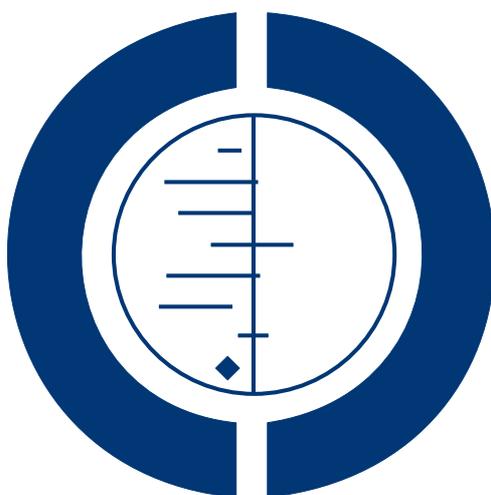


Drama therapy for schizophrenia or schizophrenia-like illnesses (Review)

Ruddy R, Dent-Brown K



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[Intervention Review]

Drama therapy for schizophrenia or schizophrenia-like illnesses

Rachel Ruddy¹, Kim Dent-Brown²

¹Academic Unit of Psychiatry & Behavioural Sciences, University of Leeds, Leeds, UK. ²Sheffield Centre for Health and Related Research, Sheffield, UK

Contact address: Rachel Ruddy, Academic Unit of Psychiatry & Behavioural Sciences, University of Leeds, 15 Hyde Terrace, Leeds, LS2 9LT, UK. R.A.Ruddy@leeds.ac.uk.

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ABSTRACT

Background

Medication is the mainstay of treatment for schizophrenia or schizophrenia-like illnesses, but many people continue to experience symptoms in spite of medication (Johnstone 1998). In addition to medication, creative therapies, such as drama therapy may prove beneficial. Drama therapy is a form of treatment that encourages spontaneity and creativity. It can promote emotional expression, but does not necessarily require the participant to have insight into their condition or psychological-mindset.

Objectives

To review the effects of drama therapy and related approaches as an adjunctive treatment for schizophrenia compared with standard care and other psychosocial interventions.

Search methods

We searched the Cochrane Schizophrenia Group's Register (October 2006), hand searched reference lists, hand searched *Dramatherapy* (the journal of the British Association of Dramatherapists) and *Arts in Psychotherapy* and contacted relevant authors.

Selection criteria

We included all randomised controlled trials that compared drama therapy, psychodrama and related approaches with standard care or other psychosocial interventions for schizophrenia.

Data collection and analysis

We reliably selected, quality assessed and extracted data from the studies. We excluded data where more than 50% of participants in any group were lost to follow up. For continuous outcomes we calculated a weighted mean difference and its 95% confidence interval. For binary outcomes we calculated a fixed effects risk ratio (RR), its 95% confidence interval (CI) and a number needed to treat (NNT).

Main results

The search identified 183 references but only five studies (total n=210) met the inclusion criteria. All of the studies were on inpatient populations and compared the intervention with standard inpatient care. One study had drama therapy as the intervention, one had role-playing, one had a social drama group and two used psychodrama. Two of the included studies were Chinese and it is difficult to

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know whether psychodrama and indeed inpatient psychiatric care in China is comparable with the drama interventions and inpatient care in the other included studies. There were no significant findings about the value of drama interventions for keeping inpatients engaged in treatment. Due to poor reporting very little data from the five studies could be used and there were no conclusive findings about the harms or benefits of drama therapy for inpatients with schizophrenia.

Authors' conclusions

Randomised studies are possible in this field. The use of drama therapy for schizophrenia and schizophrenia-like illnesses should continue to be under evaluation as its benefits, or harms, are unclear.

PLAIN LANGUAGE SUMMARY

Drama therapy for schizophrenia or schizophrenia-like illnesses

Drama therapy is one of the creative therapies suggested to be of value as an adjunctive treatment for people with schizophrenia or schizophrenia-like illnesses. Randomised studies have been successfully conducted in this area but poor study reporting meant that no conclusions could be drawn from them. The benefits or harms of the use of drama therapy in schizophrenia are therefore unclear and further large, high quality studies are required to determine the true value of drama therapy for schizophrenia or schizophrenia-like illnesses.

BACKGROUND

Schizophrenia is a mental illness which is described in the International Classification of Diseases as a disorder with fundamental, characteristic distortions of thinking and perception, and inappropriate or blunted affect in clear consciousness (WHO 1992). The characteristic distortions of thinking and perception relate to a sense of invasion of self. The person experiences difficulties in distinguishing between self and non-self, which is called a loss of ego boundaries. One of the other distortions of thinking is called 'concrete thinking' and refers to literalness of expression and understanding, this is also known as absence of symbol formation (Sims 1995).

Medication is the mainstay of treatment for schizophrenia. However, five to 15% of people continue to experience symptoms in spite of medication and may also develop undesirable side effects. Drama therapy is one of the arts therapies that can be used in addition to medication to help those with schizophrenia. In the UK, drama therapy has been used for several decades as a form of psychotherapy for those for whom the more conventional 'talking therapies' are less beneficial. Such groups have included people with moderate to severe learning disabilities (Blewett 1995), people with dementia (Wilkinson 1998) and people with long-standing schizophrenic illnesses (Nitsun 1974).

Drama therapy developed out of work on 'remedial drama' by people such as Peter Slade in the 1940s and 1950s and Sue Jennings

in the 1960s and 1970s. It has its roots in influences such as Greek theatre (with its ideas of ritual and catharsis), Winnicott's ideas on the overlap between play and therapy (Winnicott 1971) and Boal's concept of drama as social action (Boal 1982).

The rationale for the use of drama therapy in schizophrenia is that as an action-oriented therapy it has some helpful features not present in the purely talking therapies. One key concept in drama therapy is that of the drama as container. For people with schizophrenia, thoughts and emotions can be disordered and hard to contain. Thus conventional psychotherapy can be problematic because it presumes at least some ability to self-regulate thoughts and feelings and to undertake basic reality-checking. The more formal structure of drama therapy and its separation between the world of the drama and the world of the group, may offer a degree of environmental regulation to compensate for the lack of self regulation (Bielanska 1991). Another concept is that of aesthetic distancing (Jones 1993). Here the 'make-believe' element of the drama allows participants to work with material which is sensitive to them. Such sensitive issues could relate to murderous or persecutory fantasies that might be so alarming that a sufferer would choose to deny or minimise them, rather than talk them through in therapy. The distancing effect of drama (by playing the fantasy out in a metaphorical or symbolic way) allows the material to be worked with, with an underlying safety net that this is, after all, 'only a story.'

Drama therapy has a developmental model, with increasing de-

mands being placed on participants with greater resilience, insight and interpersonal abilities. The most basic form of drama therapy is known as the creative-expressive mode (Jennings 1990) and may consist of activities such as drama games and improvisational exercises to encourage spontaneity and creativity within a safe framework. No exploration of the images and material created is necessary; they are left uninterpreted. More demanding forms of drama therapy encourage participants to recognise their own projections in the work they produce, or modify and experiment with the roles they play. Some drama therapists use existing text to allow participants to explore roles that are new or challenging to them (Jenkyns 1996).

A third approach is to make use of the archetypal myths, fairy tales and folk tales from various cultures for their ability to mirror and facilitate human developmental tasks (Bettelheim 1976). Again, the story can be seen as a container to add to the safety of the experience, as well as giving a degree of mirroring and normalisation for the participants (Schmid 2002).

OBJECTIVES

To review the clinical effects of adjunct drama therapy and related approaches for people with schizophrenia or schizophrenia-like illnesses compared with standard care alone or standard care plus other additional psychosocial interventions.

METHODS

Criteria for considering studies for this review

Types of studies

We included all relevant randomised controlled trials. Where a trial was described as 'double-blind' but it was implied that the study was randomised we included these trials in a sensitivity analysis. If there was no substantive difference within primary outcomes (see types of outcome measures) when these 'implied randomisation' studies were added, then we included these in the final analysis. If there was a substantive difference, we used only clearly randomised trials and described the results of the sensitivity analysis in the text. We excluded quasi-randomised studies, such as those allocating by using alternate days of the week.

Types of participants

We included people diagnosed with schizophrenia or schizophrenia-like illnesses using any criteria. We included trials where it was implied that the majority of the participants had a severe mental

illness which was likely to be schizophrenia. We did not exclude trials due to age, nationality or gender of participants. We included trials with participants with any length of illness who were being treated in any treatment setting.

Types of interventions

1. Drama therapy (in groups or individually), for any length of time, as an adjunctive treatment for schizophrenia or schizophrenia-like illnesses, regardless of the other interventions being used (eg medication, hospitalisation, problem solving therapy, psycho-education, social skills training, cognitive-behavioural therapy, family therapy or psychodynamic psychotherapy)

The British Association of Dramatherapists following definition of drama therapy was used as a gold standard for inclusion: "Dramatherapy has as its main focus the intentional use of healing aspects of drama and theatre as the therapeutic process. It is a method of working and playing that uses action methods to facilitate creativity, imagination, learning, insight and growth."

Regardless of whether it was formally described as drama therapy, we considered any intervention using role play, drama games, improvisation, dramatic text, story making or any similar approaches. We also included studies of psychodrama if the intervention was judged to fall within the definition of drama therapy above. We compared this against one or more of the following:

2. Standard care

This includes the type of care that fits with normal 'custom and practice'. This includes interventions such as medication, hospitalisation, community psychiatric nursing input and day hospital.

3. Other treatments

This would include any other treatment (biological, psychological or social) such as medication, problem solving therapy, psycho-education, social skills training, cognitive-behavioural therapy, family therapy or psychodynamic psychotherapy.

Types of outcome measures

1. Leaving the study early

1.1 For specific reasons

1.2 For general reasons

2. Global state

2.1 Relapse*

2.2 Time to relapse

2.3 No clinically important change in global state

2.4 Average endpoint global state score

2.5 Average change in global state scores

3. Mental state

3.1 No clinically important change in general mental state*

3.2 Average endpoint general mental state score

3.3 Average change in general mental state scores

3.4 No clinically important change in specific symptoms

3.5 Average endpoint specific symptom score

- 3.6 Average change in specific symptom scores
 - 4. Death - suicide and natural causes
 - 5. Behaviour
 - 5.1 No clinically important change in general behaviour
 - 5.2 Average endpoint general behaviour score
 - 5.3 Average change in general behaviour scores
 - 5.4 No clinically important change in specific aspects of behaviour
 - 5.5 Average endpoint specific aspects of behaviour
 - 5.6 Average change in specific aspects of behaviour
 - 6. Adverse effects
 - 6.1 No general adverse effects
 - 6.2 Average endpoint general adverse effect score
 - 6.3 Average change in general adverse effect scores
 - 6.4 No change in specific adverse effects
 - 6.5 Average endpoint specific adverse effects
 - 6.6 Average change in specific adverse effects
 - 7. General functioning
 - 7.1 No clinically important change in general functioning
 - 7.2 Average endpoint general functioning score
 - 7.3 Average change in general functioning scores
 - 7.4 No clinically important change in specific aspects of functioning, such as social or life skills
 - 7.5 Average endpoint specific aspects of functioning, such as social or life skills
 - 7.6 Average change in specific aspects of functioning, such as social or life skills
 - 8. Service outcomes
 - 8.1 Hospitalisation
 - 8.2 Time to hospitalisation
 - 9. Satisfaction with treatment
 - 9.1 Recipient of care not satisfied with treatment
 - 9.2 Recipient of care average satisfaction score
 - 9.3 Recipient of care average change in satisfaction scores
 - 9.4 Carer not satisfied with treatment
 - 9.5 Carer average satisfaction score
 - 9.6 Carer average change in satisfaction scores
 - 10. Quality of life
 - 10.1 No clinically important change in quality of life
 - 10.2 Average endpoint quality of life score
 - 10.3 Average change in quality of life scores
 - 10.4 No clinically important change in specific aspects of quality of life
 - 10.5 Average endpoint specific aspects of quality of life
 - 10.6 Average change in specific aspects of quality of life
 - 11. Economic outcomes
 - 11.1 direct costs
 - 11.2 Indirect costs
- * Primary outcomes of interest

We reported all outcomes for the short-term (up to 12 weeks), medium-term (13 to 26 weeks), and long-term (more than 26 weeks).

Search methods for identification of studies

1. Electronic searches

The Cochrane Schizophrenia Group Trials Register was searched (October 2006) using the phrase:

[(**drama* or *play* or *story* or *improvi?ation* or *fairy* or *creative* or *theat* or *ritual* or myth* or *role-play* in title, abstract and index fields in REFERENCE) OR (**drama* or *role play* in interventions field in STUDY)*]*

This register is compiled by systematic searches of major databases, hand searches and conference proceedings (see Group Module).

2. Reference searching

We also inspected references of all identified studies, included or excluded, for more studies.

3. Hand searching

We hand searched 'Dramatherapy' 1995-2006 (end) and 'Arts in Psychotherapy' 1998-2006 (end).

4. Personal contact

We contacted the authors of relevant reviews or studies to enquire about other sources of relevant information.

Data collection and analysis

1. Selection of trials

We (RR, KDB) independently selected suitable studies for inclusion in this review as detailed below. In cases of disagreement we obtained the article and independently assessed each article for relevance to the review and consulted a third reviewer if necessary. We resolved any arising disagreements by discussion and where there was still doubt, we added the study to those awaiting assessment and contacted the study authors for further clarification.

We assessed the titles and abstracts of identified studies to determine whether they met the inclusion criteria. In order to minimise bias, we printed a list of all titles and abstracts excluding the author's names, institutions, and journal title. In cases where the title and abstract contained sufficient information to determine that the article did not meet the inclusion criteria, these were excluded. We recorded all rejected papers and documented reasons for exclusion.

We retrieved the full papers of all remaining titles and abstracts deemed relevant. In addition, we also reviewed all other potentially relevant articles identified by the various search strategies (reference checking, personal communications etc. All papers in languages other than English were translated/reviewed by someone who spoke the language (as far as possible). We studied all articles independently and completed a form for each study and scored the quality of the research as defined below. We documented reasons for exclusion. Where the same study had more than one article written about the outcomes, we treated all the articles as one study and presented the results only once.

2. Data extraction

We (RR, KDB) extracted all data from the selected trials, again,

working independently of each other and we resolved any disputes by discussion. When this was not possible and further information was necessary to resolve the dilemma, we did not enter data and added this outcome of the trial to the list of those awaiting assessment.

3. Assessment of quality

We assessed the quality of a particular trial in accordance with guidelines in the Cochrane Handbook (Higgins 2005). We noted the method of randomisation on the data extraction form. Allocation concealment was assessed as follows as described in the Cochrane Reviewers Handbook (Higgins 2005):

- A - Adequate description of the allocation procedure
- B - Unclear description of the allocation procedure
- C - Inadequate description of the allocation procedure
- D - Allocation concealment was not used

We accepted trials that were of category A and B and commented on any problems with allocation concealment in the text. In cases of disagreement, we sought clarification from the authors of the trial and added these to the list of those awaiting assessment. In addition, we were blinded to the author's names, institutions and journal title to prevent any bias.

3.1 Loss to follow up

The paper should give an adequate description of the loss of its participants in terms of the number of withdrawals, dropouts, and protocol deviations. We excluded data from studies where more than 50% of participants in any group were lost to follow up (this did not include the outcome of 'leaving the study early'). In studies with less than 50% dropout rate, we considered people leaving early to have had the negative outcome, except for the event of death. We analysed the impact of including studies with high attrition rates (25-50%) in a sensitivity analysis. If inclusion of data from this latter group did result in a substantive change in the estimate of effect we did not add the data to trials with less attrition, but presented it separately.

4. Data analysis

We assessed outcomes using continuous (for example, changes on physical function scales), categorical (for example, one of three categories on a quality of life scale, such as 'better', 'worse' or 'no change'), or dichotomous (for example, either returned to employment or did not return to employment) measures.

4.1 Continuous data

The many scales available to measure outcomes in psychosocial trials vary in the quality of their validation and reliability. Therefore, if a rating scale's validation had not been published in a peer-reviewed journal, we excluded the data (Marshall 2000). In addition, it is preferable for the rating scale to be either a self-report or completed by an independent observer or relative and where this was not the case we noted this in the discussion. Where possible we used trials that had used the same instrument to measure specific outcomes in direct comparisons. Where continuous data were presented from different scales rating the same effect we presented both sets of data and inspected the general direction of effect. We

reported the mean and standard deviation. Where standard deviations were not reported in the paper we attempted to obtain these from the authors or to calculate them using other measures of variation such as the confidence intervals. For continuous data we calculated the weighted mean difference using the fixed effect model.

4.2.1 Skewed data: Often, continuous data on clinical and social outcomes do not follow a normal distribution. To avoid the pitfall of applying parametric tests to non-parametric data, we applied the following standards to all data before inclusion: (a) standard deviations and means were either reported in the paper or were obtained from the authors; (b) when a scale started from the finite number zero, the standard deviation, when multiplied by two, was less than the mean (otherwise the mean was unlikely to be an appropriate measure of the centre of the distribution, (Altman 1996)); (c) if a scale started from a positive value (such as PANSS which can have values from 30 to 210) the calculation described above in (b) was modified to take the scale starting point into account. In these cases skew is present if $2SD > (S - S_{min})$, where S is the mean score and S_{min} is the minimum score. Endpoint scores on scales often have a finite start and endpoint and these rules can be applied to them. When continuous data are presented on a scale which includes a possibility of negative values (such as change on a scale), there is no way of telling whether data are non-normally distributed (skewed) or not. It is thus preferable to use scale endpoint data, which typically cannot have negative values. If endpoint data were not available, we used change data, but did not subject these to a meta-analysis, and reported them in the 'Additional data' tables.

4.2 Dichotomous data

For dichotomous outcomes, we estimated a relative risk ratio with its associated 95% confidence intervals (CI). As a summary measure of effectiveness, where possible, we also calculated the number needed to treat statistic (NNT).

4.3 Endpoint versus change data

As previously stated where possible we presented endpoint data and if both endpoint and change data were available for the same outcomes then we only reported the former.

4.4 Cluster trials

Studies increasingly employ 'cluster randomisation' (such as randomisation by clinician or practice) but analysis and pooling of clustered data poses problems. Firstly, authors often fail to account for intra-class correlation in clustered studies, leading to a 'unit of analysis' error (Divine 1992) whereby p values are spuriously low, confidence intervals unduly narrow and statistical significance overestimated. This causes type I errors (Bland 1997, Gulliford 1999).

Where clustering was not accounted for in primary studies, we presented the data in a table, with a (*) symbol to indicate the presence of a probable unit of analysis error. We contacted first authors of studies to obtain intra-class correlation co-efficients of their clustered data and adjusted for this by using accepted meth-

ods (Gulliford 1999). Where clustering had been incorporated into the analysis of primary studies, we presented these data as if from a non-cluster randomised study, but adjusted for the clustering effect.

We sought statistical advice and were advised that the binary data as presented in a report should be divided by a 'design effect'. This was calculated using the mean number of participants per cluster (m) and the intra-class correlation co-efficient (ICC) design effect = $1+(m-1)*ICC$ (Donner 2002). If the ICC was not reported it was assumed to be 0.1 (Ukoumunne 1999).

If cluster studies had been appropriately analysed taking into account intra-class correlation co-efficients and relevant data documented in the report, synthesis with other studies would have been possible using the generic inverse variance technique.

5. Sensitivity analyses

Where data permitted, we undertook sensitivity analyses in order to see if sub-grouping the data resulted in important changes in the results. We compared the result of the subgroup analysis with the overall result to see if there was any important difference and discussed any differences in the results section. Five such subgroupings were pre-specified, recognising that data may be too sparse to undertake all of them.

group vs individual therapy:

- differences between studies that give self-reported or observer-rated outcomes

- differences between studies with more than 50% attrition rate and those with less than 50% attrition rate

- differences between studies using intention to treat analyses and those not using intention to treat analyses

- differences between cluster randomised trials and non cluster randomised trials.

6. Testing for heterogeneity

Firstly, we considered all the included studies within any comparison to estimate clinical heterogeneity. Then we visually inspected graphs to investigate the possibility of statistical heterogeneity. This was supplemented employing, primarily, the I-squared statistic which provides an estimate of the percentage of inconsistency thought to be due to chance. Where the I-squared estimate was greater than or equal to 75%, this was interpreted as indicating the presence of high levels of heterogeneity (Higgins 2003). If inconsistency was high, we did not summate data, but presented the data separately and investigated reasons for heterogeneity.

7. Addressing publication bias

We entered data from all identified and selected trials into a funnel plot (size of study versus effect size) (Davey Smith 1997, Egger 1997), to attempt to detect the possibility of publication bias.

8. General

Where possible, we entered data in such a way that the area to the left of the line of no effect indicated a favourable outcome for drama therapy.

RESULTS

Description of studies

See: [Characteristics of included studies](#); [Characteristics of excluded studies](#).

Please see Excluded and Included Trials table.

1. Search

The search resulted in 341 references, 329 of which were clearly not relevant to this review. Of the remaining 12 reports, we were able to include five trials.

2. Excluded studies

We excluded eight studies. Five were not randomised (Buchkremer 1987, Harrow 1951, Murow 1997, Spencer 1983, Zhou 2004).

In Sturm 1974 the participants were described as the most repressed inpatients from a psychiatric as opposed to a neurological or motivational viewpoint, which might suggest that they had schizophrenia but there was no information given on diagnosis so we could not assume that they had schizophrenia and therefore excluded the study. We excluded one study because drama therapy was not the intervention under investigation (DeCarlo 1985). We also excluded Grodner 1982 as allocation was unclear and only a minority of people (7/45) had schizophrenia.

3. Awaiting assessment

There is one study awaiting assessment (Parrish 1959) which we have been unable to locate.

4. Ongoing studies

We know of no ongoing studies.

5. Included studies

Five studies were included. Three of these studies (Nitsun 1974, Qu 2000, Zhou 2002) met the inclusion criteria and the intervention was definitely consistent with drama therapy. Two other studies (Gutride 1973, Whetstone 1986) were role playing interventions that were not conducted by drama therapists but are included for completeness as the interventions are consistent with the definition of drama therapy.

5.1 Objectives

Zhou 2002 explored "the effect of psychodrama in improving the self esteem of patients with schizophrenia". Qu 2000 studied the effectiveness of psychodrama for improving mental state in chronic schizophrenia. Nitsun 1974 compared group movement and drama therapy with a modified psychotherapy group to look at effects on clinical, psychological and social functioning. Gutride 1973 used structured learning therapy (modelling and role playing social interactions with social reinforcement) to enhance social interactions. Whetstone 1986 used social dramatics as a clinical nursing tool for developing social skills of the chronically mentally ill.

5.2 Method

Nitsun 1974 was group randomised to receive treatment. The patients were divided into two groups matched for age, intelligence and length of hospitalisation. The groups were then randomly

assigned to receive one or other treatment. The outcomes were assessed by a psychiatrist, psychologist and nursing staff who were not blind to the interventions received. Both [Zhou 2002](#) and [Qu 2000](#) randomised individuals to receive either psychodrama or standard inpatient care. [Zhou 2002](#) does not specify whether the study was blind but [Qu 2000](#) says that the rater was blind to the study group. [Gutride 1973](#) divided the participants into acute and chronic groups and then randomly assigned them to the two groups. [Whetstone 1986](#) randomly assigned the participants to the two groups. Neither [Gutride 1973](#) nor [Whetstone 1986](#) blinded the participants or the assessors.

[Nitsun 1974](#) had one session a week for 22 weeks with assessment immediately after treatment and no long term follow up. [Zhou 2002](#) had two hour sessions five times a week for four weeks with no long term follow up and [Qu 2000](#) had two hour sessions five times a week for three months with no long term follow up. [Gutride 1973](#) involved three sessions a week for four weeks with no long term follow up and [Whetstone 1986](#) had two hours a week for eight weeks with no long term follow up.

5.3 Setting

[Nitsun 1974](#) was conducted at Goodmayes Hospital, UK an inpatient psychiatric hospital. [Zhou 2002](#) was conducted at The Second Affiliated Hospital of Ji'ning Medical School, Shandong, China and [Qu 2000](#) was conducted at the Beijing Hui Long Guan Hospital, Beijing, China. [Gutride 1973](#) and [Whetstone 1986](#) were both conducted in state hospitals (Pennsylvania and Missouri respectively) in the USA so it is reasonable to assume that the standard care interventions were comparable. It is also reasonable to presume that the two Chinese hospitals are comparable in their standard care for psychiatric inpatients and their prescribing regimes for schizophrenia. However it is impossible to know whether the inpatient care in the five studies would be similar enough to consider combining the results.

5.4 Participants

All 24 participants in [Nitsun 1974](#) had chronic schizophrenia, with some negative symptoms of schizophrenia and were of normal intellect as measured on the Weschler Adult Intelligence Scale. There were 14 males and 10 females equally distributed into the two groups. The patients were aged between 25 and 46 years, had been hospitalised for at least two years. In [Zhou 2002](#) there were 24 participants, male and female, aged 18-60 years, with schizophrenia for a mean of 11 years (standard deviation nine years) who were hospitalised at the time of the study. In [Qu 2000](#) there were 60 patients, male and female, aged between 33 and 60 years who had had schizophrenia for at least five years (longest 39 years) and were currently hospitalised. In [Gutride 1973](#) there was a combination of acute (30) and chronic (57) participants. No information is given about their age and sex and only 75% of them had schizophrenia (the rest had psychotic depression, schizoid personality and inadequate personality). In [Whetstone 1986](#) all 15 participants had schizophrenia and they were described as chronically mentally ill. They had been hospitalised for more than four months. There were

eight males and seven females and the mean age was 36.8 years for the experimental group and 39.3 years for the control group. The participants of the [Gutride 1973](#), [Whetstone 1986](#), [Zhou 2002](#) and [Qu 2000](#) studies were probably comparable in terms of their illness but the participants in [Nitsun 1974](#) had been hospitalised for over two years and therefore possibly a more chronic and disabled population than the other studies.

5.5 Interventions

5.5.1 Drama therapy

In [Nitsun 1974](#) inpatient drama therapy was conducted in a group of 12 patients once a week for one hour, every week for 22 weeks. The sessions had eight facilitators, a drama therapist, a drama teacher and six auxiliary therapists who were experienced in movement and drama therapy, including an occupational therapist. The situations explored during the group were mainly imaginary in content and involved physical movement to a lesser or greater degree. Opportunities were given in all sessions for individual, pair and group work. As the sessions progressed patients were encouraged to explore situations of their own choice. All participants also received treatment as usual (including occupational and industrial therapy and attending hospital socials), but psychiatrists agreed to make no changes to their medication during the course of the therapy.

In [Qu 2000](#) all participants received antipsychotic drugs but the experimental group also received psychodrama. These were two hour sessions, five times a week, for three months. The therapy consisted of the patients first identifying psychological barriers and symptoms, the therapists then designed scenes and roles to explore these and then in groups of three to four participants the patients performed the various roles and explored the way they felt about them. This was watched by other groups who were encouraged to comment on the roles and how they could be improved. At the end of the therapy the therapist explained what the 'right' behaviour was and the patients were asked to redesign the drama until they learned the 'right' behaviour.

In [Zhou 2002](#) all participants received antipsychotic drugs but the experimental group also received psychodrama. These were two hour sessions, five times a week for four weeks. The sessions consisted of the therapist encouraging the participants to become involved in a drama and influence it to progress towards a particular outcome. Several participants were involved in the drama as actors and the others watched. The roles rotated in different sessions. The leading actor had to talk about his/her feelings as the scenario progressed. The other actors have to try to make the situation as real as possible. The action was followed by a discussion of the drama and the situation. The therapist used the drama to help the patients analyse their psychological barriers and gave recommendations. These were built on session by session.

In [Gutride 1973](#) all participants received standard inpatient care and all were told about the objectives of the training intervention using role playing. The control group were told that their training was delayed for a few weeks due to equipment failure. The ex-

perimental group received four weeks of structured learning therapy (modelling and role playing social interactions with social reinforcement) designed to enhance social interaction. The training was conducted in groups of five to eight participants three times a week. There were two group leaders for each group who were undergraduate volunteers who had undergone a 12 hour training programme in the application of modelling, role playing and social reinforcement prior to the investigation. In the sessions the participants were shown a video modelling a particular social interaction with commentary by the group facilitators. This was followed by a discussion of how the interaction could be applied to individual circumstances. The sessions ended with videoed role-playing and feedback. [Gutride 1973](#) was also complicated by the fact that half of the intervention group and half of the control group were allocated to receive individual or group psychotherapy for three or more sessions a week.

In [Whetstone 1986](#) the five participants in the experimental group were part of a social drama group for two hours a week over eight weeks. They were exposed to 12 different social scenarios and were asked (in a theatre like setting) to play out the vignettes. The role-play was videotaped and then the group provided feedback. There was no information about the group facilitators.

The drama therapy in the two Chinese studies ([Qu 2000](#), [Zhou 2002](#)) was probably a similar intervention but the drama therapy in [Nitsun 1974](#) was less directive and did not depend on the therapist instilling correct ways of behaving in the participants. It was also clear that the interventions in [Gutride 1973](#) and [Whetstone 1986](#) were more role-play aimed at improving social interaction than drama therapy and therefore the results of these studies could not be appropriately combined with the other studies. It would only be appropriate to combine the results of [Qu 2000](#) and [Zhou 2002](#).

5.5.2 Comparison treatment

In [Nitsun 1974](#) the comparison group received group therapy in a group of 12 patients once a week for an hour, every week for 22 weeks (at the same time as the drama therapy intervention). The sessions had three facilitators who were all social workers. Patients were seated in chairs in a circle. Verbal discussion amongst group members was encouraged and interpretative comments were offered by the therapists. All participants also received treatment as usual (including occupational and industrial therapy and attending hospital socials) and, like the patients in the drama therapy group, psychiatrists agreed to make no changes to their medication during the course of the therapy.

In [Qu 2000](#) and [Zhou 2002](#) the comparison groups only had antipsychotic medication and no additional time given to them to compensate for the time given to the participants in the psychodrama intervention.

In [Gutride 1973](#) and [Whetstone 1986](#) the comparison groups only received standard inpatient care, although in [Gutride 1973](#) it was more like a waiting list group because they were promised the intervention in a few weeks time so the comparison groups are not equivalent.

5.6 Outcomes

There was no usable data from [Gutride 1973](#) or [Whetstone 1986](#). [Gutride 1973](#) used a number of validated rating scales (Psychotic Inpatient Profile, Ward Atmosphere Scale, FIRO-B, Psychiatric Outpatient Mood Scales) and also designed and validated two other scales standardising the observation of social interactions (Standardised observation procedure of patient social interaction, naturalistic observation of social interaction). [Whetstone 1986](#) used the standardised "Nurses observation scale for inpatient evaluation-30". However there was no raw data (means or standard deviations) given in the paper so they could not be included. We have attempted to contact the author but have so far been unsuccessful.

The only usable data for [Nitsun 1974](#) was leaving the study before the end of therapy. [Nitsun 1974](#) used a mixture of validated (Wing Scale of Schizophrenic Symptoms, Weschler Adult Intelligence Scale, Becker's genetic analysis of the Rorschach, Draw-a-person Body Image Scale, Venables rating scale for activity withdrawal) and invalidated (Global assessment of illness, rating of improvement, quantitative features of performance on Rorschach tests) outcome-rating scales, but unfortunately no standard deviations were reported. Sandler's A test significance levels for the statistically significant results were also too inaccurate to use. [Nitsun 1974](#) also presented some results specific to the value of drama therapy including measures of coordination, imagination, communication and cooperation but unfortunately these were only measured for the drama therapy group and no standard deviations were given. We have attempted to contact the author but have so far been unsuccessful.

[Qu 2000](#) used the Scale for the Assessment of Negative Symptoms (SANS) and the Scale for Assessment of Positive Symptoms (SAPS) before and after therapy and the data given in the paper were usable for the categories assessed in these scales. There was also information on the number of people leaving the study early. [Qu 2000](#) also measured interpersonal relationships, degree of participating behaviour and did a behaviour assessment during the first and third months of therapy but not using standard scales so we did not include this data.

[Zhou 2002](#) used a 'self esteem scale' (SES) and a 'feeling inferior scale' (FIS). It is unclear whether these are validated scales as the reference supporting their use is in Chinese. For completeness we have included the results but they should be viewed with caution as we have no information about either scale. Zhou also had information on the number of people leaving the study early.

5.6.1 Outcome rating scales included in this review

5.6.1.1 Scale for the Assessment of Negative Symptoms (SANS, [Andreasson 1989](#))

SANS is a six-point scale that gives a global rating of the following negative symptoms: alogia, affective blunting, avolition-apathy, anhedonia-asociality, and attentional impairment. Higher scores indicate more symptoms.

5.6.1.2 Scale for the Assessment of Positive Symptoms (SAPS,

Andreason 1989)

SAPS is a six-point scale that gives a global rating for positive symptoms and an individual rating for the following positive symptoms: delusions, hallucinations, bizarre behaviour, positive formal thought disorder. Higher scores indicate more symptoms.

Risk of bias in included studies

1. Randomisation

Nitsun 1974 stated that people were matched into two groups according to age, intelligence and length of hospitalisation. The groups were then randomly assigned to either of the two treatments, but the paper is not explicit how this was undertaken. In Gutride 1973 the acute and chronic participants were identified and then randomly allocated to the groups. Whetstone 1986, Zhou 2002 and Qu 2000 stated they were randomised but the method of randomisation is not explicit.

2. Blindness

Nitsun 1974 stated that the intention was for assessors to be blind to treatment but as the study progressed they realised this was not the case because patients disclosed to them which group they were in. As the patients were all inpatients in the same hospital (some on the same wards) it is unlikely that they were blind to what others were receiving. In Qu 2000 the assessment therapist was blind to the intervention that the participants were receiving but Zhou 2002 doesn't mention blindness. Neither Whetstone 1986 nor Gutride 1973 were blind.

3. Descriptions of people who withdrew before completion

Nitsun 1974 explained that the person who withdrew from the drama therapy group between the third and fourth sessions was a 39 year old female who became very paranoid and refused to come to further sessions. The two people who withdrew from the group therapy group before the end were both males. One refused to attend in the first place despite encouragement and the other who was paranoid withdrew between the second and third sessions. In Qu 2000 and Zhou 2002 no participants withdrew before the end of therapy. This could have been because they were inpatients and the treatment was enforced. Neither Whetstone 1986 nor Gutride 1973 give information about those who withdrew by group before the end of therapy.

4. Overall impression

Currently reports of the studies do not provide reassurance that allocation was fully concealed. Therefore, all studies are categorised as 'B'. Although the assessors were supposed to be blind in Nitsun 1974 and Qu 2000 it is possible that they were told by the participants about the intervention they were receiving. None of the studies included a power calculation so it is not possible to ascertain whether the trials were adequately powered to detect the effects they were looking at.

Effects of interventions

1. COMPARISON: DRAMA THERAPY + STANDARD CARE VS GROUP THERAPY + STANDARD CARE

1.1 Leaving the study early - medium term (Nitsun 1974)

In Nitsun 1974 one person left the drama therapy group before the end compared with two people from the group therapy treatment. This result favours the drama therapy group but is not statistically significant (N=24, RR 0.5 95%CI 0.05 to 4.81, Z =0.6 p=0.55).

2. COMPARISON: PSYCHODRAMA + MEDICATION + INPATIENT STAY VS MEDICATION + INPATIENT STAY

2.1 Leaving the study early - short term (Zhou 2002)

In Zhou 2002 nobody left either group before the end of study (N=24).

2.2 Leaving the study early - medium term (Qu 2000)

In Qu 2000 nobody left either group before the end of the study (N=60).

2.3 Mental state

2.3.1 At the end of therapy (endpoint data, SANS, medium term, high = poor) (Qu 2000)

On this continuous measure of mental state, the psychodrama group (N=30) had an average mean of 32.33 (SD 16.84) and the standard inpatient care group (N=30) had an average mean of 42.33 (SD 11.92). The data is not normally distributed so the results cannot be analysed using parametric tests and are reported in additional data tables, but should be viewed with caution

2.3.2 At the end of therapy (endpoint data, SAPS, medium term, high = poor) (Qu 2000)

On this continuous measure of mental state, the psychodrama group (N=30) had an average mean of 13.43 (SD 17.52) and the standard inpatient care group (N=30) had an average mean of 16.63 (SD 8.70). The data is not normally distributed so the results cannot be analysed using parametric tests and are reported in additional data tables, but should be viewed with caution.

2.4 Self esteem

2.4.1 At the end of therapy (endpoint data, SES, short term, high = good) (Zhou 2002)

On this continuous measure of self esteem, the psychodrama group (N=12) had an average mean of 33.0 (SD 4.0) and the standard inpatient care group (N=12) had an average mean of 29.0 (SD 4.0). The data appears to be normally distributed, although not much is known about the scale. The weighted mean difference (WMD) was 4.0 CI 0.8 to 7.2. There is a significant difference between the groups favouring the psychodrama group (Z =2.45, p=0.01).

2.5 Feelings of inferiority

2.5.1 At the end of therapy (endpoint data, FIS, short term, high = poor) (Zhou 2002)

On this continuous measure of feelings of inferiority, the psychodrama group (N=12) had an average mean of 59.0 (SD 12.0) and the standard inpatient care group (N=12) had an average mean of 76.0 (SD 19.0). The data appears to be normally distributed, although not much is known about the scale. The weighted mean

difference (WMD) was -17.0 CI -29.71 to -4.29. There is a significant difference between the groups favouring the psychodrama group ($Z = 2.62$, $p = 0.009$).

DISCUSSION

1. Strengths and weakness of the review

In this review we make an all too rare attempt to quantify the effects of a treatment approach for people with schizophrenia that is advocated by drama therapists. We have made great efforts to identify randomised studies in order to measure the value of this specialised treatment as objectively as possible. [Nitsun 1974](#), [Gutride 1973](#), [Whetstone 1986](#), [Zhou 2002](#), and [Qu 2000](#) recognised the need for this and have proved that randomisation is possible; this review brings their work to the fore and highlights lessons that future trialists could learn.

Unfortunately only five studies could be included in the review and poor reporting of data has led to further loss of information. It is also likely that two of the studies from which data could be included ([Nitsun 1974](#), [Zhou 2002](#)) are underpowered to find a clinically meaningful effect. Also in [Qu 2000](#) the data is not normally distributed so any findings need to be treated with caution, but could suggest areas for further study. Scales have been used in these hypothesis-generating trials. Significant shifts in scales could suggest clinical meaning that could be tested in a fully powered study.

2. Applicability

It is clear from the description of psychodrama in the two Chinese studies ([Qu 2000](#), [Zhou 2002](#)) that the therapists play a very directive role in defining what is appropriate behaviour in particular situations. Also looking at the lack of dropouts from these studies it might be reasonable to assume that the treatment was compulsory. Both of these factors are very different from the practice of drama therapy in Europe and the US where participants are offered therapy as a choice and are helped to come to their own conclusions about the pros and cons of different behaviours in different scenarios. This means that it is difficult to generalise the results from these studies to western drama therapy but the results have implications for the practice of drama therapy in China. The only study conducted in a Western setting was [Nitsun 1974](#) and the results of this are not available so no conclusions can be drawn about the role of drama therapy in the west. Only [Whetstone 1986](#) gives information about the number of people initially approached to take part in the studies. They found that half of the intervention group refused to participate in the study because role-play was too anxiety provoking. This may suggest that drama therapy may not always be acceptable to people with schizophrenia, but no information is available from the other studies to support this.

3. COMPARISON: DRAMA THERAPY + STANDARD CARE VS GROUP THERAPY + STANDARD CARE

3.1 Leaving the study early - medium term ([Nitsun 1974](#))

In [Nitsun 1974](#) one person left the drama therapy group before the end compared with two people from the group therapy treatment. This was not a significant result and so no conclusions can be drawn about the value of drama therapy over group therapy for keeping people engaged in treatment. The fact that only one person out of 12 dropped out of the drama therapy group could tentatively be taken as evidence for the fact that drama therapy was acceptable to the participants and did not have severe side effects.

4. COMPARISON: PSYCHODRAMA + MEDICATION + INPATIENT STAY VS MEDICATION + INPATIENT STAY

4.1 Leaving the study early - short term and medium term

In [Zhou 2002](#) ($N=24$) and [Qu 2000](#) ($N=60$) nobody left either group before the end of the study. It is difficult to know whether this reflects the acceptability of drama therapy or the fact that the treatment, because of the context, was compulsory.

4.2 Mental state: Skewed endpoint data, SANS & SAPS, medium term

[Qu 2000](#) ($N=60$) suggests that psychodrama as an adjunct to antipsychotic medication and inpatient care has a beneficial effect on improving negative symptoms of schizophrenia but not positive symptoms. The data is intention to treat data but because the results are not normally distributed so little significance should be placed on this result. These results are also only at the end of treatment and it would have been useful to see if the improvement was maintained in the longer term.

4.3 Self esteem: Endpoint data, SES, short term

[Zhou 2002](#) ($N=24$) suggests that psychodrama as an adjunct to antipsychotic medication and inpatient care has a significant beneficial effect on improving self esteem in people with schizophrenia. This data is intention to treat data and normally distributed, but the sample size is low and there is little information available about the scale so the results should be treated with caution and need testing in an adequately powered trial probably with a better known self esteem measure.

4.4 Feelings of inferiority: Endpoint data, FIS, short term

[Zhou 2002](#) ($N=24$) suggests that psychodrama as an adjunct to antipsychotic medication and inpatient care has a highly significant beneficial effect on improving feelings of inferiority in people with schizophrenia. Again, this data is intention to treat data and normally distributed, but the sample size is low and there is little information available about the scale so the results should be treated with caution and need testing in an adequately powered trial probably with a better known measure.

AUTHORS' CONCLUSIONS

Implications for practice

1. For people with schizophrenia

If offered drama therapy, a person with schizophrenia should know that its use is under evaluation and its benefits or harms are, as yet, unclear. The person offered this intervention could suggest that they would comply only in the context of inclusion in real world, evaluative research.

2. For clinicians

If drama therapy is available for people with schizophrenia its use can only be viewed as experimental as it is currently not known whether this approach helps or harms. It is unclear whether drama therapy has any impact on mental state, social functioning, interpersonal relationships, quality of life, self esteem and satisfaction with care.

3. For policy makers

There is no evidence to support the use of drama therapy as part of policy.

4. For funders

Funders with an interest in the projective therapies should support further adequately powered, and designed studies of drama therapy for schizophrenia.

Implications for research

1. General

If the CONSORT recommendations (Moher 2001) were followed in reporting future studies, we would be more aware of the effects of drama therapy. Much important data from one of the included studies was lost due to poor reporting.

2. Specific

As drama therapy is used for people with schizophrenia, large simple, well-designed and reported trials are justified to establish whether it has a role in the treatment of schizophrenia or schizophrenia-like illnesses. All the studies included in this review look at inpatient populations so there is clearly a need for randomised controlled trials addressing the value of drama therapy for people with schizophrenia. We have suggested a design in Table 1.

Researchers may wish to involve more comparable interventions. Some way of compensating for the additional time spent with people and the group cohesiveness generated by allocation to drama therapy may be seen as desirable. A variety of clinically meaningful outcomes are important in future drama therapy studies. For example, clinically significant changes in global functioning, mental state and behaviour, relapse, admission to hospital, engagement with services, quality of life, leaving the study early, satisfaction with care, adverse effects, death and economic outcomes (cost-effectiveness and cost-benefit).

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* Indicates the major publication for the study

CHARACTERISTICS OF STUDIES

Characteristics of included studies *[ordered by study ID]*

Gutride 1973

Methods	Allocation: Divided into acute and chronic groups and then randomly assigned to 2 interventions. Blindness: Neither the participants nor the assessors were blind to the intervention. Duration: 4 weeks	
Participants	Diagnosis: 75% schizophrenia (rest psychotic depression, schizoid personality or inadequate personality) . N= 87 Age: not specified Sex: not specified. History: Inpatients who consistently displayed problems with social interactions. Both acute (N=30, in hospital for less than 1 year and had had no more than 2 prior hospitalisations) and chronic (N=57) patients. Setting: State Hospital, Pennsylvania, USA.	
Interventions	1. Group structured learning therapy designed to enhance social interaction (modeling and role playing social interactions with social reinforcement). 3 times a week for 4 weeks. 12 facilitators who were undergraduates who had completed a 12 hour training. N=45 2. Standard inpatient care and were told that they would receive the training programme in a few weeks but it had been delayed due to equipment failure. N=42 3. Half of each of group 1 and group 2 received individual or group psychotherapy for at least 3 sessions a week	
Outcomes	Unable to use (because no raw data): No of dropouts Psychotic Inpatient Profile Ward Atmosphere Scale FIRO-B Psychiatric Outpatient Mood Scales Standardised observation procedure of patient social interaction. Naturalistic observation of social interaction.	
Notes		
<i>Risk of bias</i>		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Nitsun 1974

Methods	Allocation: Two matched groups randomly assigned to treatment condition. Blindness: Assessors were intended to be blind to allocation, but patients revealed this in interview Duration: 22 weekly sessions.
Participants	Diagnosis: schizophrenia (100%) N=24 Age: mean 38 years (range 25-46 years) Sex: 10 female, 14 male. History: Inpatients hospitalised for a mean of 1 year. Normal intelligence. Setting: Goodmayes Hospital, Essex, UK.
Interventions	1. Drama and movement group therapy. Once a week for 22 weeks. 8 group facilitators including a drama therapist, a drama teacher and 6 auxilliary therapists experienced in movement and drama. N=12. 2. Group psychotherapy (discussion and interpretation) 3 group facilitators, social workers. Once a week for 22 weeks. N=12
Outcomes	Psychiatrist and psychologist interviewed and rated at beginning, middle and end of treatment No. of dropouts: drama N=1, group therapy N=2 Unable to use - Global assessment of illness (7 point rating scale) - not validated and no sds Rating of improvement (9 point rating scale) - not validated and no sds Wing Scale of Schizophrenic symptoms - no sds. Weschler adult intelligence scale - no sds. Rorschach tests - no sds. Draw a person body image scale - no sds. Venables rating scale for activity withdrawal - no sds.
Notes	

Risk of bias

Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Qu 2000

Methods	Allocation: randomised. Blindness: rater blind Duration: 20 weeks (end of therapy).
Participants	Diagnosis: schizophrenia (100%) N=60. Age: 33-60 years Sex: male and female History: Inpatients. Length of illness 9-37years in drama therapy group, 5-39 years in control group. Setting: Beijing Hui Guan Hospital, Beijing, China.

Qu 2000 (Continued)

Interventions	1. Psychodrama therapy for 3 months, 2 hours 5 times a week + standard medications. N=30 2. Standard medications N=30.	
Outcomes	Scale for the assessment of negative symptoms Scale for the assessment of positive symptoms No of dropouts Unable to use: Therapist rated performance scale	
Notes		
Risk of bias		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Whetstone 1986

Methods	Allocation: Randomly assigned Blindness: Not blind Duration: 8 weeks.	
Participants	Diagnosis: N= 15 Age: 20-55 years. Mean age 36.8 years (experimental group) and 39.3 years (control group) Sex: 8m:7f History: chronically mentally ill >4 months hospitalised Setting: Inpatients in state hospital Missouri, USA.	
Interventions	1. Social drama group for 8 weeks, 2 hours a week. Exposed to 12 different social scenarios. Patients asked (in a theatre like setting) to play out the vignette. Role-play was videotaped and then the group provided feedback. N=5 2. Standard inpatient care. N=10	
Outcomes	Unable to use (no raw data): Nurses observation Scale for inpatient evaluation-30 No. of dropouts.	
Notes		
Risk of bias		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Zhou 2002

Methods	Allocation: randomised Blindness: not specified Duration: 4 weeks	
Participants	Diagnosis: schizophrenia (100%) N=24 Age: 18-60 years (mean 33 sd 9 years) History: Inpatients. Length of illness mean 11 sd 9 years. Sex: Male and female Setting: The second affiliated hospital of Ji'ning Medical School, Shadong	
Interventions	1. Psychodrama therapy for 4 weeks, 2 hours 5 times a week + antipsychotic medication N=12. 2. Standard antipsychotic medication N=12.	
Outcomes	Self esteem scale (SES) Feeling of inferiority scale (FIS) No of dropouts	
Notes		
<i>Risk of bias</i>		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Characteristics of excluded studies [ordered by study ID]

Study	Reason for exclusion
Buchkremer 1987	Allocation: not randomised (despite saying in summary it is the participants were invited for a screening talk and either agreed to take part in the treatment or control group. The two treatment groups were formed by matching within the willing participants)
DeCarlo 1985	Allocation: randomised. Participants: included people with schizophrenia. Interventions: activity therapy (finding magazine pictures to represent themselves, designing coat of arms with sections aimed at self disclosure, listening tasks, eye contact game, role plays) versus verbal therapy versus normal day treatment, no intervention consistent with definition of drama therapy
Grodner 1982	Allocation: unclear. Participants: minority of people (7/45) had schizophrenia.
Harrow 1951	Allocation: not randomised (matched groups on various characteristics)
Murow 1997	Allocation: not randomised (just divided sample into 2)

(Continued)

Spencer 1983	Allocation: not randomised (groups matched on their pre-treatment role play performance)
Sturm 1974	Allocation: randomised Participants: most regressed patients on each of the units (from a psychiatric rather than neurological or motivational viewpoint). Excluded because no diagnoses given and it is unclear whether these participants had schizophrenia
Zhou 2004	Allocation: not randomised (participants asked if they wanted to participate and allocated to drama therapy if well enough)

DATA AND ANALYSES

Comparison 1. DRAMA THERAPY + STANDARD INPATIENT CARE versus GROUP THERAPY.

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Leaving the study early	1	24	Risk Ratio (M-H, Fixed, 95% CI)	0.5 [0.05, 4.81]

Comparison 2. INPATIENT STAY + PSYCHODRAMA + MEDICATION versus INPATIENT STAY + MEDICATION

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Leaving the study early - short term	1	24	Risk Ratio (M-H, Fixed, 95% CI)	Not estimable
2 Leaving the study early - medium term	1	60	Risk Ratio (M-H, Fixed, 95% CI)	Not estimable
3 Mental state: Medium term (Skewed endpoint data, various scales, high=poor)			Other data	No numeric data
3.1 SANS			Other data	No numeric data
3.2 SAPS			Other data	No numeric data
4 Self esteem: Short term (Endpoint data, SES, high=good)	1	24	Mean Difference (IV, Fixed, 95% CI)	4.0 [0.80, 7.20]
5 Feelings of inferiority: Short term (Endpoint data, FIS, high=poor)	1	24	Mean Difference (IV, Fixed, 95% CI)	-17.0 [-29.71, -4.29]

ADDITIONAL TABLES

Table 1. Suggested design for trial

Methods	Participants	Interventions	Outcomes	Notes
Allocation: centralised sequence generation with table of random numbers or computer generated code, stratified by severity of illness, se-	Diagnosis: schizophrenia (DSMIV), subtypes and schizoaffective disorder included and numbers in each category clearly reported. N=300.*	1. Drama Therapy: individual and group. N=150 The gold standard of drama therapy set by the British Association of	Quality of life: healthy days. Service outcomes: days in hospital, time attending psychiatric outpatient clinic. Satisfaction with care:	* size of study to detect a 10% difference in improvement with 80% certainty. ** Primary outcome.

Table 1. Suggested design for trial (Continued)

<p>quence concealed until interventions assigned. Blinding: those recruiting and assigning participants, those assessing outcomes, all blind to allocated group. Duration: minimum of 26 weeks.</p>	<p>Age: adults. Sex: men and women. Setting: inpatients and community. History: baseline score on scale such as BPRS or PANSS, stratified by cut-off points into moderate and severe illness</p>	<p>Dramatherapists is: Drama therapy has as its main focus the intentional use of healing aspects of drama and theatre as the therapeutic process. It is a method of working and playing that uses action methods to facilitate creativity, imagination, learning, insight and growth.</p> <p>2. Standard care: the type of care that fits with normal 'custom and practice'. This includes interventions such as medication, hospitalisation, community psychiatric nursing input and day hospital. N=150</p>	<p>patients/carers. Global state**: CGI.*** Mental state: CGI, relapse**. Functioning: engagement with services, leaving the study early. Adverse effects: including mortality. Cognitive function. Economic outcomes: cost-effectiveness and cost-benefit.</p> <p>Some way of compensating for the additional time spent with people and the group cohesiveness generated by allocation to drama therapy may be seen as desirable</p>	<p>*** If scales are used to measure outcome then there should be binary cut off points, defined before study start, of clinically important improvement</p>
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WHAT'S NEW

Last assessed as up-to-date: 13 November 2006.

Date	Event	Description
24 April 2008	Amended	Converted to new review format.

HISTORY

Protocol first published: Issue 3, 2005

Review first published: Issue 1, 2007

Date	Event	Description
14 November 2006	New citation required and conclusions have changed	Substantive amendment

CONTRIBUTIONS OF AUTHORS

Rachel Ruddy and Kim Dent Brown wrote the review.

DECLARATIONS OF INTEREST

Kim Dent-Brown is the Chair of the Research sub-committee of the British Association of Dramatherapists.

SOURCES OF SUPPORT

Internal sources

- Leeds Mental Health Trust, UK.
- Hull and East Riding Community NHS Trust, UK.
- Sheffield Centre for Health and Related Research, UK.
- Academic Unit of Psychiatry and Behavioural Sciences, University of Leeds, UK.

External sources

- No sources of support supplied

NOTES

We are aware that the UK practitioners' spelling of drama therapy is dramatherapy' and that US practitioners use 'drama therapy'. However the editors of the Cochrane Schizophrenia Group have asked us to use 'drama therapy' within this review where the term is not being used as a proper noun (as in the title of an organisation) or in a reference, to conform with the review group's style.

INDEX TERMS

Medical Subject Headings (MeSH)

*Drama; Antipsychotic Agents [therapeutic use]; Hospitalization; Psychodrama [*methods]; Psychotherapy; Randomized Controlled Trials as Topic; Schizophrenia [*therapy]; Schizophrenic Psychology

MeSH check words

Humans