

Music therapy as a treatment for schizophrenia

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The question

Scenario:

42 year old man with schizophrenia has read a newspaper article suggesting improvements in mental well-being with music therapy

Clinical Question:

Is music therapy (in combination with standard treatments) more effective than standard treatments alone when treating the negative symptoms of schizophrenia?

P	Patients with schizophrenia
I	Additional music therapy
C	Standard treatment alone
O	Measures of negative symptoms and social functioning

Schizophrenia

- Mental disorder
- Affects approximately 1% of population
- Age of onset usually 20-30
- High co-morbidity with depression and anxiety
- 20% recover, 40% relapse/remit and 40% have chronic symptoms

Schizophrenia

- Positive Symptoms
 - Hallucinations – often auditory.
 - Delusions – often elicit abnormal behaviour.
 - Thought disorder
- Negative Symptoms
 - Social withdrawal
 - Emotional withdrawal, apathetic, lack concentration and drive
 - Poverty of speech
 - Self-neglect
- Cognitive impairment
 - IQ, memory, learning

Schizophrenia

- 'Standard care'
 - Antipsychotics (dopamine receptor antagonists)
 - Generally only improve positive symptoms.
 - Psychological therapies (CBT, family therapy)

What is Music Therapy?

- Therapeutic method using musical experiences to help people with serious mental disorders develop relationships and address issues they may not be able to using words alone.
- Can involve playing, improvising or listening to music, as well as verbal discussion and reflection with a therapist.
- Studies to date have examined the effects of music therapy as an add-on treatment to standard care.



Why is the question important?

The screenshot shows the BBC News website interface. At the top, there is a navigation bar with the BBC logo and links for Sign in, News, Sport, Weather, iPlayer, TV, and Radio. Below this is a red banner with the word 'NEWS' and a 'LIVE BBC NEWS CHANNEL' button. The main content area features a headline 'NHS art therapy for schizophrenia' by Emma Wilkinson, a health reporter. A sub-headline reads: 'Government advisers are expected to recommend art therapy on the NHS for people with schizophrenia'. A small image shows a person in a white shirt. A large black box with white text reads 'NICE National Institute for Health and Care Excellence'. Below this, a highlighted text block contains the following text: '1.4.4.3 Consider offering arts therapies to all people with psychosis or schizophrenia, particularly for the alleviation of negative symptoms. This can be started either during the acute phase or later, including in inpatient settings. [2009]'. Below the highlighted text, there is a paragraph: 'with "negative" symptoms such as withdrawal and poor motivation. Schemes use trained therapists, with degrees in art, music or dance, and encourage people with schizophrenia to be creative as well as participating in group activities.' On the left side of the page, there is a vertical menu with various news categories: News Front Page, World, UK, England, Northern Ireland, Scotland, Wales, Business, Politics, Health (highlighted), Medical notes, Education, Science & E, Technology, Entertainment, Also in the, Video and At, Have Your S, Magazine, In Pictures, Country Profiles, Special Reports, and Related BBC sites (Sport, Weather).

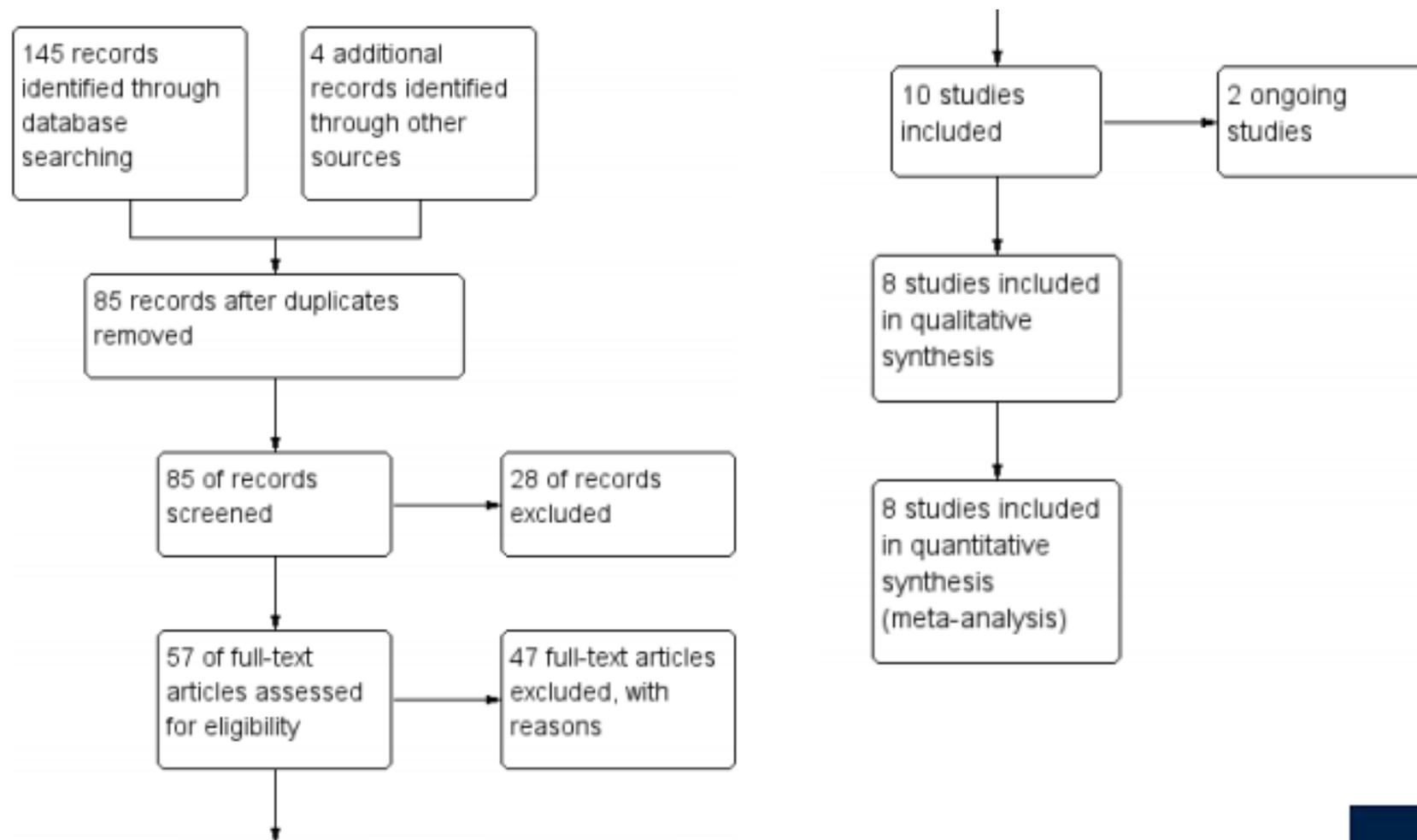


The search and search results

- Searched Cochrane Schizophrenia Group Trials Register using the phrase: [(**musi** or **improvis** in title, abstract, index terms of REFERENCE) or [(music* in interventions of STUDY)]
- The authors filtered the studies based on a number of criteria, such as the outcome measures they used, who collected the data and the type of trial.



The search and search results



The studies

- People with schizophrenia or any other non-affective serious mental disorder, diagnosed by any criteria, irrespective of gender, age or nationality.
- 8 Studies (483 participants)
- Some studies more specific with diagnosis- based on 3 psychiatric classification systems primarily used in the western world.
- Most studies concerned inpatients
- 6 studies with sample size between 60 and 81, and 2 with smaller trials (30-37)



The outcomes

- No consensus on what should be the primary outcome of music therapy.
- Disconnect between primary outcomes cited by music therapists (well-being, self-esteem, ability to express oneself) and those used in research (measures of social functioning and negative symptoms).

The outcomes

Category	Outcome measure	Variable type
General Mental state	Global state	Categorical
	Positive and Negative symptoms scale (PANSS)	7 point likert scale, subjective
	Brief Psychiatric Rating scale (BPRS)	Clinical interview and observation of the patient. 7point likert scale.
	Scale for the assessment of negative symptoms (SANS)	20 item rating, clinical interview and based of information from carers. 6 point Likert scale.
Functioning	Global assessment of functioning	Clinical rated scale to rate global functioning.
	Social Disability Schedule for inpatients	Psychiatrist rated scale used to rate levels of social functioning
	Cognitive functioning- PASAT and CCPT tasks.	Computerised neurophysiological test assessing attention disorders.

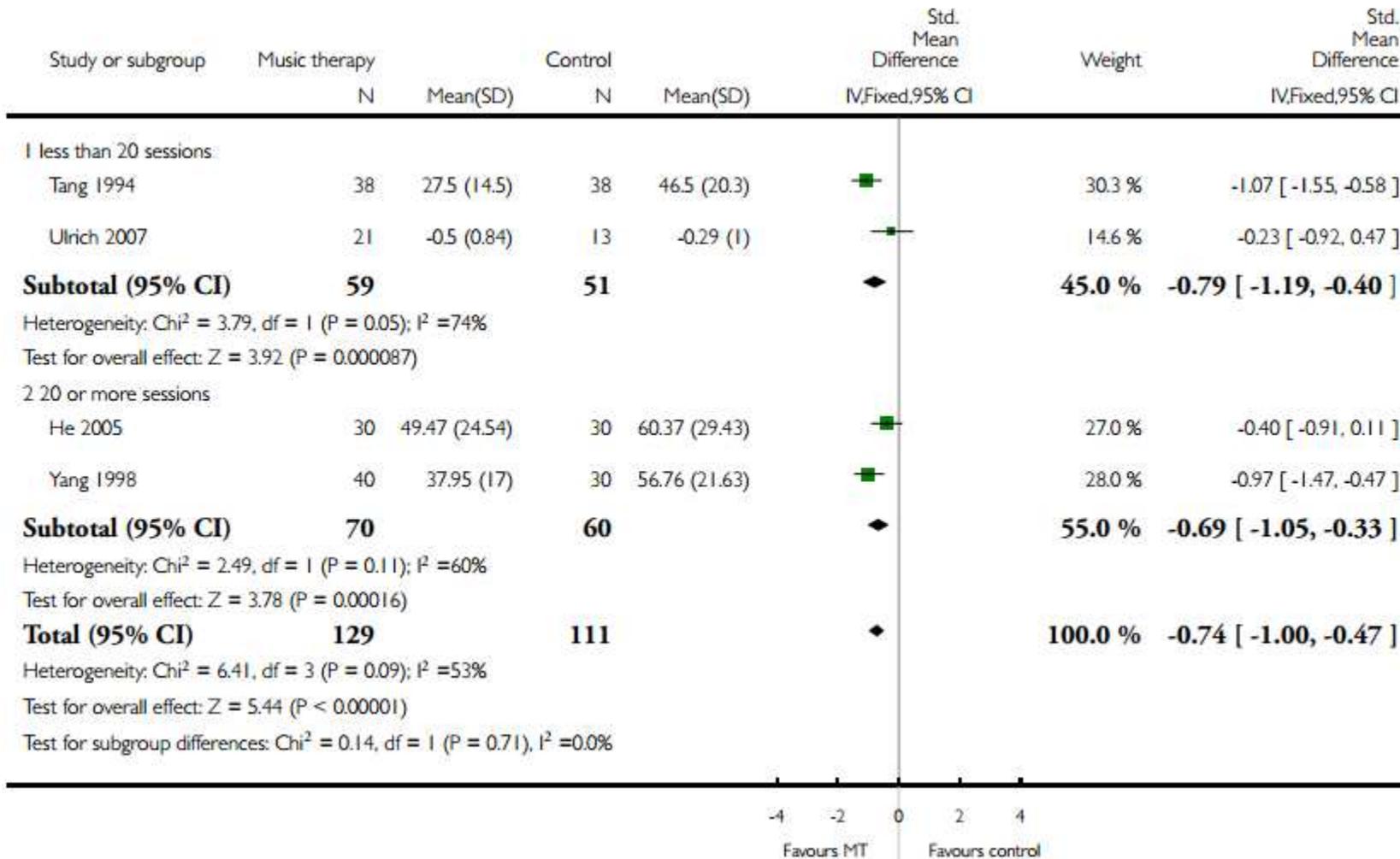
The Results

Music Therapy vs Standard Care-

- Effects inconsistent across studies and dependent on number of music therapy sessions and quality of music therapy provided.
- Therapy added to standard care superior to standard care for global state
- Good effects on negative symptoms
- Some aspects of cognitive functioning and behaviour improved.

The Results

Analysis 1.4. Comparison 1 Music therapy versus standard care (all outcomes short-term - 1 to 3 months), Outcome 4 Mental state: Specific - 2. Negative symptoms - average endpoint score (SANS, high score = poor).



The study appraisal

- Music therapy is a broad category, different approaches are included.
- Disconnect between primary outcomes cited by music therapists and those used in research
- All studies concerned short and medium-term use of music therapy.
- All studies (except one) involved only inpatients – unclear if effective in community & for patients with less severe symptoms.
- Comparison with ‘standard care’ is broad & vague
- No placebo for music therapy intervention

The Implications

- Music therapy can help people with schizophrenia improve their global state and the negative symptoms of schizophrenia.
- Clinicians would be justified in offering music therapy over the short to medium-term.
- However, effects of music therapy seem to depend heavily on the number of music therapy sessions.
 - Difficult to predict how many sessions individual patients will need.
 - Long-term effects are unclear

