

# An Individualized Self-Monitoring Instrument (ISMI) to Promote Self-Management in Bipolar Illness

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## INTRODUCTION

Scaled instruments used in psychiatric practice commonly employ lists of symptoms or behaviours based on empirical evidence and rated by the clinician and/or the patient.<sup>1,2</sup> The use of a global visual analogue scale can be an effective means for clinicians and patients to develop a common language for understanding one another and to help a patient control his/her symptoms or illness. Below, we report the development of the Individualized Self-Monitoring Instrument (ISMI), a tool found to be very useful in the care of a wide range of patients. We report its use with one patient with bipolar illness.

## CASE

MT is a 38 year-old woman admitted to the hospital in-patient, psychiatry unit in mid-January of 1995, and transferred to the Day Hospital in late March of 1995. She is a multi-talented individual who has had several careers: in the military, as a chaplain, and most recently as a musician. She has been married for seven years and has two children. She also has a long history of depressive and manic symptoms, with numerous hospital admissions due to medication non-compliance. After her last admission to the in-patient unit, MT was transferred to the Day Hospital. Her medications were lithium 300 mg po b.i.d., clonazepam 2 mg po t.i.d., and sertraline 100 mg po every morning.

## The Day Hospital

The Day Hospital is a three-month transitional unit which provides a structured environment and a series of groups for psychiatric patients. Patients are stable enough to be discharged from the in-patient setting, but require further follow-up and support to ensure successful transition to community living. Patients attend the Day Hospital Mondays through Fridays from 9:00 am to 3:00 pm and are responsible for their self-care, residential needs, and medications. Emphasis is placed on the development of life and personal management skills. For

MT, a main reason for her transfer to Day Hospital was the need for better management of her bipolar illness, thus preventing future re-admissions. Her transfer would also decrease the required length of a more costly in-patient hospital stay.

The Day Hospital is multi-disciplinary and uses 'Case Coordinators' to liaise with patients and community health care workers in all aspects of care, as well as providing psychiatric back-up as needed. Psychiatric health care workers from medicine, nursing, social work, occupational therapy, and pharmacy participate in the program, working individually and in groups with patients.

## Developing the Individualized Self Monitoring Instrument (ISMI)

A commonly used technique for assessing control and stability in bipolar patients involves asking them to 'rank' their mood on a scale from -5 (deeply depressed) to 0 (normal mood) to +5 (extreme mania). The simplistic scale collapses all the complex and interconnected elements of bipolar disease into one, and asks the patient to rank in a general way how they are feeling?. This scale proved too imprecise for MT to interpret. In addition, she expressed the need for a written document that she could use to help her communicate to her caregivers the significance of her illness and her need for help.

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Gradually it became apparent that the criteria for several components of this -5 to 0 to +5 scale would have to be established so MT would be able to evaluate different areas of her thoughts, feelings, and behaviours. As she rightly pointed out, psychiatric, nursing, and pharmacy staff asking her to rank herself on the traditional scale all had different views and all interpreted her response differently. To alleviate this problem, and to work with MT in managing her own illness, we developed criteria for each category (Figure 1). The mid-point of '0' was replaced with a term 'Mood Stable', which was not entirely accurate from a diagnostic perspective, but which had meaning for MT. She began with an outline which included six domains identified by MT as factors that hastened development of specific bipolar symptoms.

The six domains with their defining anchors or goals at "mood stable" were as follows: 1) sleep: seven to eight hours/night, 2) appetite: eating O.K. weight 120-125 lbs., 3) energy: stable, good humour, 4) medications: lithium level 0.8-1.0 mmol/L, 5) concentration/behaviour: demonstrates good judgement, thoughts are clear, 6) interpersonal: healthy social and family relationships.

By articulating these domains of her illness, MT began to express a feeling of control over her illness. She was then able to define specific criteria for each level from -5 to +5 for each domain. Figure 1 illustrates these criteria for those domains which included pharmacotherapeutic endpoints.

### Using the ISMI

Initially, the development of this tool was an intellectual exercise for MT which allowed her to view her condition in a clinical, almost detached manner. This activity resulted in a decrease in emotional lability as she became more comfortable with her illness. She defined a range of +2 to -2 as being 'safe' for her, the region in which she felt she could still control her own actions with the goal of bringing herself back to 'mood stable'. Beyond this range, she felt she could not bring herself back to stability, and

that she required help. She also realized that in the +5 and -5 areas, in-patient hospitalization or other drastic steps may be necessary for self-protection.

One area of particular interest reported by MT was related to sleep. She stated that she could feel herself spiraling out of control when her sleep patterns became irregular, and in fact, she could trigger her own manic episodes simply by choosing not to sleep. Pharmacotherapeutic interventions were designed to assist her in controlling her own sleep. For instance, at the point when she reached -2 (Loss of sleep: four hours with ruminations), a corresponding intervention was designed: L-tryptophan 4 g with or without chloral hydrate 1 g at bedtime, plus visualization exercises. This specific interpretation of the generic "prn" instruction proved very helpful in providing concrete guidance as to what "as necessary" meant. Other pharmacotherapeutic interventions were also designed to meet MT's unique and specific needs at each level of depression and mania.

In conclusion, MT has not been hospitalized, nor has she experienced significant bipolar episodes since she began using the instrument to manage her condition.

Currently, we are working with several other patients using the same model. From our experience, patients who benefit most from this approach are motivated, have an adequate attention span, do not implicitly trust medications, perceive value from such an instrument, and are willing to collaborate with members of the health care team. In describing the development of this tool, we hope we have been able to provide other caregivers with ideas concerning a patient-centred approach to therapy and the importance of a collaborative care model. ☒

### REFERENCES

1. Altman EG, Hedeker DR, Janicak PG, et al. The Clinician Administered Rating Scale for Mania (CARS-M): development, reliability and validity. *Biol Psychiatry* 1994; 36: 124-34.
2. Wetzler S, Marlowe D. The diagnosis and assessment of depression, mania and psychosis by self report. *J Pers Assess* 1993; 60: 1-31.

Figure 1: The Individualized Self-Monitoring Instrument (ISMI) for Bipolar Disorder<sup>a</sup>

SELF-ASSESSMENT											
	(-) <sup>5</sup>	(-) <sup>4</sup>	(-) <sup>3</sup>	(-) <sup>2</sup>	(-) <sup>1</sup>	MOOD STABLE	(+) <sup>1</sup>	(+) <sup>2</sup>	(+) <sup>3</sup>	(+) <sup>4</sup>	(+) <sup>5</sup>
No sleep	No sleep	Loss of sleep (two hours)	Loss of sleep (four hours)	Sleep Disturbances (four hours) Rumination	Increased Dreams Early A.M. Waking	seven to eight hours of unbroken sleep	Interrupted sleep (six hours)	Interrupted sleep (four hours)	two hours sleep	No sleep (associated with hyperactivity)	No sleep (associated with hyperactivity)
Stops eating	Stops eating No energy "No point"	No interest in food	No interest in food	Loss of appetite	Appetite OK Eating OK Normal Weight is 120-125 lbs	Ignore appetite Desire for weight loss	Increased focus and effort towards weight loss	Dramatic weight loss with infrequent eating (< 10 lbs/3 weeks)	Stops eating (feels it is not necessary)	Stops eating (associated with hyperactivity)	
Fear of newer getting better	Suicidal feelings Anger	Frequent crying Increased Anxiety	Frequent crying Increased Anxiety	Mood low Anxiety	Energy stable Good humour <b>Lithium level is 0.8-1 mmol/L</b>	Mood High Increased energy levels	Tendency to be entertaining and socializing at a superficial level	Hyperactivity Euphoria Rapid mood swing Increased Anxiety	Agitation Irritability Suicidal Thoughts Voice becomes loud	Physically aggressive Impaired speech	

  

ANCHORS										
SELF-MANAGEMENT										
Emergency Situation Hospitalization Supervision of medications (Medications in liquid form)	Urgent Psychiatric Intervention and supervision for medications	<b>Chloral Hydrate 1g Clonazepam 0.5g qhs for sleep Incr. Lithium to 900mg qhs (with psychiatrist)</b> Warm bath with candles before bed	<b>L-Tryptophan 4g Chloral Hydrate 1g qhs for sleep</b> (with psychiatric input) Visualization exercise (woods, Muskoka)	Focus on sleep: <ul style="list-style-type: none"> <li>• good aeration in bedroom</li> <li>• comfortable bed and pillow</li> <li>• hot milk at night</li> <li>• no naps</li> <li>• inform husband</li> </ul>	<b>SLEEP</b>	Focus on sleep: <ul style="list-style-type: none"> <li>• good aeration in bedroom</li> <li>• comfortable bed and pillow</li> <li>• hot milk at night</li> <li>• no naps</li> <li>• inform husband</li> </ul>	<b>L-Tryptophan 4g Chloral Hydrate 1g qhs for sleep</b> (with psychiatric input) Visualization exercise (woods, Muskoka)	Psychiatric input that day <b>Neuroleptic Medications (e.g., Haldol &amp; Cogentin)</b>	Home supervision when taking medications	Emergency Situation Hospitalization Supervision of medications (Medications in liquid form)
Food intake to be monitored	Needs outside encouragement to eat Won Ton soup (soothing soup)	Sit at table for meals Eating out helps (Asian food best) <b>Ensure for lunch</b>	<b>Start Ensure</b> with meals Yogurt Frozen loes	Be aware of food intake Don't skip meals	<b>APPETITE</b>	Be aware of food intake Don't skip meals	<b>Ensure with meals</b> (Diet supplement)	<b>Increase Ensure</b> Vary flavours Chart food intake Husband to make & serve meals	Home supervision of meals	Food intake to be monitored
Constant Observation	Home supervision Safety contract with psychiatrist <b>No access to medications</b> Need hugs and encouragement	Okay to cry Increase appts with psychiatrist (re. anxiety) <b>Close monitoring of meds</b>	Verbalize feelings to family/friends <b>Lithium Level</b> to be monitored	Monitor Moods Seek distractions (e.g., movies) Try to get out of the house	<b>THOUGHTS and BEHAVIOURS</b>	Be aware of mood changes Look at this chart to see where you fit in	Discuss with psychiatrist Go over chart <b>Lithium Level</b> to be monitored	Decrease stimulation with husband's help Darken room No music or TV No phone calls	'Time out' in own room Home Supervision No access to meds Need hugs and encouragement	Constant Observation

<sup>a</sup>For brevity, this figure is limited to domains including pharmacotherapeutic interventions (boldface)