Current controversies in the psychosocial treatment of psychosis

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Manchester

Britain's 3rd largest city
Population of over £4m
Industrial heritage, for cotton and textiles

Manchester Town Hall



And also....



Three universities.....

At Manchester University there are,
28,000 undergraduates
9,000 postgraduates
12,000 staff

Mixture of old...



And very new...



Famous for....

Father of physics – Ernest Rutherford



And.....

Kilburn and Williams with the first 'computer' (Baby)



Key areas of psychological treatment in schizophrenia

- Behavioural approaches e.g. social and other skills training, contingency management etc, generalisability??
- Neuropsychological and cognitive remediation

 some progress in influencing underlying
 processes, generalisability??
- Family interventions good evidence for reducing relapse - ?inpatient settings - some evidence
- Individual cognitive behaviour therapy

Evidence on individual cognitive behaviour therapy for psychosis

- Massive literature on cognitive and behavioural treatments; CBT (over 100 years)
- Lots of case series papers over many years (see Beck, 1952)
- Last 30 years, CBT evaluated in many randomised controlled trials
- UK government guidance on CBT is based on these trials

Individual CBT research has focused on....

- Mainly, chronic, treatment resistant psychosis
- Acute, inpatients
- Recent onset and prodromal
- Complex cases e.g. those with coexisting substance use, violence, forensic, and learning difficulties

Reviews of CBT

There have been a number of reviews of the efficacy of CBT

Overall demonstrate that CBT superior to treatment as usual and control treatments with small to medium effect sizes (Jauhar et al, 2014, 50 studies; Wykes et al, 2008, 34 studies)

Wykes et al (2008) review (Sz Bulletin, 34, 523-537)

- Reviewed 34 studies (excluded those which were not 'purely' CBT)
- CBT had effect size of 0.4 (CI 0.252-0.548) on target symptoms
- Also improvements for negative symptoms, functioning, mood (effect sizes 0.35-0.44)
- However, more rigorous trials had lower effect sizes i.e. non blinded studies had 50-100% inflation of effect sizes

Meta-analysis of effect sizes for CBTp on positive (P), negative symptoms (N), social functioning (F), mood (M), hopelessness (H), social anxiety (SA) and target symptom (T): (Wykes et al, 2008)



Nevertheless.....

 Although in the UK, psychological treatments are now a recommended treatment for schizophrenia

And, government guidelines state that:

- Cognitive behaviour therapy should be offered to **all** people with schizophrenia
- Start in the acute phase, or later, including inpatient settings

Despite recommendations....

National implementation is poor

- "No voice, no choice": a joint review of adult community mental health services in England (2007) suggested 46% service users offered CBT
- Rethink survey of 500 service users only 14% had received CBT
- Recent Manchester survey also suggested implementation was poor

Individual and family CBT audit in Manchester (2013)

Individual CBT:

- Offered 33 (18%)
 Referred for 23 (12%)
 Received 13 (7%)
- Family intervention (51% of sample had family contact)
 - Offered
 - Referred
 - Received

3 (1.6%) 2 (1.2%) 2 (1.2%)

What might be the problem?

- Services not well geared up for delivery lots of trained staff but emphasis on case management – therapy not prioritised
- CBT not a panacea may not be suitable for everyone
- People with psychosis heterogenous population - different populations may need different interventions

And... does everyone want therapy?

Explored in the NIHR funded Self-Help Therapy and Recovery Trial (STAR-T; Haddock et al, 2014) Aimed to explore people's preferences for psychological treatment and how they would like it delivered

4 treatment options



CBT recovery guide & telephone CBT

 weekly telephone CBT over 12 months

 Recovery guide telephone and group

 weekly telephone CBT over 12 months and group support sessions fortnightly for 6 months facilitated by a CBT therapist and a Service User Researcher

Treatment as usual alone
Or..., randomisation

Who took part.....

- N = 97, male = 63%
 Mean age = 35
 Mixed sample, mixed ethnicity and service type (36% first episode)
- We found that:
 - Only 2 chose to be randomised
 - Many people chose treatment as usual

PREFERENCES FOR TREATMENT



Developments in CBT for psychosis with specific populations....

- CBT to reduce full transition to psychosis in prodromal psychosis (Morrison et al, 2012)
- CBT plus motivational interviewing for psychosis and substance misuse (Haddock et al, 2003; Barrowclough et al, 2010)
- CBT for people with psychosis and learning difficulties (Haddock et al, 2003)
- CBT for specific symptoms e.g. hallucinations (Birchwood et al, 2011)
- CBT for those with psychosis and violence problems (Haddock et al, 2009)

What can we conclude?

Psychological treatments are effective for many people

But, not every one wants therapy – some people happy as they are

 Different populations need modifications to treatments Working with in complex settings with complex issues in psychosis Anger, aggression, violence and substance misuse

Therapeutic approaches for complex clients?

- Treatments are not yet well evaluated for these groups in these settings
- So, can we use CBT and other approaches which are designed for other groups for these problems in these settings?

Key features of complex clients in secure settings

- Persistent, treatment resistant symptoms
- Violence/self harm
- Anger
- Unmotivated?
- Difficult interpersonal environment

Result in significant personal, service, staff and public challenges



But, people with schizophrenia....

- Commit only a small proportion of violent crime
- Only 5% of homicides committed by people with a diagnosis of SZ (National Suicide and Homicide Survey, 2006)
- More likely to be victims of aggression and violence than the general population (11 x general populaton; Teplin et al, 2005)

Schizophrenia and violence

- Although many studies link schizophrenia to increased violence....
- Not consistent findings, methodological problems with research (e.g. different populations, prospective vs. retrospective designs etc)
- Base rates low
- Depending on type of violence, people with Sz have slightly higher rates BUT confounded by other factors
 ?not helpful to look at diagnosis

Other contributory factors.....

substance use personality disorder

anger

hostility

environment

delusions

gender

command hallucinations

Key areas of work in Manchester in complex cases

Understanding the role of:

- Psychosis
- -Anger
- -Substance use
- -Interpersonal environment

Is the *severity* of psychotic symptoms linked with violence?

- Difficult to tell precisely, methodological issues in the research
- Some evidence that delusions are linked to increased violence but other factors e.g. substance misuse, anger etc may inflate this
- However, content or type of symptom seems more important than severity

Manchester violence prospective study (Haddock, Barrowclough, Novaco, Cross and Tarrier, 2014)

- 77 people with diagnosis of Sz and history of violence followed up over 12 months
- Severity of symptoms not linked to increased violence
- Those with *paranoia* and/or *delusions* of control were more violent
- And, they were more angry

Command hallucinations and aggression/violence

- Studies shows type of command (harm other/harm self etc) not really linked to compliance
- But beliefs about the entity giving the commands are linked to compliance (Beck-Sander et al, 1997; Barrowcliff and Haddock, 2010, Bucci et al, 2013) e.g.
 - Believing commander justified in making the command associated with violence to others
 - Believing the commander to be omnipotent = violence to others (especially when combined with impulsivity)
 - Believing commander to be benign associated with self harm

So, specific symptoms and beliefs about them play a key role in violence and aggression
Anger and psychosis

- Anger commonly experienced by those with psychosis, particularly inpatient settings
- Anger consistently associated with aggression/violence in general population
- Similarly, anger predictive of violence/aggression in psychotic samples (Novaco and Renwick, 1998; Doyle and Dolan, 2007)
- Due to.... disagreement about treatment, feeling disrespect, being criticised.....

Important cognitive themes linked to anger

Thinking about being provoked

Suspiciousness

Beliefs about voices

Sensitive to disrespect

Rumination

Feeling justified for anger Sensitive to criticism

Substance use and psychosis?

- Rates of substance use higher in psychosis samples than in 'normal' population
- Problematic within inpatient settings and often history of substance misuse not addressed – ongoing unresolved problem
- Leads to more untreated symptoms, less engagement with treatment, disinhibition, emotional problems.....

Why do people with psychosis use substances?

To control unpleasant feelings To manage psychotic symptoms To control side effects of meds. To feel `normal' To fit in with a social group To have fun (when most mental health services are not that fun, especially secure and inpatient services!)

People with psychosis have many positive experiences from substances

Drowns out voices Reduces social anxiety or paranoia Helps depression Stops bad thoughts Enhances magical experiences Helps you think more Have a good time Talk more fluently

Brain works better Feel normal More energy Better sex More confidence Helps relax

Interpersonal environment and psychosis

- Interpersonal environment has long been demonstrated to contribute to outcome in Sz (e.g. expressed emotion)
- Environment has been clearly related to relapse of symptoms, aggression/violence (e.g. Barrowclough et al, 2001)
- This has been highlighted in family environments and in staff and inpatient environments
- Psychiatric services often under-resourced, low staff morale and high staff turnover

The Observer, April 8, 2007 (quote taken from mental health nurse, anonymous)

Those working on acute psychiatric wards live in parallel worlds filled with horrors that no one on the outside could ever try to imagine. We see atrocities every day and take them for normal.

'Every morning, we brace ourselves for mayhem: I could start my day witnessing an attack on another member of staff or a patient, or even be attacked myself. The only thing I can be sure of is that the risk of such violence is increasing.'

Informing practice: key issues

Type of psychotic symptoms and beliefs about them
Anger and impulsivity
Substance use
Interpersonal environment

The PICASSO programme

Haddock et al, (2009) Br.J. Psychiatry

(Psychological interventions for coping with anger in schizophrenia: study of options)

PICASSO clinical sample

In contact with mental health services (in or outpatient) DSM-IV schizophrenia or schizoaffective disorder Hallucinations & delusions History of violence/aggression Treatment resistant' and unmotivated

Challenges faced....

 Dual diagnoses (Violence and aggression, learning difficulties, self harm, personality issues, substance use)

- Multiple problems: persistent psychosis, anger, depression, anxiety, interpersonal difficulties...
- Adverse life history, criminal convictions, poor social networks, poor family relationships.....

Environmental challenges

- Security factors over-ride aesthetics, risk management paramount
- Very little individual autonomy
- Staff dual role of security and therapy
- Multi-disciplinary teams, multiple models of working
- High stress, high staff turnover
- Hostile, unempathic environment

PICASSO CBT treatment programme

- Individual 1-1 psychological therapy
- Aimed at reducing violence by focusing on treatment of key psychotic symptoms, anger, substance use and interpersonal environment
- Delivered over 6 months
- Up to 25 sessions offered
- Linked in with all staff to aid integration and generalisation

Key features of PICASSO CBT

- Increase motivation to work on psychosis and anger in therapy using motivational strategies
- Reduce distress & disruption of psychotic symptoms
- Formulate how psychosis, anger and aggression, substance use and interpersonal environment are related
- Provide CBT intervention for psychotic symptoms, anger, substance use to reduce risk of future violence integrated into interpersonal environment

Integrating motivational interviewing into CBT

Motivation building (from Miller and Rollnick, 2002) used as people not always keen to change and engage in treatment

Intervening when a person is not committed to change ineffective and unhelpful

Used as a precursor to CBT to increase motivation and identify key goals, and....

interchangeably with CBT throughout if motivation wanes

PICASSO social activity therapy training programme

- A control treatment which was matched with CBT for therapy contact time
- Aimed at collaboratively working with the individual to identify pleasurable activities
- Integrated into mental health treatment as usual

Sample

325 people screened 108 probably eligible Total eligible and consented = 77 • Male n = 66• Single n = 74Schizophrenia 90% Schizoaffective disorder 10%

PICASSO sample: accommodation (n)

Own Home	4
Supported Accommodation	1
Family Home (Parents)	3
Family Home (Spouse)	2
Hostel	9
Ward (Not Secure)	10
Ward (Secure)	48
(High secure	12

Symptom profile (n)

- All 4 or more on PANSS hallucinations or delusions
- Command hallucinations n = 16
- Threat control over-ride
 - symptoms n = 35
- Mean total PANSS score 63.8
- Mean PANSS positive score 18.4

Therapy participation

3 withdrew from therapy (2 CBT, 1 SAT).
 1 person transferred out of region
 Of the 73, all but 8 received 10 or more sessions

- Mean no. sessions: 17.0 (CBT) 17.4 (SAT)
- No significant differences between no. of sessions received or no. of minutes of therapy received between groups.

Outcomes

Aggression and violence case notes

- systematic review, Ward Anger Rating Scale (Novaco and Renwick , 2001)
- Risk case notes systematic review
- Anger Novaco Anger Scale (Novaco, 2003)
- Symptoms PANSS (Kay et al, 1989) and PSYRATS (Haddock et al, 1999)
- Global functioning (GAF)

Aggression and violence

Violence assessed from:

- case note recording of incidents extracted by blind raters
- staff ratings based on observation on Ward Anger Rating Scale
- No differences in pre-trial (3 months) violence between groups

Total incidents of verbal and physical aggression over treatment and follow-up period (ns verbal, physical p =0.004 eot, 0.076 follow-up)



Results: risk

 Risk management strategies employed by services reduced significantly more for those who received CBT
 E.g. more loover more projects

E.g. more leave, more access to community, discharge...

Risk: decreased vs. stayed the same or worsened (inpatients only, p = 0.034)



Results: anger (NAS, WARS)

- Trend for all participants to be less angry overall (no sig. group differences)
- Participants felt significantly less provoked overall at end of treatment, not follow-up
- And, *staff* rated whole group as less angry & aggressive at EOT & follow-up
 No treatment was superior

Results: symptoms

 Improvements in both treatments at end of treatment & follow up on overall general psychotic symptoms (PANSS)

- Significantly better outcome in CBT group for delusions although not hallucinations (PSYRATS)
- Improvements in global functioning overall, trend for CBT to be superior

Conclusions

- An integrated CBT enhanced by motivational interviewing can improve outcomes for people with psychosis at risk of violence in variety of settings
- Psychosis, anger, substance use and the interpersonal environment all have to be considered in treatment
- Enhancing CBT using motivational strategies essential for difficult to engage people

"...change seems to happen when the person connects it with something important, something cherished. Intrinsic motivation ...arises in an accepting, empowering atmosphere...the way out of (the) forest has to do with exploring and following what the person is experiencing and what, from his or her perspective, truly matters."

Miller and Rollnick, 2002

A case study illustrating the key challenges...

Steve

25 year old man with 8 yr history of Sz

- Experimenting with drugs from 15+, mainly amphetamines, cannabis
- Repeated hospitalisations for relapse, drugs usually involved

Admission to HDU following multiple aggressive and violent attacks on staff

Steve DVD

Problems in engagement

He didn't want to be seen
Wouldn't talk to anyone

- Interactions were aggressive and dismissive of attempts to engage
- Often on 'one to one' to control aggressive behaviour to others
- Appeared very psychotic

Key therapeutic issues

Hopeless, angry, depressed, anxious

- Felt completely misunderstood, beliefs true, why didn't they get the police?
- Drugs are only thing that help him, why were people against them?
- Or, why didn't they give him something that had the same effect?

Current problems: psychosis

- Believed people could read his thoughts and influence his actions
- These people could also inflict pain on him, sticking pins
- He was a special person who was in touch with many secret organisations, reincarnation of famous 'evil' man
- He was responsible for bad things happening (wars, plane crashes)

Current problems: anger

Angry at people who were inflicting pain and 'putting things in head' Angry at psychiatrist & staff for locking him up & making him take medication that he didn't need No-one listened, no control over treatment hence aggression justified

Main goals: Steve

Get out of hospital
Get a flat, own money, girlfriend
Take as many drugs as he liked
Stop medication

Main goals: staff

Reduce anger and aggression Gain `insight' and be respectful of other's views Say he wouldn't take drugs Demonstrate some self care/independent living skills Take medication happily

What he thought was important...

- Might need to talk to someone to discuss what was interfering with achieving goals
- The disagreement between him and staff re symptoms, anger and drug use had to be resolved (prove them wrong)
- Resolve confusion as to origin of his delusional experiences: what was 'real' or 'not real'
- Directing energy towards goals and 'looking after himself' rather than at others

Problem list: Steve's perspective

- Disagreement about:
 - diagnosis: anxiety not schizophrenia
 - Getting wrong treatment
 - drug taking, problem for staff not him
- Distress and anger:
 - re people harming him
 - towards staff and situation

Key strategies used..

 Maintaining 3rd person role, mediator, exploring beliefs in empathic way

- Building self-esteem in coping with persecutors, reducing distress, increasing control, reducing arousal
- Ensure team gave clear information re what was required to reach goals
- Agreeing formulation re anger, aggression, psychosis with team

Team's rules for moving on

 take prescribed medication and say he would continue to do so
 say that he wouldn't take drugs
 practice at independent living
 reduce his hostility and aggression

Impact on Steve

Steve was:

- clearer about how to achieve goals
- less distressed & able to explore and question beliefs
- clearer on role of substance use in his difficulties
- -reduced anger and arousal

For example...

- Came to conclusion that some of his beliefs in past probably were due to Schizophrenia (famous evil man) and substance use
- Changed to another medication that he was happier with, controlled his anxiety better
- Was given opportunity to progress, realised he had more control over future, more hope that goals were achievable

What can we conclude?

- CBT is definitely helpful for chronic, treatment resistant psychosis in reducing symptoms
- Acute and inpatient psychosis benefits from CBT, may speed recovery
- Growing evidence with forensic and complex presentations evaluation with more complex groups e.g. in forensic settings
- CBT acceptable, low attrition