



The Psychosocial Dimension of Psychopharmacology

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Disclosure: I have no commercial affiliations and will not be discussing any off-label product uses or services

Medical Psychotherapy

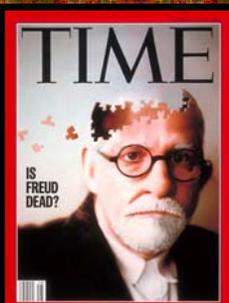
(Freud, 1905 – *On Psychotherapy*)

"We physicians cannot discard psychotherapy, if only because another person intimately concerned in the process of recovery — the patient—has no intention of discarding it... A factor dependent on the psychical disposition of the patient contributes, without any intention on our part, to the effect of every therapeutic process initiated by a physician; most frequently it is favorable to recovery, but often it acts as an inhibition... All physicians, therefore, yourselves included, are continually practicing psychotherapy, even when you have no intention of doing so and are not aware of it; it is a disadvantage, however, to leave the mental factor in your treatment so completely in the patient's hands. Thus it is impossible to keep a check on it, to administer it in doses or to intensify it. Is it not then a justifiable endeavor on the part of a physician to seek to obtain command of this factor, to use it with a purpose, and to direct and strengthen it?"

Objectives

- Review evidence base regarding psychosocial aspects of medications
- Enhance ability to recognize psychological contribution to pharmacologic treatment-resistance
- Use psychosocially informed techniques to improve pharmacologic treatment outcomes

The Decade of the Brain 1990-1999



- Presidential Proclamation 6158
July 17, 1990
 By the President of the United States of America
 A Proclamation
 I, George Bush, President of the United States of America, do hereby proclaim the decade beginning January 1, 1990, as the Decade of the Brain. I call upon all public officials and the people of the United States to observe that decade with appropriate programs, ceremonies, and activities.
 In Witness Whereof, I have hereunto set my hand this seventeenth day of July, in the year of our Lord nineteen hundred and ninety, and of the Independence of the United States of America the two hundred and fifteenth.
GEORGE BUSH
[Filed with the Office of the Federal Register, 12:11 p.m., July 18, 1990]
- Shift from a bio-psycho-social model
- Bio-bio-bio model

Mindless Psychiatry?

- Meaning aspects of medications largely disappear from academic psychiatry
 - Psychiatric literature from 1950's – early 1980's
 - Focus on psychological factors affecting response to substances (medications and substances of abuse)
- Psychology literature
 - Lends itself to an antipsychiatry bias
- Primary care literature
 - Metaanalysis of interventions to increase adherence
 - Of 26 studies meeting metaanalytic criteria, 25 were from Primary Care Medicine... only 1 from psychiatry (Chong, Aslani, & Chen, 2011)

The Decade of Treatment Resistance

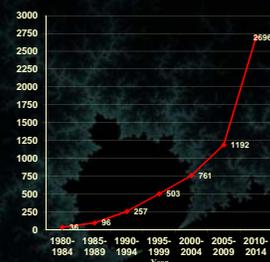
- Improved science points to limitations of medical model treatments
- Despite significant advances in neurosciences, drug development, and evidence based practice, there is no corresponding improvement in treatment outcomes



The Problem of Treatment Resistance

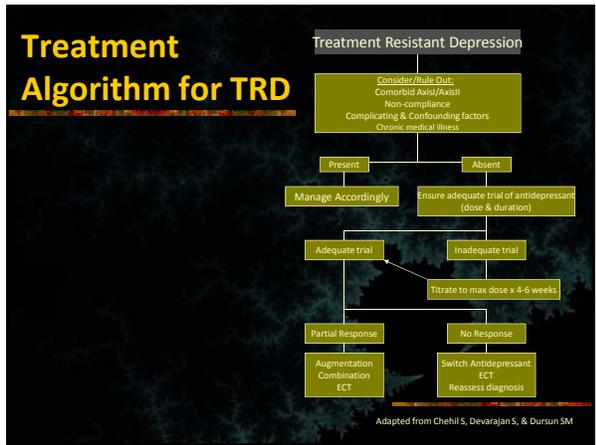
- 7500% Increase in references to "treatment-resistant" psychiatric conditions between 1980 and 2014
- During the same period, there was a 2-fold increase in the total number of articles.
- "The unfortunate reality is that current medications help too few people to get better and very few people to get well."

- Thomas Insel, M.D., Director, NIMH



Search terms: depression OR schizophrenia OR "anxiety disorder" OR bipolar OR OCD AND "treatment resistant" OR "treatment resistance" OR "treatment refractory" Limit: human.





- ### Meaning and Medication
- Meanings attached to medications
 - Concordant w/ med effect ⇒ ↑ outcomes
 - Antithetical to intended effect ⇒
 - Treatment resistance to medications
 - Treatment resistance from medications
 - For many patients, medications are among their most important connections
 - Can function as transitional objects
 - May have replaced people
 - Meanings may be unconscious

- ### Common Dynamics of Treatment Resistance TO Medications
- Ambivalence about symptoms
 - Secondary gains of illness
 - Symptoms as communication
 - Medication effects undercut defenses
 - Negative transferences
 - Sexual intrusion
 - Toxic experiences of rejection
 - Other forms of control
 - Nocebo responses
- 

Covert Dynamics of Treatment Resistance FROM Medications

- Submission to medical authority
- Loss of signal function of affect
- Avoidance of appropriate affect or healthy developmental steps
- Medications replace people
- Medications bolster maladaptive defenses

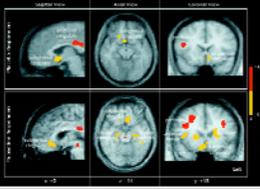
6 Technical Principles of Psychodynamic Psychopharmacology

- Avoid mind-body split
- Know who the patient is
- Attend to ambivalence about symptoms
- Cultivate an alliance in relation to medications
- Be aware of countertherapeutic uses of medications (resistance from medications)
- Address countertransference enactments in prescribing

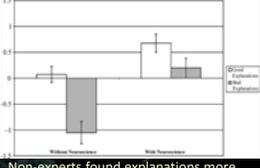
Dualistic Assumptions Are Breaking Down

- Medication response is profoundly affected by a range of psychosocial factors
 - Treatment of depression with antidepressants is primarily a psychological treatment. (Ankarberg & Falkenström, 2008)
- Psychotherapy is a biological therapy
 - Functional neuroimaging of psychotherapy and medication response shows considerable overlap in brain changes (Baxter et al, 1992; Brody, et al, 2001; Martin et al, 2001).
 - Psychotherapy turns on genes
 - Upreulates 5-HT1 receptors (Karlsson, et al, 2010)
 - Meaning changes the brain

Arguments from Neuroscience



- Beware!
- The Seductive Allure of Neuroscience Explanations (Weisman et al, 2008)



- Placebo responders show similar neo-cortical and paralimbic activation pattern to drug responders (Mayberg et al, 2002)
- Non-experts found explanations more satisfying with neuroscience
- Even when the arguments were bad!

Medication Outcomes Shaped by Range of Psychosocial Factors

- Characteristics of the pill
- Setting of Administration
- Prescriber effects
- Non-clinical patient characteristics
- Therapeutic alliance

Characteristics of the Pill Affect Outcome

- Characteristics of the pill
 - Color (de Craen & Roos, et al, 1996; Fisher & Greenberg, 1997)
 - Red pills are energizing
 - Blue pills calming... in most cases (Cattaneo, et al, 1970)
 - Expensive pills work better (Waber & Shiv, et al, 2008)
- Implications for generic substitution
 - Most patients report decreased intention to continue medications (Roman, 2009).
 - 34% of patients experience new adverse events (Weissenfeld et al, 2010).

Medication Effects Shaped by the Doctor's Attitudes

- Characteristics of the prescriber
 - Attitudes Toward Drug Therapy
 - Uhlenhuth, Canter, Neustadt, and Payson (1957)
 - Investment in the Patient and Symptomatic Improvement
 - Lyerly, Ross, Krugman, and Clyde (1964)
 - Empathy
 - Downing, Rickels, and Dreesman (1973)

Medication Prescriptions: How Is More Important than What

- TDCRP data comparing medication and prescriber effects (McKay, et al, 2006)
 - Physician effects accounted for greater variability in outcomes than did medication condition
 - Effects were additive
 - Top 1/3 of psychiatrists got better outcomes with placebo than bottom third got with active drug

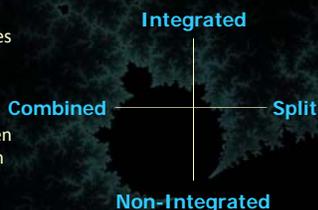
Placebo and Antidepressant Effects

- Placebo effects account for a large portion of antidepressant response.
- Using the FDA drug study database, which included all of the negative drug studies that pharmaceutical companies chose not to publish, researchers demonstrated that ~75-81% of drug response is due to the placebo effect (Kirsch & Sapirstein, 1998; Kahn, et al, 2000; Kirsch, et al, 2002).

Mind-Body Integration in Psychiatric Care

■ Integrated treatment frame

- Medications support psychotherapeutic task
- Therapy addresses issues with medications as manifestations of transference
- Communication between treaters is essential when working with treatment resistance or Axis II comorbidity



Know Who Your Patient Is

■ Developmental history can be helpful

- Alerts patient you are interested in more than symptoms
- May enhance alliance
- More likely patients will bring non-pharmacologic interferences to your attention
- Characteristic relational patterns are repeated with medications
- Can predict and address psychodynamic interferences before they lead to treatment failure

■ Explore patient's relationship with medications

- Medications are important object relationships

"Non-Clinical" Patient Variables Affect Medication Outcomes

■ **Neuroticism** (Joyce & Paykel, 1989; Scott et al, 1995; Bagby et al, 2002; Steinberg et al, 2010)

■ **Defensive style** (Kronström et al., 2009)

■ **Locus of control** (Reynaert et al, 1995)

■ **Autonomy** (Peselow et al, 1992)

■ **Sociotropy** (Peselow et al, 1992)

■ **Social disadvantage** (Hahn, 1997)

■ **Acquiescence** (McNair et al., 1966, 1970; Fast & Fisher, 1971)

■ **Attachment style** (Ciechanowski et al., 2001, 2006; Cominos & Grenyer, 2007)

■ **Expectations of treatment** (Meyer et al., 2002; Krell et al, 2004; Aikens et al, 2005; Gaudiano & Miller, 2006; Sneed et al., 2008)

■ **Treatment preferences** (Lin et al., 2005; Iacoviello et al., 2007; Kocsis et al., 2009; Raue et al, 2009; Kwan, Dimidjian & Rizvi, 2010)

■ **Ambivalence about medications** (Sirgy et al, 2001; Aikens et al, 2008; Warden et al, 2009)

■ **Secondary gains associated with illness** (van Egmond & Kummeling, 2002)

■ **Autonomous motivation for treatment** (Zuroff & Koestner, et al, 2007)

■ **Readiness to change** (Beitman et al, 1994; Lewis & Simons, et al, 2009)

Character & Temperament Affect Pharmacologic Outcomes

- Neuroticism ⇔ poor antidepressant response (Joyce 1989, Scott 1995, Bagby 2002, Steunenberg 2010)
- Defensive style (Kronström et al., 2009)
 - Immature defenses predict antidepressant non-response
- Locus of control (Reynaert et al, 1995)
 - Internal locus of control is positive prognostic factor in antidepressant treatment
- Autonomy/Sociotropy (Peselow et al, 1992)
 - Low sociotropy/high autonomy- 74.1% antidepressants response rate
 - High sociotropy/low autonomy- 38.5% antidepressants response rate

Patient Attitudes Affect Outcomes

- Expectations
 - Patients with high expectations for treatment had a 90% response rate where as those with low expectation had a 33% response rate (Krell et al. 2004)
- Theories of illness (Sullivan et al, 2003)
 - Better antidepressant outcomes in moderately depressed patients who view their illness as “non-biologic”

Interpersonal Positions Affect Medication Outcomes

- Social disadvantage ⇔ nocebo response (Hahn, 1997)
- Acquiescence (McNair et al., 1968, 1970; Fast & Fisher, 1971)
 - Initial placebo response
 - Subsequent nocebo response
- Attachment style
 - Secure attachment ⇔ early antidepressant response (Cominos & Grenyer, 2007)
 - Attachment style affects adherence (Ciechanowski, 2001)
 - Dismissive attachment style leads to worsened diabetic control compared with other attachment styles
 - Interactive effect with communications: if the patient rated the doctor as a good communicator, the adverse effect of attachment style was negated

Attend to Ambivalence Towards Symptoms



- Sources of ambivalence:
 - Secondary Gains
 - Symptoms serve defensive functions
 - Symptoms as communications/currency
- “What do you stand to lose if treatment works?”

Ambivalence Common in Psychiatric Population

- Harm is most common of 15 themes in content analysis of antidepressant perceptions (Piguet et al, 2007)
- Approximately half of patients identify secondary gains from illness or treatment seeking (Dulgar-Tulloch, 2009; van Egmond, 2005)
- Patients do not signal their ambivalence unless asked specifically
 - 2-3% signal ambivalence when asked a broad questions
 - 23-36% signal ambivalence in response to more specific questions

Ambivalence ⇔ Pharmacologic Treatment Resistance

- Ambivalence about medications
 - Directly correlated with non-compliance (Aikens et al, 2008;)
 - Patients with early ambivalence are 2 times more likely to discontinue medications and 3 times more likely to stop medication in the context of side effects (Warden, 2009)
 - Perceived stigma ⇔ poor adherence (Sirey et al, 2001)
- Ambivalence about illness
 - Patients with secondary gains less likely to recover (van Egmond & Kummeling, 2002)
 - Readiness to change (Beitman et al, 1994; Lewis et al, 2009)

Readiness to Change

- Beitman et al (1994) measured readiness to change in a randomized trial of benzodiazepines for panic disorder.
 - The greatest determinate of a positive outcome was readiness to change, outweighing drug condition
- Lewis et al (2009) measured readiness to change in the treatment of adolescent depression
 - Hypothesized greater impact of readiness to change on CBT outcomes
 - Readiness to change was associated equally with improved outcome in those receiving CBT and medication

Cultivate Pharmacotherapy Alliance

- Alliance is not the same as compliance
- Alliance directly correlated with treatment response (Krupnick et al, 1996)
 - Alliance is an equally powerful factor in pharmacotherapy as in psychotherapy
 - Alliance is a stronger determinant of treatment outcome than drug condition (active drug vs. placebo).

Elements of an Effective Pharmacotherapeutic Alliance

- Autonomy support
- Agreement about targets
- Respect for treatment preferences
- Shared decision making
- Good communication

Support Patient Autonomy (Zuroff et al. 2007)

- Outcome associated with autonomous motivation for treatment across multiple modalities- IPT, CBT, medications
 - May be a more potent factor than alliance
- Patients feel more motivated for treatment with autonomy supportive doctors

Find Agreement About What Is Being Treated

- Agreement about diagnosis
 - Patients disagreeing with diagnosis were 2 times more likely to discontinue treatment (Woolley et al, 2010)

Patient Preferences Matter



- Patients receiving preferred treatment do better
 - 45-50% response rate when treatment matched patient preference (medications vs therapy)
 - 22.2% response rate when patient received therapy (non-preferred)
 - 7.7% response rate when patient received medication (non-preferred)

(Kocsis et al, 2009)

Explore Treatment Preferences

- Patients given a non-preferred treatment are more likely to discontinue treatment (Raue et al. 2009) and miss follow up appointments (Kwan et al. 2010)
- Patients receiving medications when they prefer psychotherapy show significant decreases in therapeutic alliance over time (Iacoviello et al 2007)

Involve Patients in Decision-Making

- Involved patients were 2.3 times more likely to continue treatment (Wooley 2010)
 - Improved outcome at 18 months (Clever 2006)
 - Promotes treatment consistent with guidelines (Clever 2006)
 - 7.3 times more likely if also in agreement about diagnosis (Wooley 2010)

Skilled Communication Enhances Adherence

- Effective communication with depressed patients
 - Clear
 - Response pattern (Lin et al, 1995)
 - Duration of treatment (Lin et al, 1995)
 - Information about side effects **improves** adherence (Bull et al, 2002)
 - Collaborative
 - Non-authoritarian orientation to problem solving (Bultman & Svarstad, 2000)
- Especially important in specific populations
 - Dismissive attachment style (Ciechanowski, 2001)
- Communication is personal (Rosen, Nakesh & Alegria, 2015)
 - Computer use significantly reduces alliance at intake
 - Computer use significantly reduces treatment continuance

Be Aware of Countertherapeutic Uses of Medications

- Avoid collusion with counter-therapeutic uses of medications
- Interpret counter-therapeutic uses
 - Medication and avoidance of appropriate affect
 - Medications replace people
 - Medication and splitting
 - Enactment
- Negotiate discontinuation when appropriate



Identify and Contain Counter-transference Acting Out

- Patients struggling with overwhelming affects induce corresponding affects in their treaters
- Doctor can prescribe in an effort to lessen his or her own discomfort
- ---> irrational prescribing addressing doctor's symptoms more than the patient's (Waldinger & Frank, 1989)
- Contain impulsive action... of the doctor
- Consultation with colleagues is important
- A psychodynamic formulation is anchoring (Treloar, 2010)

T

T is protecting narcissistic vulnerabilities, and often does so by distancing himself from potential sources of narcissistic injury. At the same time, his longing for connection, respect, and admiration, has left him vulnerable to being used and abused. Consequently, he is quite anxious about any experience of dependency. He will likely struggle with taking medications, first, because they represent a narcissistic injury. Second, if they work, T will be confronted with the problem of need and dependency, which may make him want to stop his medications.

Summary

- It is impossible to reduce psychiatric treatments to either the biological or psychological domain
 - Non-pharmacologic variables shape pharmacologic treatment response
 - A large portion of medication response is attributable to psychosocial factors
- Prescribers neglecting psychosocial factors are not providing evidence-based care
 - "15 minute med checks" lack evidence base!
 - Meaning factors should receive more attention from psychiatry (research, teaching, and clinical practice)
 - Expert prescribing attends to all evidence bases

Questions:



Further Readings

- Mintz, D. & Belnap, BA. "What is Psychodynamic Psychopharmacology: An Approach to Pharmacologic Treatment Resistance." *Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry*, 2006, 34(4): 581-601.
- Mintz D & Flynn D. How (Not What) to Prescribe. *Psychiatr Clin North Am*, 2012, 35(1):143-163.