Q10: In individuals with psychotic disorders (including schizophrenia) and bipolar disorders are psychoeducation, family interventions and cognitive-behavioural therapy feasible and effective?

Background

Most studies/reviews carried out on treatment of psychotic disorders (including schizophrenia) and bipolar disorders explore pharmacological interventions. However there is evidence that adjunctive psychological support is crucial to the quality of life, levels of disability and functioning, prevention of relapses, users' and families' satisfaction with care and chances of recovery.

A clear recommendation on psychological support for psychotic and bipolar disorders is necessary for service planning and clinical practice.

Population/Intervention(s)/Comparator/Outcome(s) (PICO)

Population: adults with psychotic disorders (including schizophrenia), and bipolar disorders

Interventions: psychoeducation, cognitive-behavioural therapy, and family interventions

Comparisons: care as usual

Outcomes*:* ***s***ymptoms severity

prevention of relapses

disability and functioning

quality of life

mortality

treatment adherence

users' and families' satisfaction with care.

Cognitive-behavioural therapy (including adherence therapy)

List of the systematic reviews identified by the search process

Jones C et al (2004). Cognitive behavioural therapy for schizophrenia. *Cochrane Database of Systematic Reviews,* (4): CD000524.

NICE (2009). Core interventions in the treatment and management of schizophrenia in primary and secondary care (update). NICE Clinical Guideline 82.

Gonzalez-Pinto A et al (2004). Psychoeducation and cognitive-behavioral therapy in bipolar disorder: an update. *Acta Psychiatrica Scandinavica,* 109:83–90.

PICO table

Serial no.	Intervention/Comparison	Outcomes	Systematic reviews used for GRADE	Explanation
1	Cognitive behavioural therapy /treatment as usual in schizophrenia	Symptoms severity Disability and functioning Quality of life Mortality Treatment adherence	Jones C et al (2004). Cognitive behavioural therapy for schizophrenia. *Cochrane Database of Systematic Reviews,* (4): CD000524.	Mentioned in Smith et al (2007) NICE (2009) does not have forest plots
2	Adherence therapy/treatment as usual in schizophrenia	Symptoms severity Disability and functioning Quality of life Mortality	NICE (2009). Core interventions in the treatment and management of schizophrenia in primary and secondary care (update). NICE Clinical Guideline 82.	

		Treatment adherence		
3	Cognitive behavioural therapy /treatment as usual in bipolar disorder	Symptoms severity Prevention of relapses Disability and functioning Users' and families' satisfaction Quality of life Mortality Treatment adherence	Gonzalez-Pinto A et al (2004). Psychoeducation and cognitive-behavioral therapy in bipolar disorder: an update. *Acta Psychiatrica Scandinavica,* 109:83–90.	Mentioned in Geddes & Briess (2006)

Narrative description of the studies that went into the analysis

Jones et al (2004) included 19 trials. All nineteen trials focused on people with psychosis, whether schizophrenia, delusional disorder or schizoaffective disorder, and all employed operational criteria for diagnoses (DSMIII-R, DSM IV or ICD-10). Many people were reported to have co-morbid mental disorders, such as depression or anxiety disorder. In only one trial was the duration of illness less than five years. Some authors intentionally selected people with medication-resistant symptoms. Participants were aged between 18 and 65. All studies employed a cognitive behavioural intervention in addition to standard care. In all trials, standard care included treatment with antipsychotic medication.

Gonzalez-Pinto et al (2004) did not perform a meta-analysis. In all three included trials, cognitive therapy was adapted for bipolar disorder and included advice on medication compliance, self monitoring of symptoms, establishing routine, and ensuring sufficient sleep to reduce risk of relapse. The first study included in the review (42 outpatients aged 18 years or more with bipolar type I disorder who had experienced at least 1 episode of mania/hypomania or bipolar depression in the preceding 2 years, most taking lithium alone or in combination with another mood stabiliser) compared cognitive therapy versus usual care for 6 months followed by cognitive therapy. It found no significant difference between cognitive therapy and usual care in the proportion of people who relapsed over 6 months, although fewer people receiving cognitive therapy relapsed (1/21 [5%] with cognitive therapy v 2/21 [10%] with usual care; P = 0.06).

Psychoeducation, family interventions and cognitive-behavioural therapy

The second RCT (103 outpatients, aged 18–70 years with bipolar type I disorder not currently suffering from mania or bipolar depression, who had experienced 2 or more mood episodes in the preceding 2 years or 3 episodes in the preceding 5 years, all taking lithium, carbamazepine, or valproate sodium) compared cognitive therapy versus usual care for 1 year. Cognitive therapy was given for 12–18 sessions over the first 6 months, followed by two additional sessions in the following 6 months. The RCT found that cognitive therapy significantly reduced the proportion of people who relapsed over 12 months (21/48 [44%] with cognitive therapy v 36/48 [75%] with usual care; HR 0.40, 95% CI 0.21 to 0.74). The third trial (25 outpatients aged 18–70 years with bipolar type I disorder, not currently suffering from mania or bipolar depression, who had experienced 2 or more mood episodes in the preceding 2 years or 3 episodes in the last 5 years) compared 12–20 sessions of cognitive therapy versus routine care for 6 months. It found that cognitive therapy significantly reduced relapse over 6 months compared with usual care (RR 0.23, CI not reported; P < 0.001, absolute numbers not reported)

NICE (2009)included five trials (N = 649) that investigated the efficacy of adherence therapy.

GRADE tables

Author(s): Corrado Barbui
Date: **2009-09-15**
Question: **Should cognitive behavioural therapy vs standard care be used for schizophrenia?**
Settings:
Bibliography: Jones C et al (2004). Cognitive behavioural therapy for schizophrenia. *Cochrane Database of Systematic Reviews*, (4): CD000524.

Quality assessment							Summary of findings					Importance
							No of patients		Effect		Quality	
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	cognitive behavioural therapy	standard care	Relative (95% CI)	Absolute		
Non-responder rates (medium term)												
2[1]	randomized trials	very serious[2]	no serious inconsistency	no serious indirectness[3]	serious[4]	none	37/63 (58.7%)	52/60 (86.7%)	RR 0.69 (0.55 to 0.86)	269 fewer per 1000 (from 121 fewer to 390 fewer)	⊕OOO VERY LOW	CRITICAL
Non-responder rates (long term)												

[Psychoeducation, family interventions and cognitive-behavioural therapy]

5[1]	randomized trials	serious[5]	serious[6]	no serious indirectness[3]	serious[7]	none	111/176 (63.1%)	113/166 (68.1%)	RR 0.91 (0.74 to 1.11)	61 fewer per 1000 (from 177 fewer to 75 more)	⊕OOO VERY LOW	CRITICAL
quality of life (Better indicated by higher values)												
1[8]	randomized trials	serious[9]	no serious inconsistency	serious[3,10]	very serious[11]	none	20	20	-	MD 9.67 higher (3.22 lower to 22.56 higher)	⊕OOO VERY LOW	IMPORTANT
functioning (Better indicated by lower values)												
1[12]	randomized trials	serious[9]	no serious inconsistency	serious[3,10]	serious[13]	none	66	67	-	MD 1.19 higher (0.19 lower to 4.01 higher)	⊕OOO VERY LOW	CRITICAL
treatment acceptability (total dropouts - short term)												
5[14]	randomized trials	very serious[15]	no serious inconsistency	no serious indirectness[3]	no serious imprecision	none	60/448 (13.4%)	73/363 (20.1%)	RR 0.68 (0.5 to 0.92)	64 fewer per 1000 (from 16 fewer to 101 fewer)	⊕⊕OO LOW	IMPORTANT
treatment acceptability (total dropouts - medium term)												
2[14]	randomized trials	serious[16]	serious[17]	no serious indirectness[3]	serious[4,18]	none	14/62 (22.6%)	4/49 (8.2%)	RR 2.62 (0.4 to 16.96)	132 more per 1000 (from 49 fewer to 1303 more)	⊕OOO VERY LOW	IMPORTANT
treatment acceptability (total dropouts - long term)												
7[14]	randomized trials	very serious[19]	no serious inconsistency	no serious indirectness[3]	serious[7]	none	50/266 (18.8%)	59/257 (23%)	RR 0.80 (0.58 to 1.1)	46 fewer per 1000 (from 96 fewer to 23 more)	⊕OOO VERY LOW	IMPORTANT
Mortality												
3[20]	randomized trials	serious[21]	no serious inconsistency	no serious indirectness[3]	very serious[18]	none	0/332 (0%)	3/240 (1.3%)	RR 0.29 (0.05 to 1.83)	9 fewer per 1000 (from 12 fewer to 10 more)	⊕OOO VERY LOW	IMPORTANT

users' and families' satisfaction (Better indicated by lower values)												
0	no evidence available					none	0	0	-	MD 0 higher (0 to 0 higher)		IMPORTANT

[1] From Analysis 1.5 of Jones et al (2004) Cochrane Review.
[2] One out of two studies has a dropout rate exceeding 30%, and in one study outcome assessment was not blind.
[3] Specific training and supervision requirements, as well as requirements in terms of number of sessions and number of minutes per sessions, are addressed in the recommendation table.
[4] Less than 200 patients were included in the analysis.
[5] In two studies outcome assessment was not blind.
[6] Inspection of forest plot revealed some inconsistency (I-squared = 53%).
[7] Confidence interval ranges from appreciable benefit to no difference.
[8] From Analysis 1.20 of Jones et al (2004) Cochrane review.
[9] Outcome assessment was not blind.
[10] Only one study contributed to the analysis.
[11] Only 40 patients contributed to the analysis, and confidence interval ranges from appreciable benefit to appreciable harm.
[12] From Analysis 1.21 of Jones et al (2004) Cochrane Review.
[13] less than 200 patients were included, wide confidence interval.
[14] From Analysis 1.22 of Jones et al (2004) Cochrane Review.
[15] In three studies outcome assessment was not blind, and in one study dropout rates exceed 30%.
[16] In one study dropout rates exceed 30%.
[17] Inspection of forest plot revealed some inconsistency (I-squared = 60%).
[18] Confidence interval ranges from appreciable benefit to appreciable harm.
[19] In three studies dropout rates exceed 30%, and in four studies outcome assessment was not blind.
[20] From Analysis 1.1 of Jones et al (2004) Cochrane Review.
[21] In two studies outcome assessment was not blind.

Author(s): Corrado Barbui
Date: **2009-09-15**
Question: **Should adherence therapy vs standard care be used for schizophrenia?**
Settings:
Bibliography: NICE (2009). Core interventions in the treatment and management of schizophrenia in primary and secondary care (update). NICE Clinical Guideline 82.

Quality assessment							**Summary of findings**					
							No of patients		**Effect**		**Quality**	**Importance**
No of studies	**Design**	**Limitations**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**adherence therapy**	**standard care**	**Relative (95% CI)**	**Absolute**		

[Psychoeducation, family interventions and cognitive-behavioural therapy]

symptom score (end of treatment) (Better indicated by lower values)												
3[1]	randomized trials	no serious limitations	very serious[2]	no serious indirectness[3]	serious[4]	none	81	68	-	SMD 0.31 lower (1.14 lower to 0.53 higher)	⊕OOO VERY LOW	CRITICAL
symptom score (two yrs FU) (Better indicated by lower values)												
4[1]	randomized trials	serious[5]	serious[6]	no serious indirectness[3]	no serious imprecision	none	254	259	-	SMD 0.19 lower (0.6 lower to 0.23 higher)	⊕⊕OO LOW	CRITICAL
quality of life (Better indicated by lower values)												
2[1]	randomized trials	serious[5]	no serious inconsistency	no serious indirectness[3]	no serious imprecision	none	201	216	-	SMD 0.06 higher (0.13 lower to 0.26 higher)	⊕⊕⊕O MODERATE	IMPORTANT
treatment acceptability (total dropouts - end of treatment)												
4[1]	randomized trials	serious[5]	no serious inconsistency	no serious indirectness[3]	serious[7]	none	33/286 (11.5%)	46/289 (15.9%)	RR 0.73 (0.49 to 1.11)	43 fewer per 1000 (from 81 fewer to 18 more)	⊕⊕OO LOW	IMPORTANT
treatment acceptability (total dropouts - up to 1 yr FU)												
4[1]	randomized trials	serious[5]	serious[8]	no serious indirectness[3]	very serious[9]	none	43/309 (13.9%)	41/308 (13.3%)	RR 0.91 (0.36 to 2.27)	12 fewer per 1000 (from 85 fewer to 169 more)	⊕OOO VERY LOW	IMPORTANT
Mortality												
3[1]	randomized trials	serious[5]	no serious inconsistency	no serious indirectness[3]	very serious[4]	none	1/83 (1.2%)	2/79 (2.5%)	RR 0.60 (0.08 to 4.34)	10 fewer per 1000 (from 23 fewer to 85 more)	⊕OOO VERY LOW	IMPORTANT
functioning (Better indicated by lower values)												
0	no evidence available					none	0	0	-	MD 0 higher (0 to 0 higher)		CRITICAL
users' and families' satisfaction (Better indicated by lower values)												
0	no evidence available					none	0	0	-	MD 0 higher (0 to 0 higher)		IMPORTANT

Psychoeducation, family interventions and cognitive-behavioural therapy

[1] From Appendix 16d of NICE (2009).
[2] Inspection of forest plot revealed that confidence intervals do not overlap (I-squared = 82%).
[3] Specific training and supervision requirements, as well as requirements in terms of number of sessions and number of minutes per sessions, are addressed in the recommendation table.
[4] Less than 200 studies were included, and confidence interval ranges from appreciable benefit to appreciable harm.
[5] In one study outcome assessment was not blind.
[6] Inspection of forest plot revealed that some confidence intervals do not overlap (I-squared = 69%).
[7] Confidence interval ranges from appreciable benefit to no difference.
[8] Inspection of forest plot revealed some heterogeneity (I-squared = 75%).
[9] Less than 100 patients were included, and confidence interval ranges from appreciable benefit to appreciable harm.

Additional information that was not graded

NICE (2009) on CBT:

"Offer cognitive behavioural therapy (CBT) to all people with schizophrenia. This can be started either during the acute phase or later, including in inpatient settings"

NICE (2009) on adherence therapy:

"The current review found no consistent evidence to suggest that adherence therapy is effective in improving the critical outcomes of schizophrenia when compared to any other control"

Family interventions

List of the systematic reviews identified by the search process

Pharoah F et al (2006). Family intervention for schizophrenia. *Cochrane Database of Systematic Reviews,* (4):CD000088.

Justo LP, Soares BG, Calil HM (2007). Family interventions for bipolar disorder. *Cochrane Database of Systematic Reviews,* (4):CD005167.

PICO table

Serial no.	Intervention/Comparison	Outcomes	Systematic reviews used for GRADE	Explanation
1	Family interventions /treatment as usual in schizophrenia	Symptoms severity Disability and functioning Quality of life Mortality Treatment adherence	Pharoah F et al (2006). Family intervention for schizophrenia. *Cochrane Database of Systematic Reviews,* (4):CD000088.	Mentioned in Smith et al (2007) NICE (2009) does not have forest plots. Pilling S et al (2002). Psychological treatments in schizophrenia: I. Meta-analysis of family interventions and cognitive behaviour therapy. *Psychological Medicine,* 32:763-82. (excluded because it included all-types of family-based psychosocial interventions)
2	Family interventions/treatment	Symptoms severity	Justo LP, Soares BG, Calil HM (2007). Family interventions for	See also the profile for psychoeducation for family-

	as usual in bipolar disorder	Disability and functioning Quality of life Mortality Treatment adherence	bipolar disorder. *Cochrane Database of Systematic Reviews,* (4):CD005167.	focused psychoeducation and education in bipolar disorder

Narrative description of the studies that went into the analysis

Pharoah et al (2006) included trials that were described as 'randomized'. Hogarty (1997), however, allocated the intervention by a quasi-random method ('on alternate weeks or months') determined before patients were admitted. The demographic data suggests that this process resulted in evenly balanced groups so data are presented, although the data must be viewed with great caution. Length of treatment varied between six weeks (Bloch et al, 1995; Goldstein et al, 1978) and three years (Hogarty, 1997). Wang et al (2006) followed up participants for ten years. Participants in all included trials (except Szmukler et al (2003) and Leavey et al, 2004) had a diagnosis of schizophrenia or schizoaffective disorder. Overall, the age of participants ranged from 16 to 80 years old. Of those studies which reported the sex of the participants, most included both men and women. All participants received family interventions and some had an educational component. Thirteen trials included family therapy in the presence of patients, whilst eight restricted the groups to relatives. Overall, the main aim of the family-based interventions was to improve family atmosphere and reduce relapse of schizophrenia. Eleven studies either used less than five family intervention sessions or failed to report on the number of sessions given. The control groups were all given standard care or usual level of care that involved pharmacological interventions.

Justo et al (2007) investigated the effectiveness of any psychosocial family intervention for people with bipolar disorder and/or their families and carers. Seven randomized controlled trials (393 participants) were included in the review, all of which evaluated psychoeducational interventions. Five studies compared family interventions against no treatment, and three studies compared one type or delivery of family intervention against another family intervention. Differences in the interventions, outcome measures and end points used in the trials did not allow performing a meta-analysis. Whilst results from individual studies did not suggest a significant effect for family interventions when added to drug therapy, the studies provide insufficient evidence to draw conclusions which can be generalised to everyday practice.

GRADE tables

Psychoeducation, family interventions and cognitive-behavioural therapy

Question: Should family interventions vs standard treatment be used for schizophrenia?
Settings:
Bibliography: Pharoah F et al (2006). Family intervention for schizophrenia. *Cochrane Database of Systematic Reviews*, (4):CD000088.

Quality assessment							Summary of findings					
							No of patients		Effect		Quality	Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	family interventions	strandard treatment	Relative (95% CI)	Absolute		
relapse (hospital admission - 12 months)												
8[1]	randomized trials	very serious[2]	no serious inconsistency	no serious indirectness[3]	no serious imprecision	none	91/264 (34.5%)	90/216 (41.7%)	RR 0.78 (0.62 to 0.99)	92 fewer per 1000 (from 4 fewer to 158 fewer)	⊕⊕OO LOW	CRITICAL
global state (relapse - 12 months)												
16[4]	randomized trials	serious[2]	serious[5]	no serious indirectness[3]	no serious imprecision	none	149/446 (33.4%)	191/411 (46.5%)	RR 0.71 (0.6 to 0.83)	135 fewer per 1000 (from 79 fewer to 186 fewer)	⊕⊕OO LOW	CRITICAL
global state (relapse - 24 months)												
6[4]	randomized trials	serious[2]	serious[5]	no serious indirectness[3]	no serious imprecision	none	104/184 (56.5%)	111/164 (67.7%)	RR 0.82 (0.68 to 0.98)	122 fewer per 1000 (from 14 fewer to 217 fewer)	⊕⊕OO LOW	CRITICAL
functioning (Better indicated by higher values)												
3[6]	randomized trials	serious[2]	serious[5]	no serious indirectness[3]	no serious imprecision	none	49	41	-	MD 8.05 higher (2.83 to 13.27 higher)	⊕⊕OO LOW	CRITICAL
treatment acceptability (total dropouts)												
23[2,7]	randomized trials	serious[8]	serious[5]	no serious indirectness[3]	no serious imprecision	none	125/888 (14.1%)	141/835 (16.9%)	RR 0.84 (0.68 to 1.04)	27 fewer per 1000 (from 54 fewer to 7 more)	⊕⊕OO LOW	IMPORTANT
mortality (suicide)												

7[9]	randomized trials	serious[2]	no serious inconsistency	no serious indirectness[3]	very serious[10]	none	8/209 (3.8%)	9/168 (5.4%)	RR 0.79 (0.35 to 1.78)	11 fewer per 1000 (from 35 fewer to 42 more)	⊕OOO VERY LOW	IMPORTANT
mortality (any cause except suicide)												
4[9]	randomized trials	serious[2]	no serious inconsistency	no serious indirectness[3]	very serious[10]	none	3/100 (3%)	2/76 (2.6%)	RR 0.78 (0.19 to 3.11)	6 fewer per 1000 (from 21 fewer to 56 more)	⊕OOO VERY LOW	IMPORTANT
quality of life (Better indicated by lower values)												
0	no evidence available					none	0	0	-	MD 0 higher (0 to 0 higher)		IMPORTANT
users' and families' satisfaction (Better indicated by lower values)												
0	no evidence available					none	0	0	-	MD 0 higher (0 to 0 higher)		IMPORTANT

[1] From Analysis 1.2 of Pharaoh et al (2006) Cochrane Review.
[2] In the majority of included studies outcome assessment was not blind. In one trial dropout rates exceed 30%.
[3] Specific training and supervision requirements, as well as requirements in terms of number of sessions and number of minutes per sessions, are addressed in the recommendation table.
[4] From Analysis 1.5 of Pharaoh et al (2006) Cochrane Review.
[5] Inspection of forest plot revealed some heterogeneity.
[6] From Analysis 1.22 of Pharaoh et al (2006) Cochrane Review.
[7] From Analysis 1.17 of Pharoah et al (2006) Cochrane Review.
[8] In the majority of studies outcome assessment was not blind.
[9] From Analysis 1.20 of Pharoah et al (2006) Cochrane Review.
[10] Confidence interval ranges from appreciable benefit to appreciable harm.

Additional information that was not graded

NICE (2009) on Schizophrenia:

"Offer family intervention to all families of people with schizophrenia who live with or are in close contact with the service user. This can be started either during the acute phase23or later, including in inpatient settings. Family intervention should:

• include the person with schizophrenia if practical

• be carried out for between 3 months and 1 year

• include at least 10 planned sessions

• take account of the whole family's preference for either single-family intervention or multi-family group intervention

• take account of the relationship between the main carer and the person with schizophrenia

• have a specific supportive, educational or treatment function and include negotiated problem solving or crisis management work. "

"With regards to the training and competencies required by the therapist to deliver family intervention to people with schizophrenia and their carers, there was a paucity of information reported throughout the trials. Consequently, the GDG were unable to from any conclusions or make any recommendations relating to practice. However, the GDG acknowledge that the training and competencies of the therapist is an important area, and one that warrants further research."

NICE (2006) on Bipolar Disorder:

"Healthcare professionals should consider offering a focused family intervention to people with bipolar disorder in regular contact with their families, if a focus for the intervention can be agreed. The intervention should take place over 6–9 months, and cover psychoeducation about the illness, ways to improve communication and problem solving."

Psychoeducation

List of the systematic reviews identified by the search process

Pekkala ET, Merinder LB (2002). Psychoeducation for schizophrenia. *Cochrane Database of Systematic Reviews*, (2):CD002831.

Gonzalez-Pinto A et al (2004). Psychoeducation and cognitive-behavioral therapy in bipolar disorder: an update. *Acta Psychiatrica Scandinavica,* 109:83–90.

PICO table

Serial	Intervention/Comparison	Outcomes	Systematic reviews	Explanation

no.				
1	Psychoeducation /treatment as usual in schizophrenia	Symptoms severity Disability and functioning Quality of life Mortality Treatment adherence	Pekkala ET, Merinder LB (2002). Psychoeducation for schizophrenia. *Cochrane Database of Systematic Reviews*, (2):CD002831. (GRADED)	Mentioned in Smith et al (2007) NICE (2009) does not have forest plots.
2	Psychoeducation /treatment as usual in bipolar disorder	Symptoms severity Disability and functioning Quality of life Mortality Treatment adherence	Gonzalez-Pinto A et al (2004). Psychoeducation and cognitive-behavioral therapy in bipolar disorder: an update. *Acta Psychiatrica Scandinavica,* 109:83–90. **(NOT GRADED)**	Geddes & Briess (2006) identified no systematic reviews

Narrative description of the studies that went into the analysis

Pekkala & Merinder (2002) included only randomized controlled trials. The means of randomization was not usually described. Blinding was not reported in four studies. Study duration varied from one month to two years. The total number of participants was 1125, and their ages ranged from 15 to 58 years. All studies reported gender. The studies included 598 male and 527 female participants. All trials, except two, involved outpatients. In one study the education (counseling) started at discharge. Most trials involved stabilized patients and one explicitly stipulated stabilization as an inclusion criterion. The mean duration of illness where reported, ranged between studies from 6.3 or 9-14 years to at least 12 years in institutions. Interventions were divided into individual and group interventions.

Psychoeducation, family interventions and cognitive-behavioural therapy

All studies of group education included family members. Only Macpherson et al (1996) was classified as using a brief individual intervention (1-10 sessions). No studies could be included in the individual standard (11 or more sessions) group. There were six studies using brief group interventions and four studies using standard length group interventions. Tarrier et al (1988) used both a brief and a standard group intervention. The psychoeducational interventions had many different names. Some were called informational, psychoeducational medication management or counseling sessions, others symbolic behavioural (Tarrier et al, 1988), family intervention, or programme for relapse prevention. Standard care was routine or standard treatment or treatment as usual, standard psychopharmacological treatment, psychosocial rehabilitation efforts, or supportive psychotherapy.

The systematic review carried out by Gonzalez-Pinto et al (2004) did not conduct a meta-analysis. The first trial included in the review (69 outpatients with bipolar disorder who had relapsed in the previous year) compared an educational programme to recognise symptoms of relapse versus treatment as usual over 18 months. It found that people in the educational programme were significantly less likely to suffer a manic relapse over 18 months compared with people receiving usual care (9/33 [27%] with educational programme *v* 20/35 [57%] with usual care; RR 0.48, 95% CI 0.25 to 0.86; NNT 4, 95% CI 2 to 16), but may have been more likely to suffer from a depressive episode (18/33 [55%] with educational programme *v* 13/35 [37%] with usual care; RR 1.47, 95% CI 0.87 to 2.54), although the difference was not significant. It found that, compared with usual care, the educational programme significantly improved social function from baseline at 18 months (measured on a 4-point scale assessing 8 areas of social activity, where 0 = fair/good performance and 4 = inability to carry out function; mean difference in score 1.97, 95% CI 0.71 to 3.23). The second RCT identified by the review compared group psychoeducation plus standard pharmacological treatment versus non-structured group meetings plus standard pharmacological treatment (control) for 14 weeks. It found that the psychoeducational intervention significantly reduced recurrence at 2 years compared with control (single blind RCT, 120 people in remission with bipolar type I or type II disorder; recurrence during treatment: 38% with psychoeducation *v* 60% with control, P = 0.01; recurrence during follow-up: 67% with psychoeducation *v* 92% with control, P < 0.001).

GRADE tables

Author(s): Corrado Barbui
Date: **2009-09-16**
Question: **Should psychoeducation vs standard treatment be used for schizophrenia?**
Settings:
Bibliography: Pekkala ET, Merinder LB (2002). Psychoeducation for schizophrenia. *Cochrane Database of Systematic Reviews*, (2):CD002831.

Quality assessment	Summary of findings	Importance

[Psychoeducation, family interventions and cognitive-behavioural therapy]

							No of patients		Effect		Quality	
No of studies	**Design**	**Limitations**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**psychoeducation**	**standard treatment**	**Relative (95% CI)**	**Absolute**		
relapse (up to 18 months)												
6[1]	randomized trials	serious[2]	serious[3]	no serious indirectness[4]	no serious imprecision	none	176/383 (46%)	192/337 (57%)	RR 0.80 (0.70 to 0.92)	114 fewer per 1000 (from 46 fewer to 171 fewer)	⊕⊕OO LOW	CRITICAL
treatment acceptability (total dropouts)												
8[5]	randomized trials	very serious[6]	no serious inconsistency	no serious indirectness[4]	no serious imprecision	none	111/428 (25.9%)	86/360 (23.9%)	RR 1.13 (0.89 to 1.44)	31 more per 1000 (from 26 fewer to 105 more)	⊕⊕OO LOW	IMPORTANT
disability and functioning (Better indicated by lower values)												
0	no evidence available					none	0	0	-	MD 0 higher (0 to 0 higher)		IMPORTANT
quality of life (Better indicated by lower values)												
1[7]	randomized trials	serious[8]	no serious inconsistency	serious[4,9]	no serious imprecision	none	51	57	-	MD 9.70 lower (17.22 to 2.18 lower)	⊕⊕OO LOW	IMPORTANT
Mortality												
2[10]	randomized trials	very serious[11]	no serious inconsistency	no serious indirectness[4]	very serious[12]	none	1/91 (1.1%)	2/79 (2.5%)	RR 0.53 (0.07 to 3.5)	12 fewer per 1000 (from 24 fewer to 63 more)	⊕OOO VERY LOW	IMPORTANT
users' and families' satisfaction (Better indicated by lower values)												
0	no evidence available					none	0	0	-	MD 0 higher (0 to 0 higher)		IMPORTANT

[1] From Analysis 1.3 of Pekkala & Merinder (2002) Cochrane Review.
[2] In three studies dropout rates exceed 30%, and in two studies outcome assessment was not blind.
[3] Inspection of forest plot revealed some heterogeneity (I-squared = 54%).
[4] Specific training and supervision requirements, as well as requirements in terms of number of sessions and number of minutes per sessions, are addressed in the recommendation table.
[5] From Analysis 1.12 of Pekkala & Merinder (2002) Cochrane Review.

[6] In three studies dropout rates exceed 30%, and in three studies outcome assessment was not blind.
[7] From Analysis 1.15 of Pekkala & Merinder (2002) Cochrane Review.
[8] Outcome assessment was not blind.
[9] Only one study contributed to the analysis.
[10] From Analysis 1.5 of Pekkala & Merinder (2002) Cochrane Review.
[11] The two included trials have dropout rates exceeding 30%, and in one out of two studies outcome assessment was not blind.
[12] Less than 200 patients were included, and confidence interval ranges from appreciable benefit to appreciable harm.

Additional information that was not graded

NICE (2009) on Schizophrenia:

"There is clearly an overlap between good standard care and psychoeducation, and between psychoeducation and family intervention. The evidence found for the update does not justify making a recommendation. However, the GDG acknowledge the importance of the provision of good quality and accessible information to all people with schizophrenia and their carers, and have hence made a number of related recommendations."

NICE (2006) on Bipolar Disorder:

Individual structured psychological interventions should be considered for people with bipolar disorder who are relatively stable, but may be experiencing mild to moderate affective symptoms. The therapy should be in addition to prophylactic medication, should normally be at least 16 sessions (over 6–9 months) and should:

• include psychoeducation about the illness, and the importance of regular daily routine and sleep and concordance with medication

• include monitoring mood, detection of early warnings and strategies to prevent progression into full-blown episodes

• enhance general coping strategies.

Healthcare professionals should consider offering befriending to people who would benefit from additional social support, particularly those with chronic depressive symptoms. Befriending should be in addition to drug and psychological treatments, and should be by trained volunteers providing, typically, at least weekly contact for between 2 and 6 months.

World Health Organization (1996). Psychosocial rehabilitation – a consensus statement. Geneva: World Health Organization.

Psychoeducation, family interventions and cognitive-behavioural therapy

"Psychological support represents an important framework in which PSR (psychosocial rehabilitation) has to be undertaken. Regardless of the specific techniques employed, intensive and continuing psychological support to patients and to their families, including education, is widely accepted as a key component of PSR (psychosocial rehabilitation) programmes. Self-help groups for relatives of long-term patients have also been proved to be an effective strategy. The psychological support should also include information about consumers' and families' rights, and availability of psychosocial resources" (p.4 and 5).

Kulhara P et al (2009). Psychoeducational intervention for caregivers of Indian patients with schizophrenia: a randomized-controlled trial. Acta Psychiatrica Scandinavica.119:472-83.

This study attempted to evaluate the impact of a structured psychoeducational intervention for schizophrenia, compared with standard out-patient treatment, on various patient- and caregiver-related parameters (disability levels, caregiver-burden, caregiver-coping, caregiver-support and caregiver-satisfaction), evaluated at baseline and upon completion. Structured psychoeducational intervention was significantly better than routine out-patient care on several indices including psychopathology, disability, caregiver-support and caregiver-satisfaction. The psychoeducational intervention package used was simple, feasible and not costly. The study concludes that structured psychoeducational intervention is a viable option for treatment of schizophrenia even in developing countries like India.

Ran MS et al (2003). Effectiveness of psychoeducational intervention for rural Chinese families experiencing schizophrenia—a randomized controlled trial. Social Psychiatry and Psychiatric Epidemiology, 38:69-75.

This cluster randomized controlled trial of psychoeducational family intervention for families experiencing schizophrenia (326 cases) showed a gain in knowledge, a change in the relatives' caring attitudes towards the patients, and an increase in treatment compliance in the psychoeducational family intervention group (p<0.05, 0.001). Most importantly, the relapse rate over 9 months in this group (16.3 %) was half that of the drug-only group (37.8 %), and just over one-quarter of that of the control group (61.5 %) (p<0.05). Antipsychotic drug treatment and families' attitudes towards patients after the 9-month follow- up were significantly associated with clinical outcome (p<0.05). This large trial shows that psychoeducational family intervention is effective and suitable for psychiatric rehabilitation in Chinese rural communities. It recommends focusing on improving the relatives' recognition of illness, the caring attitude towards the patients, treatment compliance, relapse prevention, and the training of the patients' social functioning.

Agara AJ, Onibi OE (2007). Effects of group psychoeducation (GPE) on compliance with scheduled clinic appointments in a neuro-psychiatric hospital in southwest Nigeria: a randomized control trial (RCT). Annals Academy of Medicines Singapore, 36:272-5.

The aim of this study was to find out the effects of group psychoeducation (GPE) on the scheduled clinic appointments of patients admitted for psychosis and depression after discharge from hospital. Materials and Methods: A randomized controlled trial (RCT) of 4 sessions of GPE delivered while the patients were admitted was conducted and compared to no session of GPE with the usual care (48 patients admitted for psychosis and depression, 23 randomly selected to receive regular medication and care without undergoing GPE - control group- and 25 randomly selected to undergo 4 sessions of GPE before discharge from hospital). Patients in the treatment group were consistently more compliant with scheduled clinic appointments than those in the experimental group (P =

0.0009, DF = 34; t-test at 95% CI). There was also no significant difference in compliance with visits among patients with different diagnoses (treatment group; P= 0.90, DF = 12, experimental group; P= 0.33, DF = 11). The study concludes that GPE is effective in improving patients' compliance with scheduled clinic appointments after discharge for a period of 9 months. Group psychoeducation (GPE) can be used as part of treatment package for all psychiatric diagnoses and it has no age bias.

Bäuml J et al (2006). Psychoeducation: A Basic Psychotherapeutic Intervention for Patients With Schizophrenia and Their Families. Schizophrenia Bulletin, 32 (Supplement 1):S1-S9.

Psychoeducation was originally conceived as a composite of numerous therapeutic elements within a complex family therapy intervention. Patients and their relatives were, by means of preliminary briefing concerning the illness, supposed to develop a fundamental understanding of the therapy and further be convinced to commit to more long-term involvement. Since the mid 1980s, psychoeducation in German-speaking countries has evolved into an independent therapeutic program with a focus on the didactically skilful communication of key information within the framework of a cognitive-behavioural approach. Through this, patients and their relatives should be empowered to understand and accept the illness and cope with it in a successful manner. Achievement of this basic-level competency is considered to constitute an ‘‘obligatory-exercise’’ program upon which additional ‘‘voluntary-exercise’’ programs such as individual behavioural therapy, self-assertiveness training, problem-solving training, communication training, and further family therapy interventions can be built. Psychoeducation looks to combine the factor of empowerment of the affected with scientifically founded treatment expertise in as efficient a manner as possible. A randomized multicenter study based in Munich showed that within a 2-year period such a program was related to a significant reduction in rehospitalization rates from 58% to 41% and also a shortening of intermittent days spent in hospital from 78 to 39 days. Psychoeducation, in the form of an obligatory-exercise program, should be made available to all patients suffering from a schizophrenic disorder and their families.

Li Z, Arthur D (2005). Family education for people with schizophrenia in Beijing, China: randomized controlled trial. British Journal of Psychiatry, 187:339-45.

This longitudinal experimental study examined the effect of patient and family education in a sample of Chinese people with schizophrenia. A randomized controlled trial was conducted in a large hospital with a sample of 101 patients with schizophrenia and their families. The intervention group received family education. There was a significant improvement in knowledge about schizophrenia in the experimental group and a significant difference in symptom scores and functioning at 9 months after discharge. Family education on schizophrenia by nurses in China was effective in promoting improvement in patients’ symptoms.

References

Agara AJ, Onibi OE (2007). Effects of group psychoeducation (GPE) on compliance with scheduled clinic appointments in a neuro-psychiatric hospital in southwest Nigeria: a randomized control trial (RCT). *Annals Academy of Medicines Singapore,* 36:272-5.

Bäuml J et al (2006). Psychoeducation: A Basic Psychotherapeutic Intervention for Patients With Schizophrenia and Their Families. *Schizophrenia Bulletin,* 32 (Supplement 1):S1-S9.

Bloch S et al (1995). Counselling caregivers of relatives with schizophrenia: themes, interventions and caveats. *Familiy Process,* 34:413-35.

Geddes J, Briess D (2006). Bipolar Disorder. *BMJ Clinical Evidence (Online 2007),* 08:1014.

Goldstein MJ et al (1978). Drug and family therapy in the aftercare of acute schizophrenics. *Archives of General Psychiatry,* 35:1169-77.

Gonzalez-Pinto A et al (2004). Psychoeducation and cognitive-behavioral therapy in bipolar disorder: an update. *Acta Psychiatrica Scandinavica,* 109:83–90.

Hogarthy GE et al (1997). Three-year trial of personal therapy among schizophrenic patients living with or independent of family. I: Description of study and effects of relapse rates. *American Journal of Psychiatry,* 154:1504-15.

.Jones C et al (2004). Cognitive behavioural therapy for schizophrenia. *Cochrane Database of Systematic Reviews,* (4): CD000524.

Justo LP, Soares BG, Calil HM (2007). Family interventions for bipolar disorder. *Cochrane Database of Systematic Reviews,* (4):CD005167.

Kulhara P et al (2009). Psychoeducational intervention for caregivers of Indian patients with schizophrenia: a randomized-controlled trial. *Acta Psychiatrica Scandinavica.*119:472-83.

Leavey G (2004). A randomized controlled trial of a brief intervention for families of patients with a first episode of psychosis. *Psychological Medicine,* 34:423-31.

Li Z, Arthur D (2005). Family education for people with schizophrenia in Beijing, China: randomized controlled trial. *British Journal of Psychiatry,* 187:339-45.

Macpherson R, Jerrom B, Hughes A (1996). A controlled study of education about drug treatment in schizophrenia. *British Journal of Psychiatry,* 168:709-17.

NICE (2006). Bipolar disorder. The management of bipolar disorder in adults, children and adolescents, in primary and secondary care. National Clinical Practice Guideline Number 38.

NICE (2009). Core interventions in the treatment and management of schizophrenia in primary and secondary care (update). NICE Clinical Guideline 82.

Pekkala ET, Merinder LB (2002). Psychoeducation for schizophrenia. *Cochrane Database of Systematic Reviews*, (2):CD002831.

Pharoah F et al (2006). Family intervention for schizophrenia. *Cochrane Database of Systematic Reviews,* (4):CD000088.

Pilling S et al (2002). Psychological treatments in schizophrenia: I. Meta-analysis of family interventions and cognitive behaviour therapy. *Psychological Medicine,* 32:763-82.

Ran MS et al (2003). Effectiveness of psychoeducational intervention for rural Chinese families experiencing schizophrenia—a randomized controlled trial. *Social Psychiatry and Psychiatric Epidemiology,* 38:69-75.

Smith TE, Weston CA, Lieberman JA (2007). Schizophrenia (maintenance treatment). *BMJ Clinical Evidence (Online 2009),* 04:1007.

Szmukler G et al (2003). An explanatory randomized controlled trial of a support programme for carers of patients with a psychosis. *Social Psychiatry and Psychiatric Epidemiology,* 38:411-8.

Tarrier N et al (1988). The community management of schizophrenia. A controlled trial of a behavioural intervention with families to reduce relapse. *British Journal of Psychiatry,* 153:532-42.

Wang Y, Zhang HW, Yue DC (2006). The effect of family intervention in first onset schizophrenia patients during remission. *Medical Journal of Chinese People's Health,* 18:1065-6.

World Health Organization (1996). Psychosocial rehabilitation – a consensus statement. Geneva: World Health Organization.

From evidence to recommendations

Factor	Explanation
Narrative summary of the evidence base	There is evidence suggesting that psychoeducation has a positive effect on symptoms reduction in individuals with schizophrenia. In individuals with bipolar disorders the evidence is still limited, and so it is not possible to determine if psychoeducation has a positive effect. There is some evidence suggesting that cognitive-behavioural therapy (CBT) has a positive effect on symptoms reduction in individuals with schizophrenia. The evidence for adherence therapy is inconclusive. In individuals with bipolar disorders the evidence is still limited, and so it is not possible to determine if cognitive-behavioural therapy has a positive effect. Family interventions, which are often based on CBT and/or psychoeducation, improves outcomes in family members/caregivers (satisfaction with care) and in users with psychotic disorders. In individuals with bipolar disorders the evidence is still limited, and so it is not possible to determine if family interventions have a positive effect.
Summary of the quality of evidence	The quality of the evidence available is LOW.
Balance of benefits versus harms	Studies show possible benefits for people with psychotic disorders (including schizophrenia) and bipolar disorders who receive psychological support in addition to treatment as usual. No significant harm has been reported. It should be emphasised that there is an overlap between good standard care and psychoeducation, and between psychoeducation and family intervention.
Values and preferences including any variability and human rights issues	Communities and the society value psychosocial interventions, which also improve social inclusion and quality of life of people with mental disorders and their family members/caregivers, reduce disability and prevent human rights violations.
Costs and resource use and any other relevant feasibility issues	The costs and resource use is not uniform across different types of interventions for psychological support. Some interventions (e.g. cognitive behavioural therapy) are highly specialized and resource intensive, requiring substantial training of the providers, therefore less feasible at primary and secondary care levels; some others (e.g. psychoeducation) can be brief, inexpensive

	and not requiring highly specialized training. Involvement of the family in intervention programmes for psychological support of people with psychotic and bipolar disorders and their family members/caregivers are crucial to their sustainability.

Recommendation(s)

Psychoeducation should be routinely offered to individuals with psychotic disorders (including schizophrenia) and bipolar disorders and their family members/caregivers.
Strength of recommendation: STRONG

For individuals with psychotic disorders (including schizophrenia) and bipolar disorder, cognitive behavioural therapy and family interventions can be considered as an option if adequate trained professionals are available. Professionals delivering these interventions should have an appropriate level of competence and, wherever possible, be regularly supervised by the relevant specialists. These interventions should be continued as long as needed by the user and his/her family and therefore should be planned and developed in a sustainable way. Individuals and families should be actively involved in the design, implementation and evaluation of these interventions in coordination with health and social professionals.
Strength of recommendation: STANDARD

Any additional remarks

Generating more evidence on:

- the long term sustainability/effects of psychological support for people with psychotic disorders and their families/caregivers;

- the impact of users and families active involvement on the efficacy and cost-effectiveness of different forms of psychological support;

- with special attention to under researched areas, i.e. psychotherapy and bipolar disorders.

Update of the literature search – June 2012

In June 2012 the literature search for this scoping question was updated. The following systematic reviews were found to be relevant without changing the recommendation:

Justo L, Soares BGDO, Calil H. Family interventions for bipolar disorder. Cochrane Database of Systematic Reviews 2007, Issue 4. Art. No.: CD005167. DOI: 10.1002/14651858.CD005167.pub2

Xia J, Merinder LB, Belgamwar MR. Psychoeducation for schizophrenia. Cochrane Database of Systematic Reviews 2011, Issue 6. Art. No.: CD002831. DOI: 10.1002/14651858.CD002831.pub2.