

Pathways To and From Polypharmacy

NADD-Meridian Services
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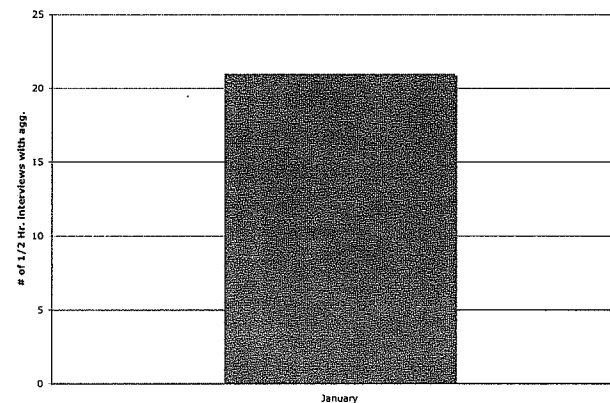
Overview

- Great deal of personal experience over last ~~20~~³⁰ years; I have been down all of these paths
- Multiple factors
 - Independent
 - Collectively

Biased Data Collection

- Most data-collection systems inadvertently exaggerate the frequency and severity of the monitored behavior
 - Failure to differentiate intensity
 - Failure to provide a measure of time free of the behavior

Illustration 1



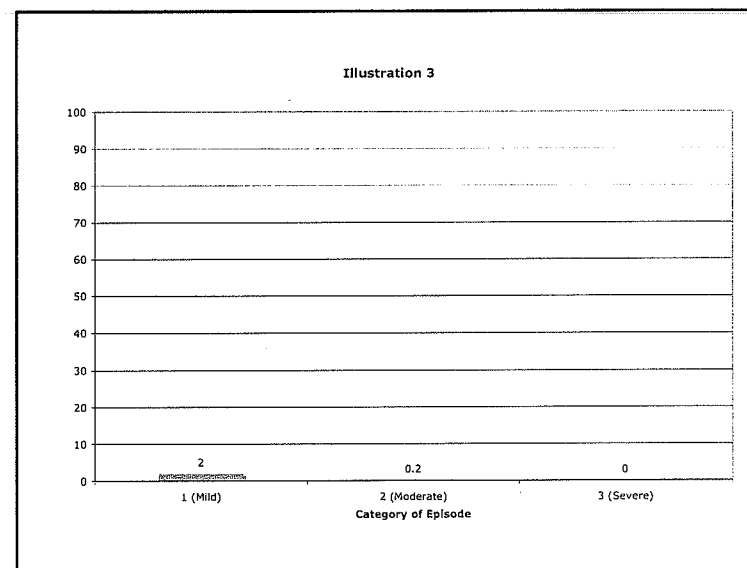
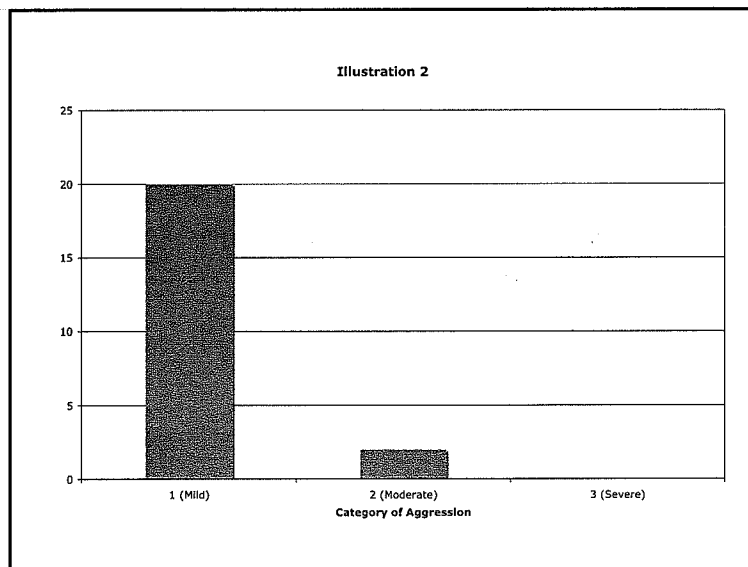


Table 2.
ANCILLARY INFORMATION TO AUGMENT
VISUAL PRESENTATION OF MONTHLY FREQUENCY DATA

<u>Category 1</u>	<u>Category 2</u>	<u>Category 3</u>
20 EPI = 2% of 960 waking ½-hour intervals	2 EPI = 0.2% of 960 waking ½-hour intervals	0 EPI
Daily range 0 to 5	Daily range 0 to 2	
Daily distribution 5, 4, 3 (x2)	Daily distribution 1 (x2)	
Average EPI per day = .64	Average EPI per day = .06	
Days without EPI = 25	Days without EPI = 29	
Contiguous 0 EPI days = 20	Contiguous 0 EPI days = 29	
Severity Rating (1-3) Episode = EPI		

- Table 4.
BEHAVIORAL SEVERITY RATING CONTINUUM
1. Behavior causes mild, infrequent annoyance to self or others.
 2. Behavior causes severe disruption to quality of life of self or others.
 3. Significant verbal aggression, periodic mild property destruction.
 4. Frequent destruction of property.
 5. Frequent self-injurious or aggressive behavior barely leading to tissue damage.
 6. Frequent self-injurious or aggressive behavior that leads to tissue damage.
 7. Disfiguring self-mutilation or disfiguring aggression toward others.
 8. Self-injurious or aggressive behavior leading to reversible loss of physical function (i.e., fractures, repairable detached retina, loss of consciousness, or concussion) to self or others.
 9. Self-injurious or aggressive behavior leading to irreversible loss of physical function (i.e., enucleation or paralysis) to self or others.
 10. Self-injurious or aggressive behavior leading to loss of life to self or others.

Failure to Determine Efficacy

- Effectiveness of medication A is not fully established before B is added and later medication C
- Reluctance to taper A because “it may have helped a little.”
- Adjunctive treatment is reasonable in many situations, but should be objectively verifiable

Failure to Distinguish Between Signal and Noise

- Signal vs. Noise (Taleb, 2005)
 - “when a change in amplitude is small, it is more likely to result from noise, with its likelihood of being a signal increasing exponentially as its magnitude increases.”
- Blips vs. Trends
 - Attribution of causation to random variations

Failure to Distinguish Between Signal and Noise

- Careful attention should be paid to:
 - Intra-day variation
 - Inter-day variation
 - Number of target free days
 - Clusters, which may be obscured by monthly averages

Determination of Efficacy

- 0-30% decrease freq = random variation
- 30-50% decrease freq = category 1
- 50-70% decrease freq = category 2
- 70-90% decrease freq = category 3
- 90-100% decrease freq = category 4

Failure to Accept A Partial Response (1/2)

- Carryover from treatment plans which address behavioral problems with goal of extinguishing the behavior
- Lack of knowledge concerning natural history and response rates of Axis 1 disorders

Failure to Accept A Partial Response (2/2)

- Dosage increased and/or another medication added with each manic episode
 - Haldol 40mg
 - Mellaril replaced with 6mg Risperidone; subsequent addition of VPA+CBZ+Li

Reluctance to Accept a Partial Response Bipolar Disorder

- Judd et. al. 2002 NIMH Multicenter study
 - N=146 bipolar 1 (bp 1) patients
 - “patients with bp 1 were symptomatically ill 43.7% of weeks throughout a mean of 12.8 years of follow-up”
 - Depressive symptoms: 31.9%
 - Manic/Hypo Manic: 8.9%
 - Cycling/Mixed: 5.9%
- “patients with bp 1 changed symptom status on average 6 times per year”- “polarity more than 3 times per year”

Reluctance to Accept a Partial Response Bipolar Disorder

- Judd et. al. 2003
 - N= 86 patients with bp 2
 - Symptomatic 53.9% of follow-up weeks
 - Depressive sx 50.3%
 - Hypomanic sx 1.3%
 - Cycling/Mixed sx 2.3%

Reluctance to Accept a Partial Response Bipolar Disorder

- Systematic Treatment Program for Bipolar Disorder (STEP-BD) Perlis et al. 2006
 - N=1,469 symptomatic at time of entry
 - 858 (58.4%) subsequent recovery
 - However, 416 (48.5%) experience recurrences of depressive sx's or manic/hypomanic, or mixed episodes

Reluctance to Accept a Partial Response Obsessive-Compulsive Disorder

- Alonso et al. 2001 follow-up study(1-5 years) N=60
 - “substantial persistent disabling symptoms”- “in spite of combined pharmacological and behavioral treatment”
- Pittenger et al. 2005
 - “Treatment resistant OCD is one of the few diagnoses in modern psychiatry for which invasive neurosurgical procedures remain part of the established armamentarium.”

Clinical Inheritance

- Multiple medications
- No or very little history re. efficiency
- Fear of the unknown
- Easy to attribute causation to random variation

Utilizing Regional Centers to Stabilize Community Residents

- Bricks and mortar
- Increased staffing levels
- Months instead of weeks
- Neutralization of fear factor

Utilizing Regional Centers to Stabilize Community Residents

- Success increases confidence
- Cultural shift
 - Enthusiasm for challenging medications replaces fear
- Precise data collection ^{drives} decision making
- Efficacy can be established prospectively

Challenging Psychotropic Medication in a Stable Setting

- Start with most noxious or least likely to be effective?
- Slow and sequential process
- Documentation of effective agents
- Possible that no current medications are effective
- Consideration of new options

