# Appendix Table E-11. Data abstraction of randomized controlled trials of family interventions

| **Author, Year** | **Setting****Country** | **Inclusion Criteria** | **Interventions and****Ns per Group** | **Description of Intervention** | **Description of Comparator** |
| --- | --- | --- | --- | --- | --- |
| Dyck, 2000 | Large community health center in Spokane, Washington | Diagnosis of schizophrenia or schizoaffective disorder, 18-45 years of age, enrollment in a community outpatient facility in Spokane, residence with family of origin or regular contact with family, patients with either a history of substance abuse or current substance abuse were not excluded | Multifamily group: n=64Standard care: n=31 | Patients assigned to multiple-family group treatment received standard care plus the group treatment. Multiple-family group treatment was intended to improve illness management, social support, and coping skills for the patient and family members. The approach was based on the previous research reported by McFarlane and colleagues. Treatment interventions were designed to educate the family and patients about the biological underpinnings of schizophrenia and engage them in the treatment process by using a standardized protocol of videotapes, lecture, and written guidelines. Treatment compoents including ongoing support, formal clinical problem solving, and expansion of social support networks. | Patients assigned to standard care received usual services, including medication management, case management, and, for some patients, therapeutic and rehabilitation services. A treatment team consisting of a case manager, a nurse, a psychiatrist, and a social worker delivered the mental health services. The team provided clinical case management services and out-of-facility services as needed. |
| Garety 2008 | Multicenter trialin UK | Diagnosis of non-affective psychosis, age18-65, psychotic episode starting not more than 3 months before entering trial, rate of at least 4 on PANSS | Family intervention:n=28Usual care: 27 | Family intervention emphasizedimproving communication, offering discussion of up-to-date information about psychosis, problem-solving, reducing criticism and conflict, improving activity, and the emotional processing of grief, loss and anger. There was a particular focus on relapse prevention, including how family members might understand warning signs and agree on appropriated intervention, including medication | Usual care |

| **Author, Year** | **Duration** | **Age Gender Race/Ethnicity** | **Other Population****Characteristics** | **Total N** | **Benefits Outcomes** | **Harms Outcomes** | **Funding** | **Quality****Rating** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Dyck, 2000 | 2 years | MFG vs. Usual CareAge, mean years: 33, 30% male: 72, 74White, %: 94, 97 | MFG vs. Usual careprevious Lifetime hospitalizations, mean: 5, 5Comorbid SUD %: 45, 50  | 63 | MFG vs. Usual care: MSANS baseline 7.9, 8.7 Months 1-3: 7.4, 9.1Months 4-6: 7.2, 8.9 Months 7-9: 7.2, 8.9 Months 10-12: 7.2, 8.4 | Not reported | Grand NIMH | Poor |
| Garety 2008 | 9 months | FI vs. usual care:Age, mean, years:35, 38.6% Male: 71, 68% White: 86, 82 | FAI vs. usual care:% Employed: 11,14 % Unemployed:71, 71 | 56 + 27 inCBT group which is not included | FI vs. usual care:Mean difference in change scores:Total PANSS at 12 months: -6.44 (-14.12 to 1.24)Total PANSS at 24 months:-6.25 (-14.77 to 2.28) Negative PANSS at 12 months: -2.42 (-5.18 to 0.35) Negative PANSS at 24 months: -1.32 (-4.42 to 1.78) BAI at 12 months:-0.42 (-6.97 to 6.13) BAI at 24 months:-2.36 (-9.13 to 4.40) BDI at 12 months:3.35 (-2.46 to 9.34) BDI at 24 months:-0.11 (-6.91 to 6.68) EuroQol at 24 months:-7.38 (-22.07 to 7.31) | Not reported | WelcomeTrust Programme Grant | Good |

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| --- | --- | --- | --- | --- | --- |
| Kopeolwicz2012 | Two communitymental health centers in Los Angeles, California | Diagnosis of schizophrenia orschizoaffective disorder, 18-50 years of age, of Mexican origin and spokeSpanish fluently, history of nonadherence (had been without antipsychotic medication without medical authorization for 1 continuous week in the month prior to study enrollment), lived with theirfamily of origin, had at least 1 family member willing to participate in the family treatment | MFG-A, n=64MFG-S, n=54Usual care, n=60 | Culturally adapted, multifamily group therapy based on McFarlane's model that combines psychoeducation and skills training. MFG-S consisted of 3 initial "joining sessions" conducted separately with each family, a 6 hour "survival skills" educational workshop, and multifamily group sessions. Modified therapy in the MFG-A arm was to target improved adherence using principles of the Theory of Planned Behavior. MFG arms convened twice monthly in 90 minute sessions. | All study participants received treatment as usual. Rigid medication protocols were not used. Patients received all services as needed from the Mental Health Department of Los Angeles County. After inpatient discharge, patients received a psychiatric evaluation and medication, and if clinically stable, received monthly 20-minute sessions. If patients needed additional services or rehospitalization, that was accommodated. |
| Mayoral, 2015 | Four mentalhealth centersSpain | Age >18 years of age; confirmeddiagnosis of schizophrenia according to the DSM-IV criteria; live with, at least, one relative; understand and speak Spanish; no admission within the6 months prior to the beginning of the study; treatment with antipsychotic drugs; and capacity to sign an informed consent | Family group therapy(n=44)Treatment as usual(n=44) | 24 weekly 60-minute sessions (in homeor at a health center) of practical and role- playing exercises, with modules on disease and treatment, assessment of needs and family relations,communication skills training, and problem facing and solving | Usual care in specialized mentalhealth centers |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Kopeolwicz2012 | Intervention andfollowup: 1 year | MFG-A vs. MFG-S vs.usual careAge, mean years: 33,30, 33% male: 67, 68, 61Ethnicity MexicanAmerican, %: 100,100, 100 | MFG-A vs. MFG-Svs. usual care% inpatient at entry:88, 83, 84Age at onset, years:25, 23, 23Lifetime hospitalizations, mean: 5.5, 5.6, 7.1BPRS total score, mean: 87.5, 85.8,81.1 | 178 | BPRS:No differences at baseline among 3 groups, p=0.18No differences at 12 month followup among 3 groups, p=0.32All groups improved significantly at 12 month followup compared to baseline, p<0.001 | Dropped out of treatmentimmediately after undergoing baseline assessments and before engaging in outpatient care: 26% (45/174) overallAttrition (leaving treatment before a 12-month assessment could be made):MFG-A 27% vs. usual care 51%, p=0.007MFG-S 37% vs. usual care 51%, p=0.11 | NationalInstitute of Mental Health | Poor |
| Mayoral, 2015 | Intervention: 12months Followup: 18 months | Family therapy vs.treatment as usual Age, mean years: 30 vs. 30 years% male: 85% vs. 78% Ethnicity: NR | Family therapy vs.usual care Previous admissions, mean:2.83 vs. 2.17Suicide attempts, mean: 1.3 vs. 3.0BPRS total score, mean: 2.07 vs. 2.13 | 88 | Family therapy vs. usual careEnd of treatment (12 months)BPRS total, mean: 1.66 vs. 2.14 (p=0.0046)Hospitalization: 0% vs. 21% (8/38); RR 0.06 (95% CI 0.004 to 1.04)Post-intervention followup (18 months)BPRS total, mean: 1.70 vs. 2.05 (p=0.44) | NR | Spain'sMinistry ofHealth | Fair |

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| Sellwood 2001Sellwood 2007Barrowclough1999 | 2 centersUnited Kingdom | ICD-10 diagnosis of schizophrenia,schizoaffective disorder or delusional disorder of at least 2 years’ duration; at least one relapse of psychotic symptoms leading to in patient admission in the 2 years preceding study entry and a minimum duration of illness of 2 years; aged between 18 and 65 years; at least10 hours of face-to-face contact with a career for each week over the previous month. | Family CBT: n=39Standard care: n=38 | Family CBT: 10 to 20 sessions over 24weeks aimed at delivering problem- solving techniques, cognitive-behavioral intervention for families, and cognitive- behavioral interventions with patients to reduce psychotic symptoms | Standard care: Standard psychiatricmanagement by the clinical team, maintenance neuroleptic medication, monitoring through out-patient and community followup and the care programmed approach to case management. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sellwood 2001Sellwood 2007Barrowlough1999 | 12 months | *Data not stratified by**intervention group* Mean age 36 (SD 10) years35% femaleRace-85% White9% Black6% Southeast Asian | Family CBT vs. standard careMean PANSS:59.10 vs. 53.89Mean score, SocialFunctioning scale:99.61 vs. 101.12Mean score, Global Assessment of Function: 43.00 vs.45.79 | 79 (80%[63/79] included at final followup) | Family CBT vs. standard careOverall symptoms, PANSS, total score: 62.40 (95% CI57.10 to 67.70) vs. 52.32 (47.92 to 56.72); p=0.005; mean change from baseline1.08 (0.99 to 1.17) vs. 0.98 (0.89 to 1.06); p=0.09Relapse: 16% (6/38) vs.49% (19/39)Overall function, Social Functioning scale: 102.93 (SD 10.69) vs. 101.03 (SD11.04); p=NS; mean change from baseline 1.29 vs. 2.42; p=NSOverall function, GAF: 42.67 (SD 10.88) vs. 48.50 (SD8.81); p=0.02; mean change from baseline 1.50 vs. 1.50; p=NS | Not reported | NationalHealth Service Tameside and Glossop Community Priority Care trust | Fair |

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| --- | --- | --- | --- | --- | --- |
| Valencia, 2007 | Single centerMexico | Outpatients age 16 to 50 with DSM-IVschizophrenia; taking antipsychotic medication; clinically stable in terms of psychotic symptoms (PANSS score <60); completed at least 6 years of elementary education; lived with their families and resided in Mexico City or the metropolitan area | SST: n=49Usual care: n=49 | SST: 48 weekly group sessions (75mins/session) composed of seven sequential treatment areas (each area includes a specific set of skills) as follows: (1) symptom management; (2) medicationmanagement; (3) social relations; (4) occupational; (5) money management; (6) couple relations; and (7) family relationsAdditional component of 8 group and 4 individual family therapy sessions for relatives | Usual care: Monthly appointments(20 mins/session) with clinical psychiatrist whocontrolled the prescriptionof their AP medication based upon the assessmentof their psychotic symptoms, checked their medication compliance, recorded their consultation attendance. |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Valencia, 2007 | 1 year | SST vs usual careMean age 30 vs. 30 years30% vs. 15% femaleRace not reported | SST vs. usual careMean age at onset of illness 21 vs. 21 yearsMean duration of illness: 9 vs 9 years Total PANSS: 115.2 (SD 30.5) vs. 107.9 (SD 22.6)Negative PANSS:29.7 (SD 8.5) vs.28.7 (SD 6.3) | 98 | SST vs. usual careOverall symptoms, totalPANSS: 46.9 (SD 14.6) vs.60.4 (SD 18.2); SMD -0.65 (95% CI -1.06 to -0.24) Negative symptoms, PANSS: 13.0 (SD 5.7) vs.17.9 (SD 6.2); SMD -0.82 (95% CI -1.23 to -0.40) Function, GAF: 66.0 (SD8.9) vs. 44.9 (SD 11.6);p<0.001; SMD 2.02 (95% CI1.53 to 2.52)Relapse 5/49 vs.10/49; RR0.50 (95% CI 0.18 to 1.36) Treatment maintenance:88% (43/49) vs. 80% (39/49); RR 1.10 (95% CI0.92 to 1.31) | Not reported | NationalInstitute of Psychiatry Ramón de la Fuente; National Council on Science and Technology | Fair |

**Please see Appendix B. Included Studies for full study references**

CI=confidence interval, MD=mean difference, MFG-A=multifamily group therapy-adherence, MFG-S=multifamily group therapy-standard, SD=standard deviation