Intensive Short-term Dynamic Psychotherapy Associated with Decreases in Electroconvulsive Therapy and Briefer Admissions on Adult Acute Care Inpatient Ward

IN PRESS PSYCHOTHERAPY AND PSYCHSOMATICS

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Running Head: Brief psychotherapy with Psychiatric Inpatients

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Acute care psychiatric inpatient admissions are frequently precipitated by psychosocial stress including interruptions in key relationships due to a move, separation or other transition. The emotions triggered by these events often induce depression, anxiety, psychotic phenomena and acting out behavior. Electroconvulsive therapy (ECT) may be an effective tertiary treatment to select patients who fail to respond to first and second line guideline-driven treatment options for severe depression.[1]

We implemented a form of brief psychotherapy, Intensive Short-term Dynamic Psychotherapy (ISTDP), on an acute care psychiatric inpatient service in Halifax Nova Scotia, a city of 400,000 people. At the same time, a new treatment protocol for ECT, the ultra brief impulse protocol, was implemented to try to reduce ECT side effects on memory loss.[2] The net result of this has previously been shown to be an increase in number of required ECT procedures per treated case.[3]

ISTDP is a brief method that assesses and augments capacity to identify and feel the very complex emotions triggered in current stressors. The treatment can be effective with high anxiety, severe depression and paranoia through the use of combinations of supportive interventions, emotional focusing, challenge to defences and cognitive recapitulation, all of which are tailored to patient capacities.[4] Based on a recently published meta-analysis, ISTDP has some empirical support for the a wide range of patients including those with depression, anxiety, personality disorders and bipolar disorder who are frequently admitted to psychiatry wards.[4] We also found, in a 10-year follow up study of 890 cases, a significant reduction in hospital use and costs after a brief course of this treatment (a mean of 7 sessions/patient).[5] Over the years 1998 to 2009, this method was used on an ad hoc basis to augment standard care for psychiatric inpatients with these conditions. We reported on the method, including case descriptions, illustrating how it appeared effective in preventing the need for ECT and helpful to some of those who failed ECT.[6]

Based on these data, a part-time position for an inpatient Psychologist trained in ISTDP was funded, starting in October 2010. To augment understanding of the approach and facilitate the referral process, the therapist joined in weekly team rounds to discuss cases. ISTDP was delivered in a one-to-one interview setting starting with a Trial Therapy session to assess capacity to benefit from the work.[7] It was used with willing patients who could attend and participate in an interview of 30 - 120 minutes duration. Patients with the full spectrum of psychiatric diagnoses were seen in this setting. All sessions were video-recorded for self review and for weekly small group, videotape supervision and evaluation of treatment adherence.

Patients with severe agitation, fearfulness, mutism or inability to attend a 30-minute interview were not considered suitable candidates until they were medically stabilized. In acute care inpatients, anxiety must be kept low in interviews in order to not risk worsening symptoms. ISTDP has a built-in set of methods to monitor anxiety discharge pathways and reduce anxiety; therefore, elevated anxiety after a trial therapy interview is unusual while anxiety reduction is common.[7]

Over the first 1.5 years of ISTDP implementation, a mean of 9.0 (SD 8.7) therapy sessions were provided to 33 inpatients on the ISTDP ward. This number represented 32.4% (33 of 102) of the total inpatient population over that time: the therapist was valued and well-

utilized. The primary clinical diagnoses were major depression (50%); psychosis (19%); bipolar disorder (13%); somatoform disorders (9%); anxiety (6%); and personality disorders (3%).

Two self-report scales were completed by 23 patients at both the first and final treatment sessions of ISTDP. The Brief Symptom Inventory [8] mean item scores decreased with treatment on the global scale (GSI): from 2.4 at baseline to 1.8 at termination (paired $t = 21.4$, $p = .000$, effect size Cohen's $d = 0.74$) and on all the subscales except 'Interpersonal Sensitivity'. The Inventory of Interpersonal Problems (32-Item) [9] mean item scores also significantly decreased on the Full scale (GSI) and on the subscales 'Dependent' and 'Too Open'. See Table 1.

We were able to assess outcomes on the ISTDP ward in comparison to a local, sister acute care ward where patients were not provided access to ISTDP. In this hospital system, patients are assessed in a central setting then assigned to either of these 2 wards when they have openings: thus, patients between wards should be comparable. Comparing hospital-derived data 1-year before versus 1-year after ISTDP implementation, the percentage of admitted patients who had ECT was reduced by 51.5% (13.2 to 6.4%) on the ISTDP ward but increased by 30.5% (9.7 to 12.7%) on the control ward. In the same time periods, the total number of ECT services was reduced by 65.2%, a net of 46 fewer ECTs, on the ISTDP ward but increased by 67.9% or 163 on the control ward. Moreover, during these same years the average length of stay on the ISTDP ward reduced by 23.0% (50.1 to 38.6 days) while it increased by a mean of 15.8% (25.6 to 30.4 days) on the control ward.

The findings from this observational study need to be interpreted cautiously based on several limitations. First, this is not a randomized controlled trial, so it is possible other factors accounted for changes in this population. Second, although this sample was nearly one third of admitted patients, it is still a relatively small number of patients on a single ward. Third, the validity of comparison analyses between wards may be confounded by a lack of standardization in the care received and unknown differences in the ward setting. Finally, this is a heterogeneous population of patients precluding the assess of effectiveness based on diagnosis: sub-analyses by diagnosis were not performed due to small numbers.

Converging data from high therapist utilization rates, reduced length of stay, reduced ECT on the ISTDP ward, coupled with broad-based self-reported improvements on standard measures may signal benefit from this brief talking treatment. By 1-year post implementation, the cost of the service itself was approximately equal to reduced ECT costs alone. Coupled with the previously reported individual case findings showing avoidance of need for ECT and response to ISTDP after failing ECT, these data suggest this treatment warrants formal study. [5]

Thus, we recommend further naturalistic study of this method which can lead to a randomized controlled trial (RCT). It would be optimal for such a study to be multicentre in order to remove any local training or implementation biases. It should also study a specific patient diagnosis, such as depression, in order to allow replication. In the interim, brief talking approaches such as this should be implemented prior to ECT delivery based on recent treatment guidelines.[1]

Table 1. Descriptive parameters for self-report measures acquired at baseline and termination of psychotherapy (n = 23 patients)

		Baseline	Termination	Paired *t* test		Cohen's *d*
Scale	Subscale	M(SD)	M(SD)	*t*	*p*	
BSI	Anxiety	2.6(0.9)	1.9(0.9)	13.15**	.001	0.72
	Somatization	2.1(0.9)	1.4(0.9)	14.31**	.001	0.77
	Psychoticism	2.3(1.0)	1.8(1.0)	7.33*	.013	0.51
	Paranoid	2.0(1.0)	1.4(0.8)	16.23**	.001	0.64
	Obsessive	2.9(1.0)	2.3(1.1)	15.74**	.001	0.63
	Hostility	1.4(1.3)	1.0(0.8)	7.32*	.013	0.38
	Phobic	2.0(1.0)	1.6(1.2)	6.67*	.017	0.44
	Depression	3.1(1.1)	2.3(1.1)	13.97**	.001	0.69
	Interpersonal	2.5(1.1)	2.2(1.0)	1.84	.189	0.29
	Additional	2.9(0.8)	2.2(0.8)	28.58**	.000	0.86
	Total mean score (GSI)	2.4(0.8)	1.8(0.8)	21.36**	.000	0.74
IIP	Sociable	2.4(0.9)	2.1(0.9)	1.66	.112	0.33
	Assertive	2.5(0.8)	2.3(0.9)	1.35	.192	0.29
	Involved	2.5(1.0)	2.5(1.0)	0.02	.985	0.00
	Too open	1.3(1.0)	0.9(0.6)	2.48*	.022	0.46
	Supportive	1.7(1.4)	1.3(1.1)	1.22	.237	0.26
	Too caring	1.8(0.9)	1.4(0.6)	1.63	.119	0.44
	Aggressive	1.4(0.7)	1.4(0.7)	0.33	.744	0.05
	Dependent	2.2(0.9)	1.8(0.9)	2.98**	.007	0.46
	Total mean item score	2.0(0.7)	1.7(0.6)	2.19*	.040	0.39

BSI: Brief Symptom Inventory. IIP: Inventory of Interpersonal Problems. * $p < .05$; ** $p < .01$

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