm (e.g. avoidance) but in fact serve to maintain beliefs (fearful predictions) and symptoms
- Engender self-control and empowerment (mood improves)
- Learn from behavioural change 'There is something I can do that helps. It isn't all uncontrollable'
- Focus on family and social contexts

CASE EXAMPLE:

'The woman who was threatened by neighbours'



- 60 year old woman with persecutory beliefs
- Psychiatric history > 30 yrs
- Both mother and sister: psychotic disorder
- Daily occurrences of distressing events
- Traced back to the malevolent intentions of a neighbour
- <u>Examples</u>: apparent snub from a friend, an overheard comment in public, a decision by her landlord or a mix-up in doctor's appointment
- Particularly alert to coincidences
- No current anomalous experiences
- Recalls times when she had heard a voice commenting
- Believed to be transmitted by her neighbour





- Firmly believes her neighbour is an evil woman
- Others do not share her views, but she is sure she in not mistaken
- Most recent episode, she was convinced she was to be murdered
- Shortly before: change of boss, builders in her flat
- In hospital thought 2 male patients sent by the landlord, Poisoned orange juice
- In retrospect, says she probably overreacted, but never suffered from mental illness (schizophrenia)
- Often feels insecure and frightened, does not like herself very much, thinks that she annoys people because she talks too much
- Was 5 when mom was hospitalised
- Feels guilty not visited her in hospital before she died





- Thinks has treated her father terribly (Argumentative as a child)
- Jealous of younger sister as thought she was favoured by dad
- Normal general intellectual functioning
- Demonstrates an <u>intolerance of uncertainty</u>
- Expresses <u>extreme opinions</u> in much that she says

Found to have a strong tendency to 'Jump to conclusions '
AND overconfidence in her judgement

TASK: Generate a personalised 'stress-vulnerability' model

Questions?





"It's not things that upset us,

it's our view of things"

- Epictetus

Further Reading:



- > Gelder, Michael G. (2008). New Oxford Textbook of Psychiatry, 2nd ed.
- Nelson, H. (2005). Cognitive behavioural therapy with delusions and hallucinations: a practice manual (2nd edn). Nelson Thornes, Cheltenham
- Morrison, A.P. (2002). A casebook of cognitive therapy for psychosis. Brunner-Routledge
- Byrne, S., Meaden, A., Trower, P., et al. (2006). A casebook of cognitive behaviour therapy for command hallucinations: a social rank theory. Routledge
- Fowler D., Garety P. and Kuipers E. (1995). Cognitive Behaviour Therapy for Psychosis: Theory and Practice. Chichester: Wiley
- National Institute for Health and Clinical Excellence (2011). Core interventions in the treatment and management of schizophrenia in primary and secondary care (update). London: NICE.
- Garety, Kuipers, et al. (2001). 'A cognitive model of the positive symptoms of psychosis' Psychological Medicine, 2001, 31, 189-195.
- Kuipers, Garety, et al. (2006). 'Cognitive, Emotional, and Social Processes in Psychosis: Refining Cognitive Behavioral Therapy for Persistent Positive Symptoms' Schizophrenia Bulletin vol. 32 no. S1 pp. S24–S31, 2006