Published in final edited form as:

Psychiatr Serv. 2011 November ; 62(11): 1377–1380. doi:10.1176/appi.ps.62.11.1377.

Implementing Interpersonal and Social Rhythm Therapy for Mood Disorders Across a Continuum of Care

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Abstract

Objective—Interpersonal and social rhythm therapy (IPSRT) is an evidence-based psychotherapy for mood disorders. The goal of this quality improvement initiative was to demonstrate feasibility of implementing IPSRT across the continuum of outpatient and inpatient care within an academic medical center.

Methods—A multi-disciplinary work group was convened to implement IPSRT in outpatient (N=48), inpatient (N= 602), and intensive outpatient (N=68) programs of an academic medical center. Quality improvement performance markers (including symptoms and group attendance rates) were collected.

Results—Institutional preference for group treatments required adaptation of IPSRT from an individual to group psychotherapy format. Iterative problem solving and protocol development resulted in models of group IPSRT appropriate for each level of care. Performance outcome markers were favorable, indicating feasibility of implementation.

Conclusions—At a single, multisite, urban, academic medical center, IP-SRT proved a feasible evidence-based psychotherapy for implementation across levels of care in routine practice.

Mood disorders are associated with high levels of disability and morbidity. Evidence-based psychotherapies for these illnesses have been shown to reduce symptoms and improve psychosocial functioning (1). Despite growing efforts to disseminate evidence-based psychosocial treatments for mood disorders, most empirically validated treatments have yet to make the transition to typical practice settings (2).

Interpersonal and social rhythm therapy (IPSRT) is an empirically supported psychotherapy for individuals with bipolar disorder that combines a focus on interpersonal relationships with behavioral interventions designed to regulate timing of daily routines (3). IPSRT

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Disclosures

Dr. Swartz reports receiving honoraria from SciMed and Navigant and receiving royalties from UpToDate. Dr. Frank reports being a member of the advisory board for Servier International and receiving royalties from the American Psychological Association and Guilford Press.

The other authors report no competing interests.

postulates that disordered circadian biology contributes to development and maintenance of psychiatric symptoms and that helping patients to develop more regular routines and social patterns helps regulate underlying circadian abnormalities, thereby reducing symptoms and improving outcomes. In efficacy trials, IPSRT has reduced time to recovery from an episode of depression (4), decreased likelihood of mood episode recurrence (5), and improved psychosocial and occupational functioning (6) among patients with type I or type II bipolar disorder. Implementation of IPSRT in routine practice has not been described previously. This report summarizes the process of implementing IPSRT in a large, multisite, academic medical center across levels of care.

Methods

The implementation process was conceptualized as a continuous quality improvement initiative (7). A multi-disciplinary work group consisting of relevant stakeholders (administrators, treatment researchers, direct-care mental health clinicians from outpatient, inpatient, and intensive outpatient service lines) was convened to use a structured problem-solving approach to develop improvement strategies. This ongoing work group, consisting of approximately ten members, began meeting weekly in July 2006 to identify quality improvement goals, solutions, and performance outcome markers. The goal of the work group was to implement IPSRT within the framework of the institution's standard clinical care procedures across three distinct levels of care, each targeting a different level of patient acuity (outpatient, inpatient, and intensive outpatient). Quality improvement was iterative, whereby the implementation process was modified weekly according to feedback received from the work group. Departmental financial support (specifically, release from other responsibilities or salary support) was provided for faculty and staff who participated in this effort. All procedures were approved by the University of Pittsburgh Medical Center Quality Improvement Review Board.

The primary performance outcome marker in outpatient and intensive outpatient clinics was the Quick Inventory of Depressive Symptomatology–Self-Report, (QIDS-SR), a 16-item self-report measure of depressive symptoms, with total scores ranging from 0 to 27 (higher scores indicate more depressive symptoms) (8). Overall functioning was assessed at baseline with the Global Assessment of Functioning (GAF), which is a 100-point scale with higher scores indicating better functioning (9). On the inpatient unit, the primary performance outcome marker was group attendance rates collected from unit logs. A standardized form was used to collect demographic data via retrospective chart reviews. Linear mixed-effects models were applied to QIDS scores over time, with random intercepts and slopes to account for individual variability. For inpatient data, we used paired t tests to compare group attendance rates six months before and six months after initiating IPSRT.

Results

The work group focused first on implementing IPSRT in the outpatient clinic. Across levels of care in this hospital system, psychotherapy services are preferentially provided in group formats. Although this is especially true in the intensive outpatient and the inpatient programs, implementation of group IPSRT was also prioritized in the outpatient program. Therefore, the first identified barrier to implementation was the fact that IPSRT originally was administered as an individual psychotherapy, and the process of adapting IPSRT to a group format proved challenging: IPSRT consists of social rhythm therapy (SRT), a set of behavioral interventions designed to help patients develop more regular routines, and interpersonal psychotherapy (IPT), a set of affectively focused strategies designed to help patients develop more satisfying relationships. In individual psychotherapy, the therapist moves between IPT and SRT according to the needs of the patient. In the implementation

process, however, therapists found that striking the right balance of IPT and SRT elements for the group was an especially challenging aspect of the group format. Furthermore, the affectively focused approach of the IPT material often seemed in conflict with the psychoeducational approach of the SRT material. The work group addressed the problem by bringing in two external consultants with expertise in group psychotherapy. With their assistance, the decision was made to temporally sequence the SRT and IPT components of treatment in the groups.

In keeping with outpatient clinic therapeutic structure, IPSRT groups met weekly for 12 to 16 sessions of 90 minutes per session. Groups were led by one therapist (early iterations of group meetings were led by two therapists) and were closed—that is, all six to 11 members progressed through the group sessions together, without the addition of new members during the process. A treatment manual was developed to ensure consistency across group leaders.

Table 1 summarizes baseline demographic and clinical information for 48 individuals who participated in six IPSRT outpatient groups from August 20, 2007, to October 12, 2009, with a mean of eight individuals per group (range six to 11). The mean $\pm$ SD GAF score at baseline was 44.8 ± 10.8 . There was a significant decrease in QIDS-SR scores over time among group participants ($\beta = -.07$, $t = -3.58$, $df = 36$, $p = .001$). Least-squares estimates of QIDS-SR scores ranged from 12.5 to 8.4 at 60 days.

The work group next focused on implementing IPSRT in a 15-bed in-patient unit specializing in management of patients with acute episodes of mood disorders. After meeting with inpatient staff, the work group identified the following barriers to implementation of IPSRT on the in-patient unit: heterogeneity of patient diagnoses; limited psychotherapy experience of bachelor's degree-prepared "milieu therapists," who were responsible for running most of the educational and skills enhancement groups on the unit; short treatment duration (average length of stay 15.4 days); and rigidity of inpatient schedules being in conflict with the IPSRT philosophy of giving individualized attention to routines. These issues were addressed as follows: shift of psychoeducation component of IPSRT away from bipolar disorder to a wider range of diagnoses, streamlining of key IPSRT concepts with a focus on social rhythm stabilization so that the intervention could be delivered during brief inpatient stays, and provision of a two-day training session on IPSRT to the entire inpatient staff (including night staff) to increase milieu awareness of IPSRT philosophy, model uptake, and endorsement.

In addition, the intervention was simplified so that it could be delivered by less experienced clinicians. Specifically, the quality improvement work group developed 13 highly structured IPSRT groups, each of which focused on a single IPSRT concept that was easily mastered by a bachelor's-prepared clinician (for example, sleep hygiene and mood). Instructions for groups were clearly explicated in a written manual. Specific goals for each group were identified and followed by detailed objectives that included talking points, activities, and examples. IPT strategies were not used both because of concerns that milieu therapists would be unable to manage affectively charged material evoked by IPT and the belief that inpatients in a highly acute phase of illness would be more likely to benefit from IPT when somewhat less symptomatic (in intensive outpatient and outpatient programs). Experienced IPSRT clinicians (KO and NN) trained milieu therapists by running inpatient groups while milieu therapists observed (demonstration phase). This period was followed by a period when milieu therapists ran group sessions while being observed by IPSRT experts until deemed competent to run group sessions on their own (observation phase). Group sessions were held daily, and topics were rotated. The sessions were open to any patient, and they lasted for one hour.

Milieu-wide IPSRT interventions were developed in addition to daily IPSRT group sessions. The Social Rhythm Metric (SRM) (10), an instrument used in IPSRT to track the regularity of social routines, was altered for use with individuals in the hospital setting. Upon arrival to the unit, patients were oriented to the SRM and given a workbook that was developed by the work group to provide self-directed IPSRT exercises. A daily SRM-related goal was elicited from each patient (such as “take no naps” or “attend at least three activities”) at the unit-wide morning meeting. At the evening meeting, patients discussed progress toward daily SRM goals and identified a personal wakeup time goal for the next morning. Individual wake-up time goals were posted on patient doors, and unit staff respected these choices (within reason), supporting patients in their efforts to achieve their personalized goals. IPSRT strategies were integrated into discharge planning processes.

Table 1 summarizes demographic and clinical data for 602 individuals admitted to the 15-bed psychiatric unit either in the six months prior to initiation of the IPSRT intervention on March 15, 2008, or in the six months after IPSRT initiation. Average length of stay was 15.4 days. Mean rates of group attendance increased significantly in the six months after IPSRT implementation relative to the six months before its implementation: $75\% \pm 12\%$ ($N=192$) of patients in the pre-IPSRT period attended at least one group session per day, whereas $80\% \pm 14\%$ ($N=198$) of patients in the post-IPSRT period attended at least one group session per day ($t=4.08$, $df=388$, $p<.001$). Anecdotally, both staff and patients found IPSRT to be a helpful strategy to address mood symptoms and provide a means of organizing patients’ daily routines on the inpatient unit.

In March 2008, IPSRT was introduced as a “specialty track” for treatment of bipolar disorder in the intensive outpatient program, an intermediate level of care between inpatient hospitalization and outpatient follow-up. The primary challenge of implementation in the intensive outpatient program was integration of IPSRT into an existing infrastructure consisting of thrice weekly, three-hour-long group sessions that used dialectical behavior therapy (11) as the primary treatment modality in groups consisting of six to 11 members. The resulting bipolar treatment program within the intensive outpatient program combined IPSRT modules with the extant dialectical behavior therapy curriculum. Instead of introducing the SRM as a new form, five items from the SRM were added to the existing diary card that monitored mood, anxiety, suicidal thoughts, and medication adherence.

Table 1 summarizes baseline demographic and clinical data from 68 individuals who participated in the Bipolar Intensive Outpatient Program from September 1, 2008, to June 1, 2009. Patients stayed in the program for variable lengths of time, and data were truncated at 60 days. A mixed-effects model indicated a significant time effect for the QIDS-SR ($\beta = -.08$, $t=-4.39$, $df=41$, $p<.001$). Least-squares estimates of QIDS-SR scores improved from 12.5 to 7.6 at 60 days.

Discussion and conclusions

At a single, multisite, urban, academic medical center, we demonstrated feasibility of implementing a programmatic initiative to deliver an evidence-based psychotherapy across levels of care in routine practice. A collaborative work group implemented three new programs that were feasible to administer within the routine workflow and duties of staff and were tailored to meet the needs of patients within and across these clinical levels of care. The work group also developed written manuals describing the interventions that were used to sustain the process in the face of staff turnover. An ongoing weekly implementation meeting helps to perpetuate the process.

Performance outcome markers of quality improvement support feasibility of implementation, as indicated by the declines in depression scores in the outpatient and

intensive outpatient groups and the increase in group attendance after IPSRT implementation in the inpatient unit. Anecdotally, patients expressed satisfaction about continuity of care from program to program (specifically, the sustained focus on stabilization of biologic and social rhythms). Staff participating in these projects expressed high levels of satisfaction with learning new approaches to patient care.

There were many limitations to this study. Performance markers cannot be construed as evidence of intervention effectiveness because there was no control condition for comparison and most patients received medication (standard psychiatric treatment) in addition to IPSRT. This project was conducted at the academic medical center where IPSRT was developed and therefore may not be generalizable to other settings. In addition, fidelity of adapted versions was not systematically compared with the original IPSRT model.

Despite these limitations, this project demonstrated that it is possible to implement a treatment model that is informed by an empirically validated psychotherapy across levels of care. Further work is needed to demonstrate the effectiveness of such an intervention on the long-term outcomes of patients.

Acknowledgments

This work was supported by grants MH 029618 and MH 094831 from the National Institute of Mental Health and by the National Alliance for Research on Schizophrenia and Depression.

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Characteristics of three patient groups receiving treatment from an academic medical center involved in a quality improvement initiative

Table 1

Characteristic	Outpatients (N=48)		Intensive outpatients (N=68)		Inpatients (N=602)	
	N	%	N	%	N	%
Age (M±SD)	43.8±13.4		41.2±13.1		39.3±13.8	
Race						
Caucasian	37	77	60	88	445	74
African American	9	19	6	9	128	21
Gender						
Female	33	69	39	57	459	76
Male	15	31	29	43	143	24
Psychiatric diagnosis						
Bipolar disorder						
Type I	25	52	26	38	60	10
Type II	7	15	9	13	21	4
Not otherwise specified	3	6	16	24	22	4
Major depressive disorder	1	2	3	4	173	29
Depression not otherwise specified	4	8	1	1	131	22
Mood disorder not otherwise specified	0	—	3	4	52	9
Psychotic disorder not otherwise specified	0	—	1	1	20	3
Schizoaffective disorder	0	—	0	—	60	10
Schizophrenia	0	—	0	—	17	3
None listed	8	17	9	13	23	4