




**Schizophrenia update for GPs. Prof Douglas
Turkington.**

‘The Schizophrenias’

- Bleuler vs Kraepelin
 - Sensitivity Disorder
 - Traumatic Psychosis
 - Drug-induced Psychosis
 - Anxiety Psychosis (Kingdon and Turkington, 2005)
 - Catatonia
 - What about Borderline PD and Dissociative Identity Disorder?
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- Antipsychotic medication
 - Psychoeducation
 - CBT
 - Family Therapy
 - Cognitive remediation
 - ‘Open dialogue’

Main evidence based approaches.



Psychosis as a State of Aberrant Salience:

A Framework Linking Biology, Phenomenology, and Pharmacology in Schizophrenia

Shitiz Kapur, (2010)

- A central role of dopamine is to mediate the "salience" of environmental events and internal representations. It is proposed that a dysregulated, hyperdopaminergic state, at a "brain" level of description and analysis, leads to an aberrant assignment of salience to the elements of one's experience, at a "mind" level. **Delusions are a cognitive effort by the patient to make sense of these aberrantly salient experiences**, whereas hallucinations reflect a direct experience of the aberrant salience of internal representations. Antipsychotics "dampen the salience" of these abnormal experiences and by doing so permit the resolution of symptoms. **The antipsychotics do not erase the symptoms but provide the platform for a process of psychological resolution.** However, if antipsychotic treatment is stopped, the dysregulated neurochemistry returns, the dormant ideas and experiences become reinvested with aberrant salience, and a relapse occurs. The article provides a heuristic framework for linking the psychological and biological in psychosis.
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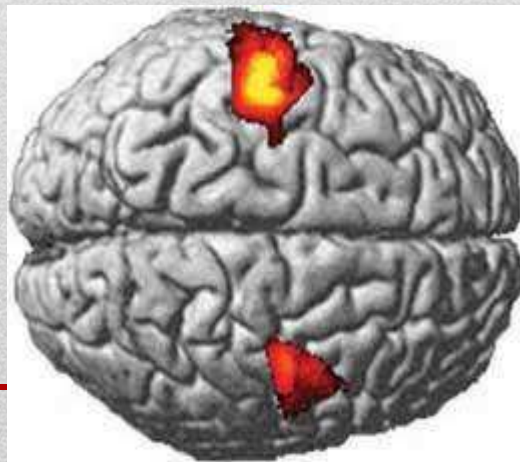
- 30 % of patients have a good clinical response with antipsychotics
- 70% have placebo level, no response or deteriorate (Kapur, 2010)

**Antipsychotics have a strong
effect on SSD NNT = 4**

- Early response is coupled with striatal D2 occupancy (Catafau et al, 2007)
- Early response is seen with many and perhaps all antipsychotics (Agid, 2008)
- Non- response within the first two weeks is a very strong (>80%) predictor of eventual non-response (Kinon et al, 2007)

**Speed of response predicts
outcome**

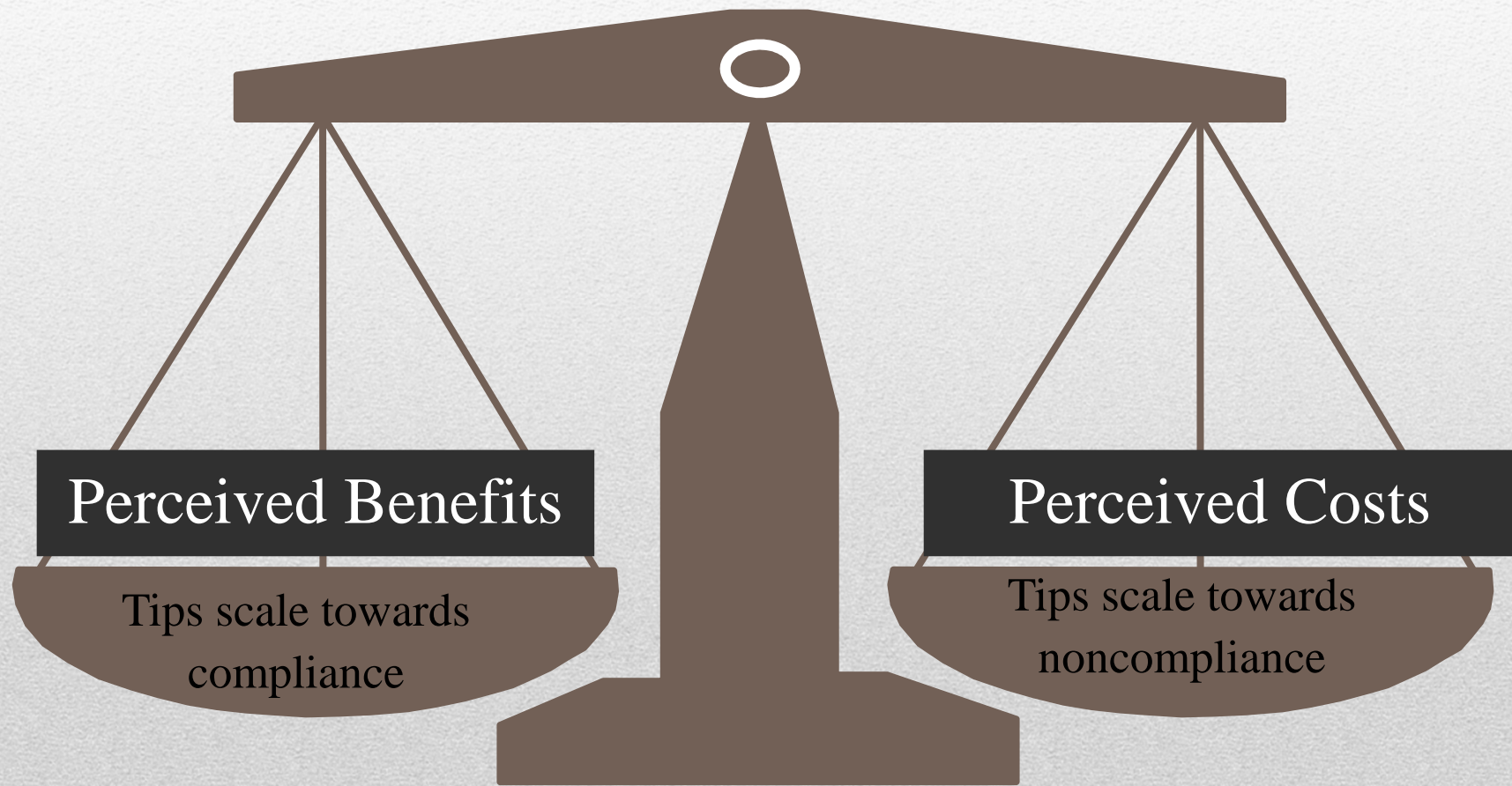
“Intravenous haloperidol ..this is the fastest change in brain volume ever seen...and to see significant remodelling of the striatum is staggering," Meyer-Lindenberg, Nature Neuroscience 2010.



Clozapine in treatment resistance

- In all meta-analyses Clozapine is by far the most effective antipsychotic
 - **NNT = 4** (>20% PANSS improvement)
 - Some improvement in 53% (Naber, 1992)
 - Recovery 4.5%
 - But many psychotic patients refuse, have or develop contraindications or cannot tolerate side effects (Kane 1988)
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Health Belief Model of Compliance



Bottom line: Perception is reality!



**A patient with a grandiose
delusional system (DVD clip)**

- 1. Medication
- 2. Psychoeducation
- 2. CBT
- 3. Family Therapy
- 4. Cognitive remediation
- 5. Open dialogue

**Vote for your choice of
intervention....**

- *Evidence-Base*
- Open, non- randomised, non-blind, long term follow up cohort studies (Seikkula & Olson, 2003).
- A method for dealing with psychotic crisis.
- At 5 years 83% back at work or studies or looking for work, 77% no residual symptoms (Seikkula et al, 2006)
- Mostly Scandinavian
- Resource intensive but cost effective.
- Medication used only sparingly

Open dialogue

- Regular long term individual and family therapy which is psychodynamically informed.
- Family, friends and work colleagues involved
- Commitment of a consistent team over the medium term
- A search for the meaning in the symptoms
- A recovery focus

Active ingredients



**A patient with distressing
hallucinations (DVD clip)**

- 1. Medication
- 2. Psychoeducation
- 2. CBT
- 3. Family Therapy
- 4. Cognitive remediation
- 5. Open dialogue

**Vote for your choice of
intervention....**

- 52 RCTs, gold standard evidence base
- Effect size moderate when added to antipsychotic medication vs TAU (Turner et al 2014)
- Effect size small but significant when compared to active comparator therapies added to antipsychotic medication (Jauhar et al, 2014)
- Hallucinations, delusions, secondary negative symptoms, insight, depression and anxiety in schizophrenia all responsive
- Less reported benefit on thought disorder, delusional systems, primary negative symptoms, cognitive deficits in schizophrenia.

CBT for schizophrenia

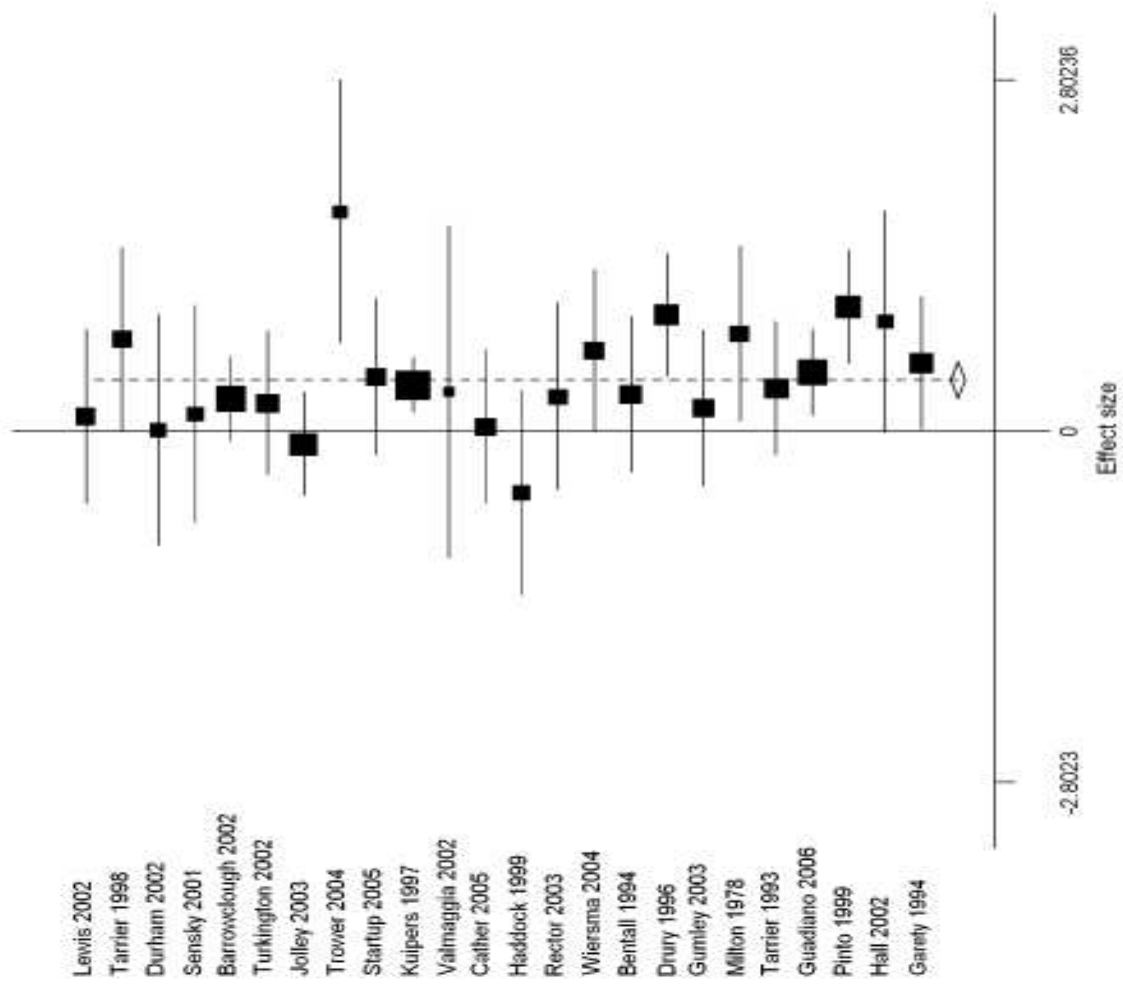


Fig. 1. Forest Plot of the Effect Sizes for the Trials Shown in Table 2.

- Problem focussed
- Normalising the experience of psychosis (Dudley et al 2007)
- Formulating and understanding symptom maintenance
- Reality testing delusions and hallucinations
- Improving insight into the need for adherence
- Improving coping skills
- Relapse prevention

CBT: active ingredients

- David is a 34 year old man who developed cognitive deficits (reduced concentration and short term memory) at school before the emergence of social withdrawal and reduced motivation. He then developed mild thought disorder and a delusion of microbots invading his body.

A patient with negative symptoms and cognitive deficits

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- 5. Open dialogue

**Vote for your choice of
intervention....**

- Evidence base gold standard, RCTs double blind
- Small effect on attention, concentration and short term memory but not durable or generalisable (Wykes, 2008)
- Cognitive adaptation training improves negative symptoms and adherence (Velligan et al, 2007)
- Cognitive training beneficial with jumping to conclusions and other cognitive errors (Moritz & Woodward, 2007).

Cognitive remediation

- Concentration, short term memory remediation
- Social skills training
- Cognitive adaptation training to improve social functioning and medication adherence
- Linguistic remediation
- JTC and other cognitive biases remediation

Active ingredients

- A 23 year old single lady with auditory hallucinations, delusions of thought broadcasting, anxiety and insomnia lives with her parents. Her father is overly critical and her mother possessive. Both parents agree that their daughter is not mentally unwell but has been possessed by a demon.

Demon possession?

- 1. Medication
- 2. Psychoeducation
- 2. CBT
- 3. Family Therapy
- 4. Cognitive remediation
- 5. Open dialogue

**Vote for your choice of
intervention....**

- Gold standard RCT evidence showing clear benefits on delayed relapse
- Effective ingredients in relapse delay/prevention include education about schizophrenia
- Reduced expressed emotion including criticism and over-protection

Family Therapy

- After three psychotic episodes a 42 year old man with schizophrenia has recovered insight into the nature of his illness. He understands the need for medication and (when well) that he isn't really under surveillance by the X-Factor or that Tulisa can hack into his brain and steal his thoughts.

A patient with insight and relapses.

- 1. Medication
- 2. Psychoeducation
- 2. CBT
- 3. Family Therapy
- 4. Cognitive remediation
- 5. Open dialogue

**Vote for your choice of
intervention....**

- Gold standard RCT evidence
- Delayed relapse but not linked to improved insight.
- Understanding the role of stress in relapse and of a personalised relapse signature and action plan
- Understanding the need for sleep hygiene
- Understanding the benefit of sustained dopamine blockade

Psychoeducation

- Every individual with schizophrenia is different in terms of the psychiatric input they need to recover.
- Medication, adequate and consistent community input remain the mainstay of treatment but partnership prescribing important.
- Symptoms, insight and distress can be helped with CBT.
- Relapse can be delayed with psychoeducation and/ or family therapy.
- Deficits (cognitive, social, theory of mind, JTC) can be helped by remediative approaches.
- The treatment cocktail needs to be individually shaken.

Conclusions
