The Transitional Pain Service for Post-Surgical Pain: Lessons Learned from Toronto General Hospital

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TPS CASE REPORT

(Weinrib et al., 2017)

Referral from APS to TPS.

Male in his 50s, several weeks post-surgery and taking **460 mg** morphine equivalent dose (MED). Severe pain (mostly chronic, not post-surgical).

Patient had undergone laparotomy subsequent to duodenal bleed, likely due to long term overuse of over-the-counter NSAIDs

History of chronic pain (fibromyalgia)

History of alcohol, benzodiazepine, and nicotine dependence

TPS CASE REPORT

(Weinrib et al., 2017)

What is the Transitional Pain Service?

- Early intervention by pain specialists
- Targeted to patients at risk of persistent pain AND/OR long-term, high-dose opioid use
- Multi-disciplinary care from the beginning: pain medicine, physiotherapy, psychology
- For our TPS, procedures include: surgical oncology, multi-organ transplantation, vascular, cardiac
- Treating complex patients who would otherwise fall through the cracks in our medical system

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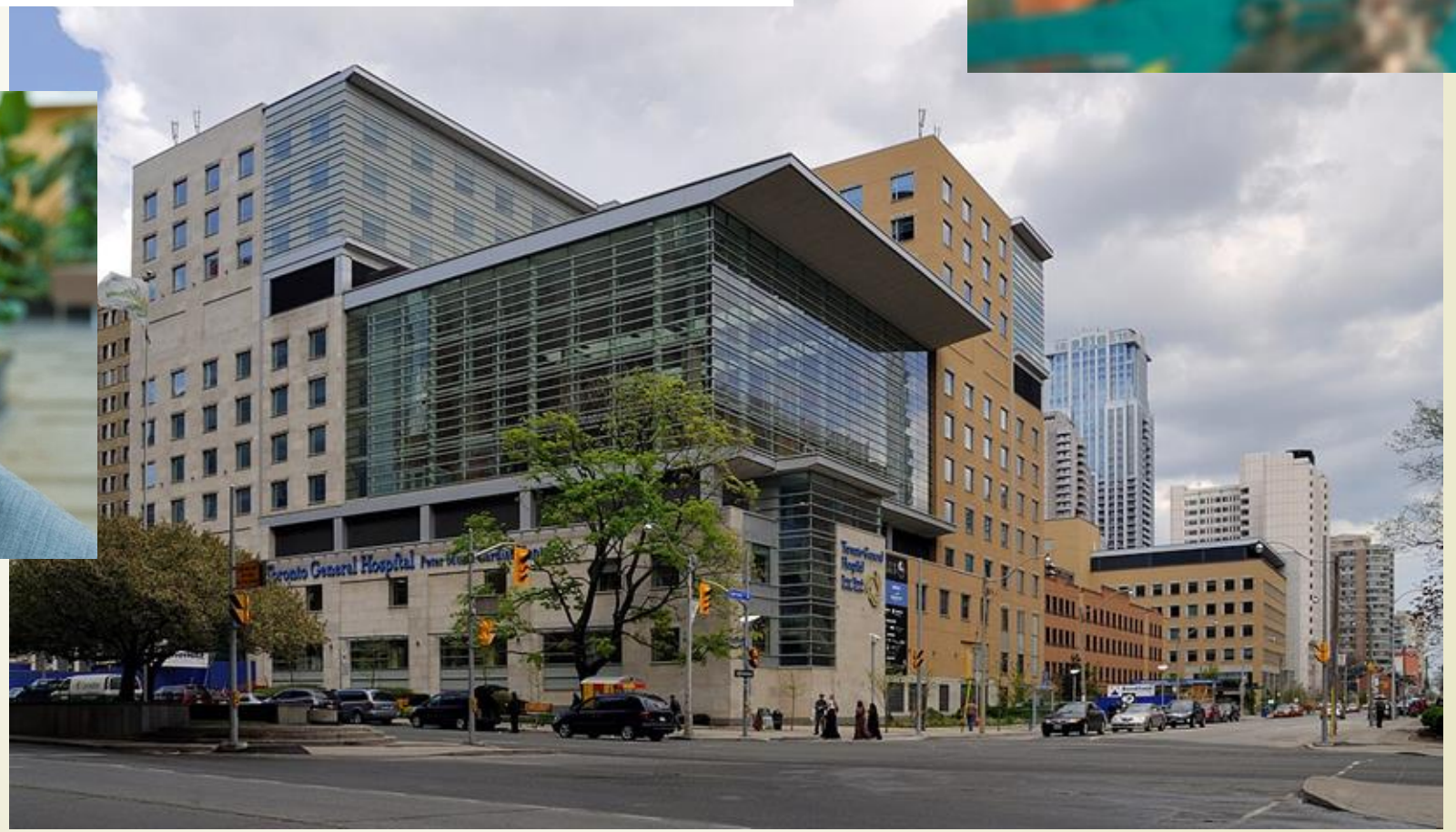
PERSPECTIVES

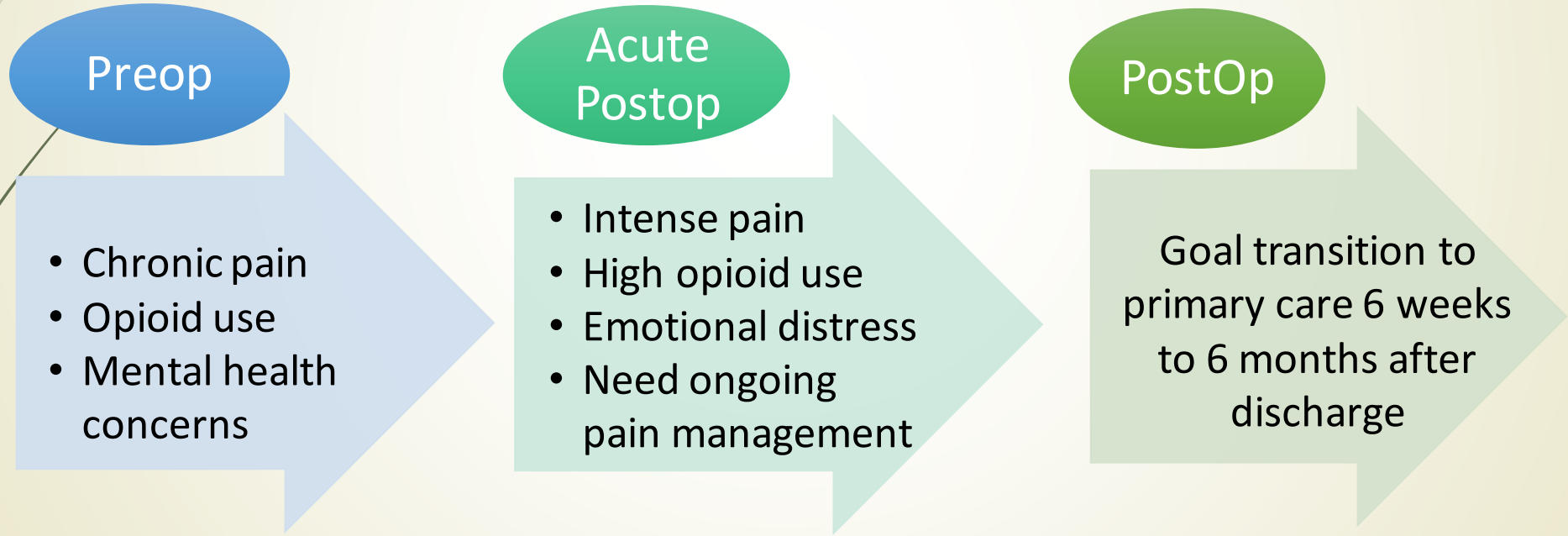
The Toronto General Hospital Transitional Pain Service: development and implementation of a multidisciplinary program to prevent chronic postsurgical pain

Katz , Weinrib, et al. J Pain Res 2015:8;695-702

Dr. Joel Katz

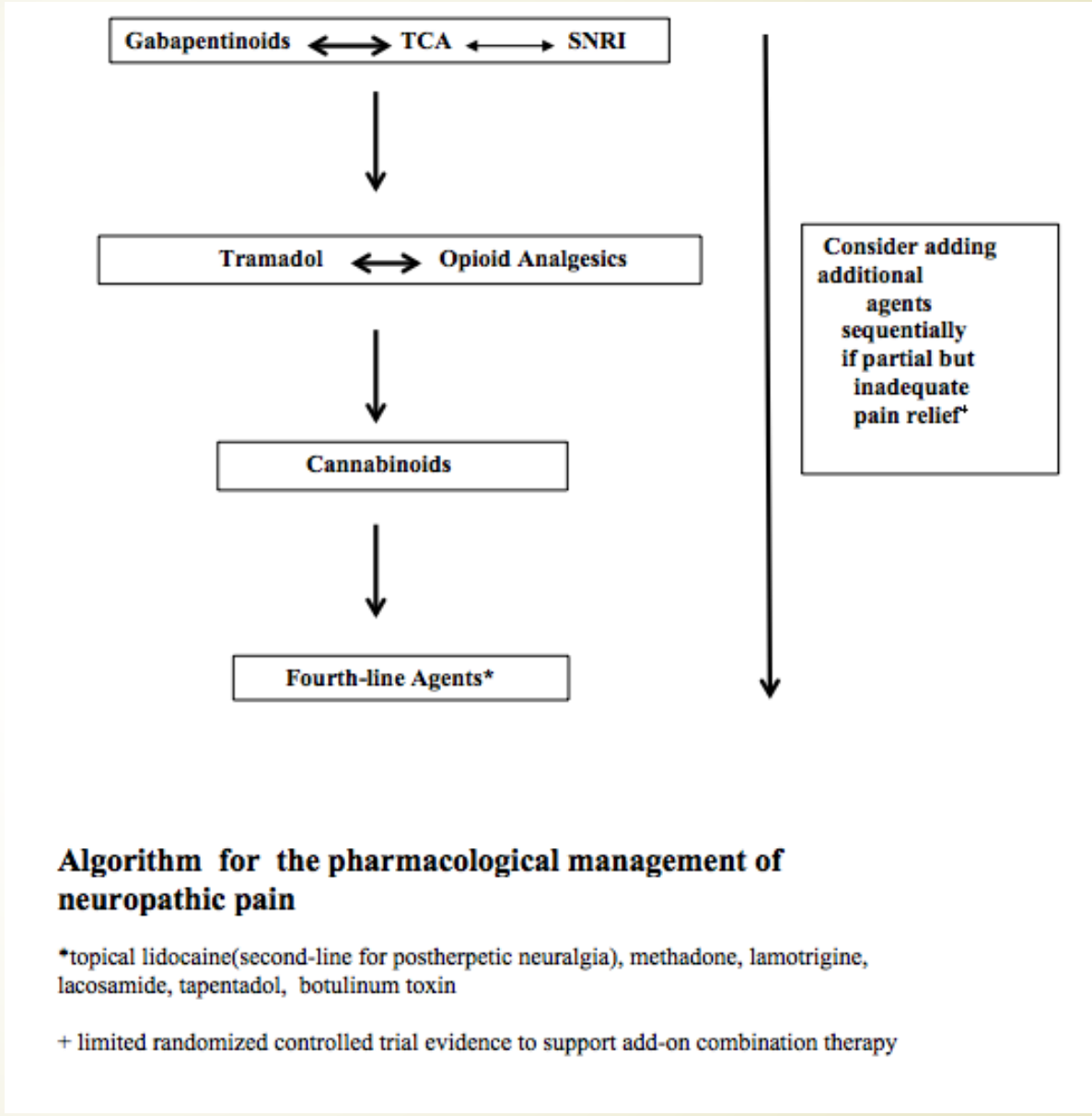


The mission of TPS is the treatment of patients who are <u>at risk</u> for transitioning from acute to chronic postsurgical pain.



Chronic Neuropathic Pain Guidelines (Canada)

- (Moulin, Boulanger, Clark, Clarke, Dao, Finley et al., 2014)



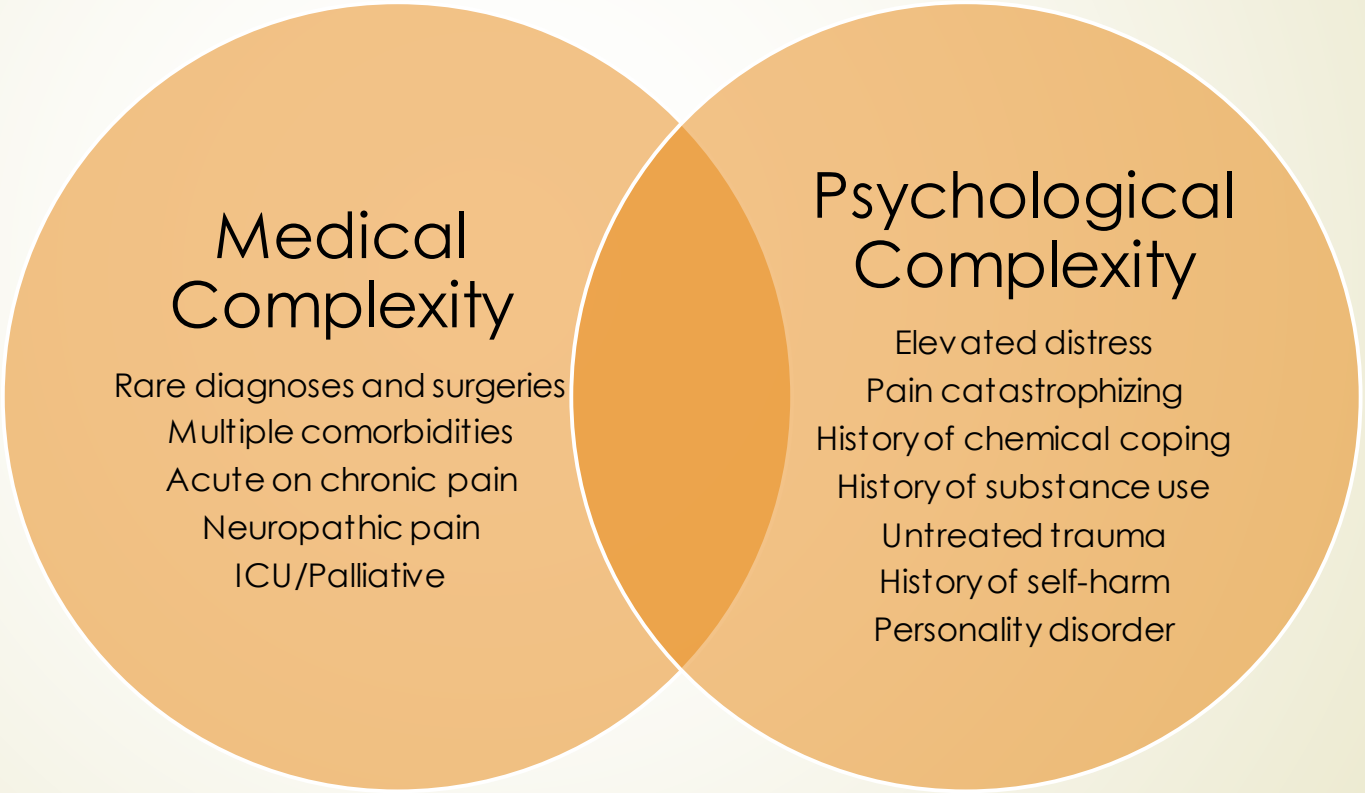
The Challenge of the Transitional Pain Service is its Scope

Pre-Surgical | Acute | Transitional | Persistent (6 months)

TRANSITIONAL PAIN SERVICE: Lessons Learned

LESSON 1: Expect Complexity.

We are selecting for complexity.



Spotlight on Borderline Personality Disorder

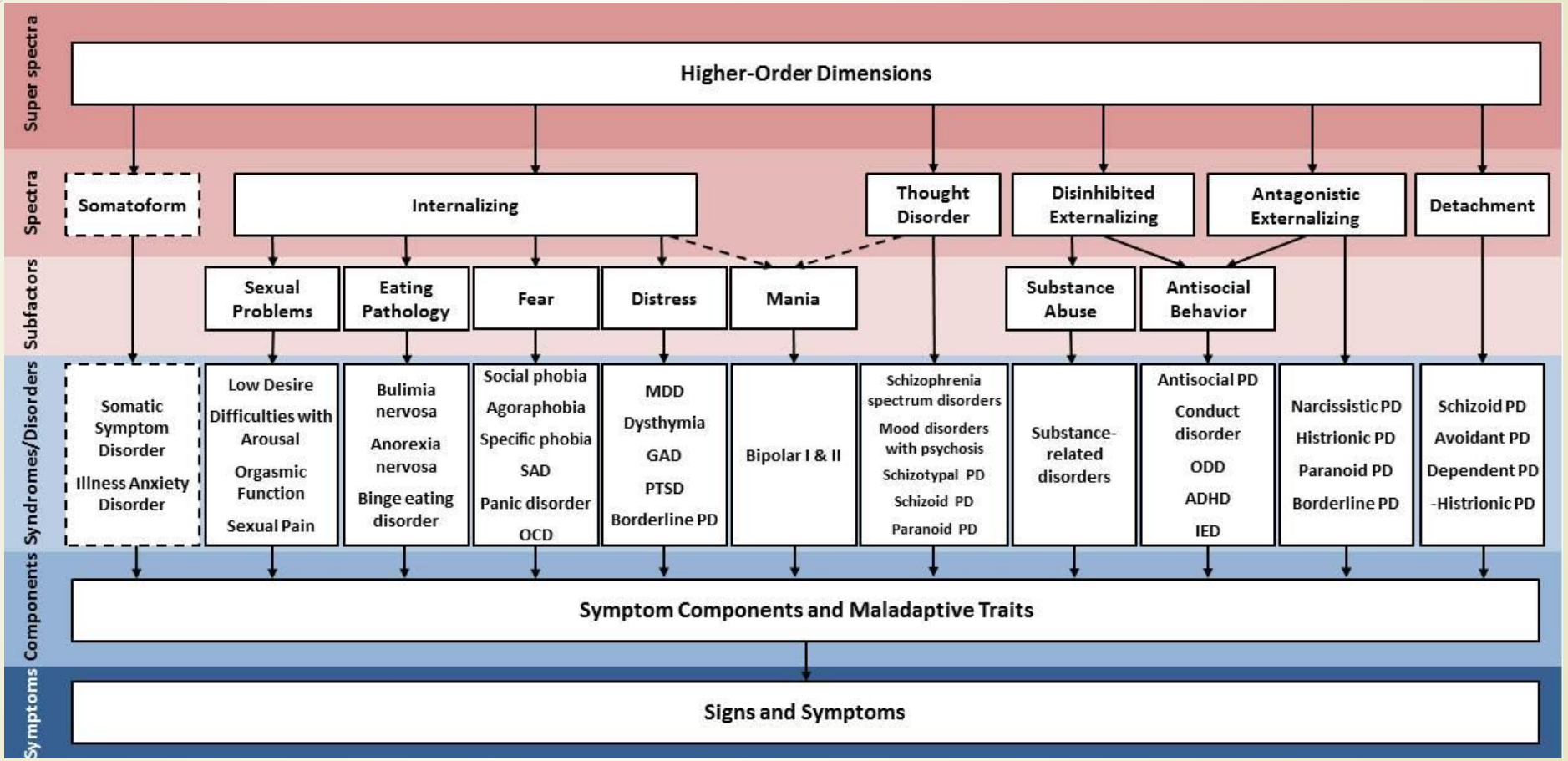
"I don't treat borderline personality disorder."

We all treat borderline personality disorder.

- Marked emotional dysregulation
- More difficulty with pain and opioids
- Longer hospital stays
- Interpersonal conflict
- Self-harm and suicidal behavior

What is Borderline Personality Disorder?

(HiTOP Model, Kotov et al., 2017)



One third of patients seeking treatment for chronic pain have borderline personality disorder (Sansone & Sansone, 2012).

TABLE 1. Studies examining the prevalence of borderline personality disorder among various samples of pain patients

First Author/Year of Publication	Country of Origin	Sample Description	Sample Size	Assessment of Borderline Personality	Prevalence of Borderline Personality
Gatchel[4]/1994	United States	Tertiary care patients/ chronic low back pain disability	152	Structured Clinical Interview for DSM—Personality Disorders	26.90%
Sansone[5]/2001	United States	Primary care patients/ various chronic pain symptoms	17	Personality Diagnostic Questionnaire-4	47.10%
				Self-Harm Inventory	29.40%
				Diagnostic Interview for Borderlines	47.10%
Manchikanti[6]/2002	United States	Tertiary care patients/ chronic pain patients (2 subgroups)	150	Millon Clinical Multiaxial Inventory III	10% and 12%
Workman[8]/2002	United States	Patients referred to a physical therapy pain management program	26	Personality Diagnostic Questionnaire- Revised	31%
Dersh[8]/2006	United States	Tertiary-care patients/ chronic disabling occupational spinal disorders	1,323	Structured Clinical Interview for DSM—Personality Disorders	27.90%
Braden[9]/2008	United States	Community sample/ positive for lifetime self-reported pain	1,208	International Personality Disorder Examination screening questionnaire	27.40%
Sansone[10]/2009	United States	Tertiary care patients/ various chronic pain symptoms	117	Personality Diagnostic Questionnaire-4	9.40%
				Self-Harm Inventory	14.50%
Fischer-Kern[11]/2011	Germany	Tertiary care patients/ various chronic pain symptoms	48	Structured Interview of Personality Organization	58%

DSM: *Diagnostic and Statistical Manual of Mental Disorders*

Why do we see so much BPD in acute, transitional, and chronic pain?

Borderline Personality Disorder: A Dysregulation of the Endogenous Opioid System?

Article *in* Psychological Review · April 2010

DOI: 10.1037/a0018095 · Source: PubMed

CITATIONS
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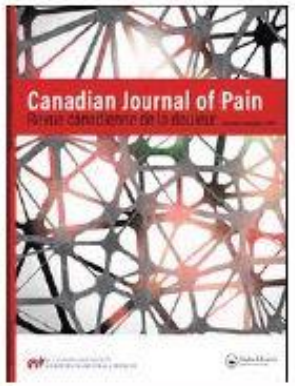
LESSON 2: We can help.



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Acceptance and Commitment Therapy to manage pain and opioid use after major surgery: Preliminary outcomes from the Toronto General Hospital Transitional Pain Service

Muhammad Abid Azam, Aliza Z. Weinrib, Janice Montbriand, Lindsay C. Burns, Kayla McMillan, Hance Clarke & Joel Katz

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To link to this article: http://dx.doi.org/10.1080/24740527.2017.1325317

(Not randomized. n = 252 pain medicine only; n = 91 meds plus ACT.)

Opioid Weaning

(Azam, Weinrib, et al., Canadian Journal of Pain, 2017)

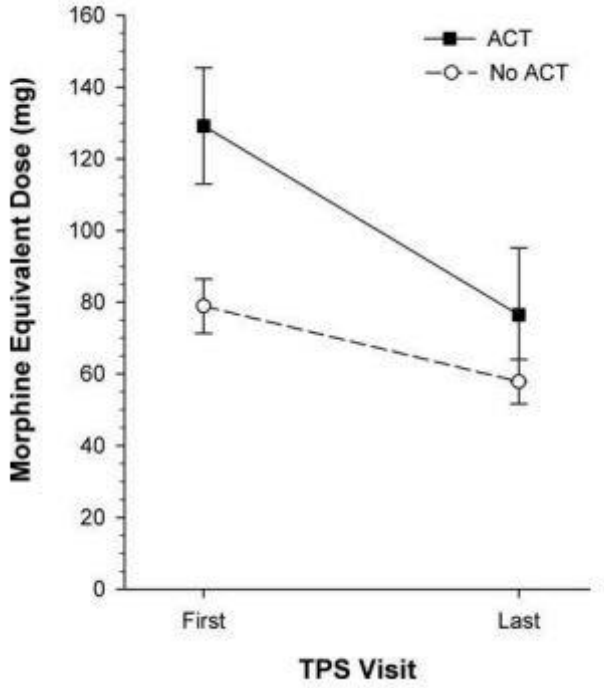


Figure 4. Daily opioid consumption in morphine equivalent dose (mean ± standard error of the mean) shown for the two groups of patients at the first and last TPS visits after hospital discharge. The ACT group had significantly higher opioid use at the first TPS visit than the no ACT group ($P < 0.001$, effect size $\eta_p^2 = 0.19$) and showed greater significant reductions in opioid use by the last TPS visit ($P < 0.001$). ACT $n = 82$; no ACT $n = 193$.

Pain Interference

(Azam, Weinrib, et al., Canadian Journal of Pain, 2017)

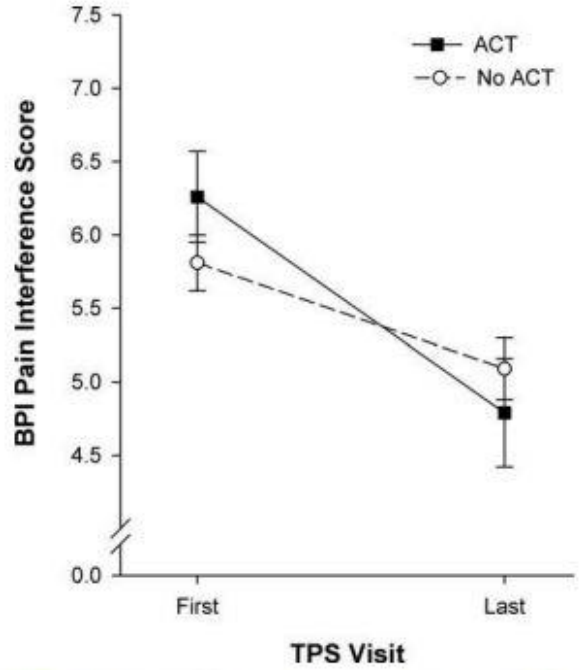


Figure 2. BPI pain interference scores (mean ± standard error of the mean) shown for the two groups of patients at the first and last TPS visits after hospital discharge. The ACT group (n = 53) showed greater significant reductions in pain interference scores ($P < 0.001$, effect size $\eta_p^2 = 0.14$) compared to the no ACT group ($n = 147$, $P < 0.001$, effect size $\eta_p^2 = 0.09$).

Depression

(Azam, Weinrib, et al., Canadian Journal of Pain, 2017)

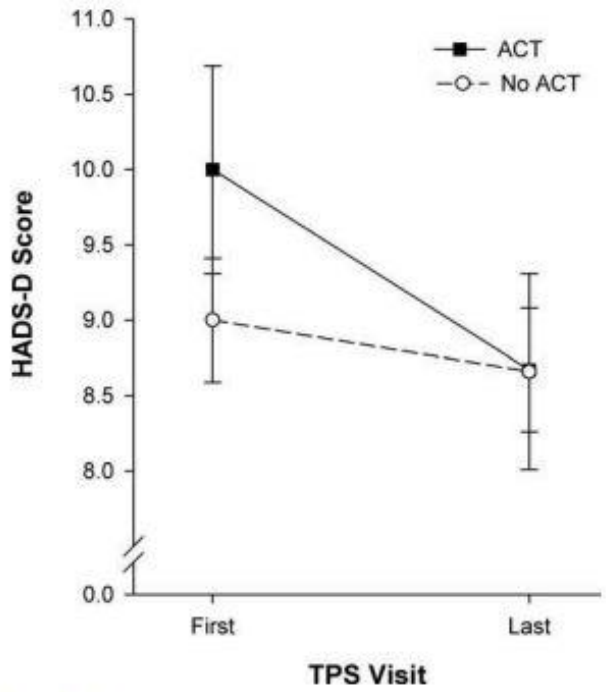
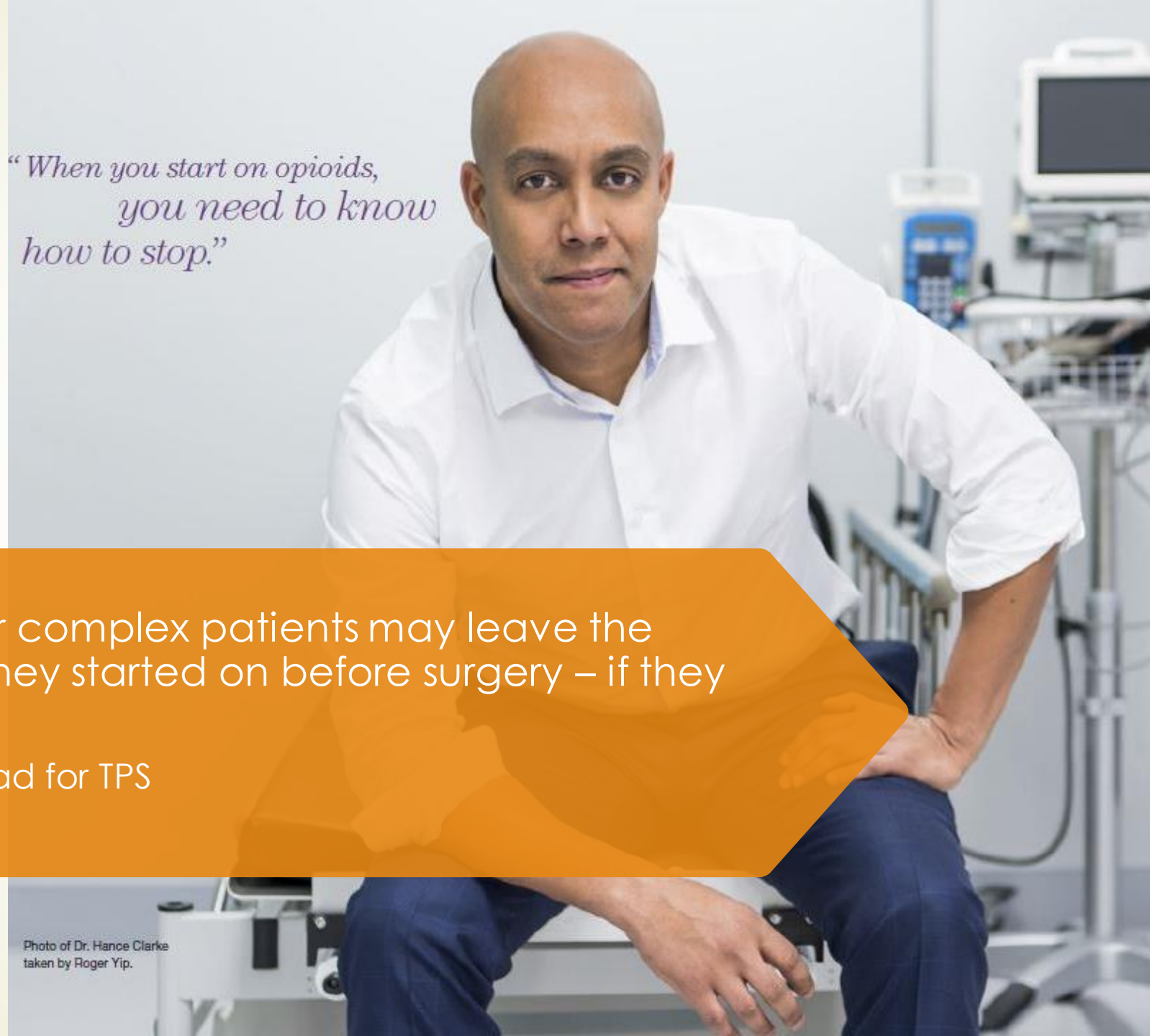


Figure 3. HADS–depression scores (mean ± standard error of the mean) shown for the two groups of patients at the first and last TPS visits after hospital discharge. Statistically significant interaction showed that the ACT group ($n = 59$, $P = 0.001$, $\eta_p^2 = 0.05$) had significant reductions in depressive symptoms. Depressive symptom scores: 8–10 mild; 11–15 moderate; >16 severe.

LESSON 3: There is a need for expertise in de-prescribing opioids.

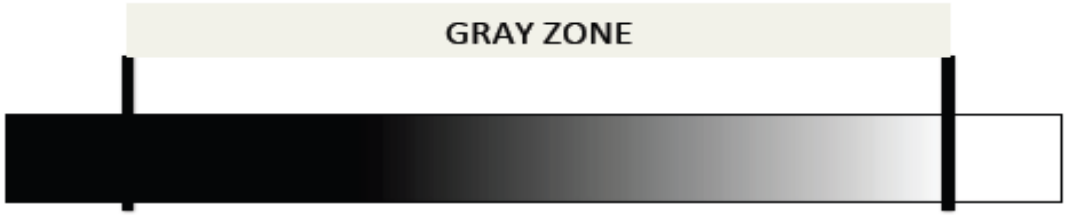


Our data suggests that our complex patients may leave the hospital on 3x the opioid they started on before surgery – if they don't see TPS.

-Dr. Hance Clarke, Medical Lead for TPS

An Evolving Mission: Addressing the Opioid Use "Gray Zone"

(Ballantyne, 2013)



Meets DSM criteria for addiction

- No lost prescriptions
- No ER visits
- No early prescriptions
- No unsanctioned or repeated requests for dose escalation
- No UDT aberrancies
- No doctor shopping (PMP)

Fig. 4. Spectrum of dependence and addiction. ER, emergency room; PMP, prescription monitoring program (now available in several states in the United States, in continued development); UDT, urine drug test. Doctor shopping occurs in the United States because many patients have multiple providers, unlike countries with national health systems, where patients have a medical "home."

Compassionate Care That Addresses the Opioid Crisis in Hospital

"As challenging as this crisis may appear, we can overcome the opioid epidemic… if we remember that, in the battle against addiction, *compassion is our most powerful weapon*. It's what allows us to stop judging and start helping."

-Dr. Vivek Murthy, U.S. Surgeon General

What is the scope of TPS?

- Every opioid problem in the hospital?
- Every pain problem in this hospital?
- Need to have clear criteria that work for your team, communicate your criteria and set boundaries.

COMMON QUESTIONS

"We don't have the money."

No one does!

How to stretch a dollar?

- Start small
- Pick a priority
- Trainees
- Technology
- Stepped care models

Who should we target?

Medical Risk Factors: High risk surgeries, pre-surgical pain/opioid use, high intensity pain/neuropathic indicators after surgery

Psychological Risk Factors: pain catastrophizing, depression, anxiety, trauma, substance use (including daily long-term benzodiazepines), borderline personality

Or… everyone? My bet is that holistic and timely intervention is cost-effective at a systems level.

What measures should we use?

- There is no right answer. Here are some suggestions:
  - Pain Catastrophizing Scale (PCS-13)
  - Depression(PHQ-9)
  - Anxiety (GAD-7)
  - *Is the patient currently taking an SSRI/benzo?*
  - Trauma (PCL-5)
  - Borderline Symptoms (BSL-23)

How many sessions of psychological treatment are needed?

We don’t know!

Let’s experiment.

When it comes to the Transitional Pain Service model, there is much exploration still to be done.