Uses and Abuses of Psychotropic Medications in People with I/DD

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OVERVIEW

- DEFINING PSYCHOTROPIC MEDICATION & USES
- GENERAL POPULATION UTILIZATION
- WHY ADDITIONAL CARE IS NEEDED FOR PEOPLE WITH I/DD
- SYMPTOM-BASED APPROACH TO MEDICATION USES
- UNDERSTANDING POLYPHARMACY
- HYPOTHESIS DRIVEN TREATMENT
- ADVOCACY, UNDERSTANDING, AND DIALOG
- SUMMARY

PSYCHIATRIC DRUGS IN GENERAL POPULATION

- Drugs are prescribed for:
  - problems sleeping
  - pain control
  - changes in mood
  - unbearable anxiety
  - persistent odd beliefs
- Who prescribes:
  - Primary Care Physicians = 80-90%
  - Hospitalists = 95% ; inpatient opioid Rx = 33-64%
  - Psychiatrists = <25% (Mark et al, 2009)
- How is this monitored?.....(next slide)

MONITORING PRESCRIPTION PATTERNS [controlled and non-controlled drugs]

- FDA:
  - Controlled substances (DEA license)
  - National Provider Identification (NPI)
- State Boards – Licensing by specialty
  - State Controlled Substance License
  - Ethical practice; types of prescriptions
- State Board of Pharmacy
  - Controlled substances report to central bank by patient to identify over use from proper use
- Insurance Companies
  - Formulary limitations; prior authorizations

PSYCHOTROPIC MEDICATION

- WHAT are psychotropic medicines?
  - Manufactured substances that affect neuronal functioning
    - *Psycho* (the mind) + *tropos* (turning); in use since 1945-50
  - Neurons work collaboratively in networks to manifest in thoughts, feelings, and actions => behavior
  - Synonyms: psychoactive, psychiatric
  - Purpose is to prevent or cure illness; to improve function
  - Some medicines also can be abused/ lead to addiction
- MEDICINE v NUTRACEUTICALS (aka FOOD)
  - Medicine is designed to address a dysfunctional state to bring it back to a normally functioning state
  - Food keeps the organism going/functioning in normal capacity

RATES OF RX FOR PSYCHOTROPICS 2009

- XANAX = $44 M (A)
- LEXAPRO = $27.7 M (A,D)
- ATIVAN = $25.9 M (A,P)
- ZOLOFT = $19.5 M (A,D,O,T)
- PROZAC = $19.5 M (A,D)
- DESERYL = $18.9 M (A,D)
- CYMBALTA = $16.6 M (A,D,F)
- SEROQUEL = $15.8 M (B,D)
- EFEXOR = $15 M (A,D,P)
- VALIUM = $14 M (A,P)
- ADDERALL = $10.8 M (S)
- ABILIFY = $8.2 M (B,D,A)

A=anxiety; B=bipolar; D=depression; F=fibromyalgia; O=OCD; P=panic; T=PTSD; S=stimulant

PREVALENCE OF MENTAL ILLNESS SEEKING TREATMENT – USA, 2014

- % ADULTS > 18yo with serious psychological distress past 30 days = 3.4%
- NUMBER OF VISITS to physician offices with MENTAL ILLNESS as primary dx
  = 59.8 million
- NUMBER OF EMERGENCY DEPT visits with MENTAL ILLNESS as primary dx
  = 5.7 million
- Suicide deaths/100,000 population = 13.4

GENERAL POPULATION UTILIZATION

- SYMPTOM RELIEF
  - Distress and interference with daily functioning
  - Avoidance of discomfort
- ACUTE
  - Injury/illness; Loss; Catastrophic stress; Performance enhancement
- CHRONIC CONDITIONS
  - Pain; Muscular-skeletal; Neuropathic; Waxing/Waning patterns
  - Degenerative conditions; Schizophrenia; Depression; Anxiety…
- PAIN
  - Problem of 5th vital sign
  - Multiple mechanisms to influence pain over time
  - Overlap into addiction/addiction behavior

ADDITIONAL CARE IS NEEDED IN PEOPLE WITH I/DD

- COMPLEX SUBSTRATE (BRAIN/OTHER DEVELOPMENTAL ISSUES)
  - Neurological and Psychiatric disorders
  - Sensitivity to sensory inputs (external and internal)
  - Higher risk of trauma history (physical/emotional/sexual)
- METABOLISM OF DRUGS (TOXINS)
  - Full load of medications; any abnormality of enzymatic processing of drugs
- COMMUNICATION
  - Verbal v. Nonverbal – have to learn behavioral quirks and indicators
  - Direct behavior may have an indirect reason (screaming; self-soothing)
- IMPORTANT NOT TO MAKE ASSUMPTIONS
  - Repeated behavior may have different etiologies
    - E.g. Crying is not always Sadness;

SUBSTANCE USE IN PEOPLE WITH I/DD

- NORMALIZATION
  - Access to alcohol, cigarettes, marijuana, pills
  - Familial/friend patterns of use; abuse/dependence may not be recognized
- FREE ACCESS
  - Unlocked supplies; trades
- SELF-MEDICATION
  - Purchases to address problems (NoDoz to stay up; laxative abuse)
- VULNERABLE PERSON
  - Peer acceptance
  - Drug-running
  - Sensitive to smaller amounts; unexpected responses

PSYCHOTROPIC MEDICATION CAVEATS

- FDA-APPROVED CONDITIONS
  - Limits use of *approved* syndromes and symptoms
- MISUSE OF TERM
  - Doesn't necessarily make people feel better
  - All drugs that affect CNS/alertness/coordination are not psychotropic meds
  - Illegal substances can have important effects; cannot treat those symptoms
- TREATMENT-RESISTANT CONDITIONS
  - Start to look at non-approved uses of medications
  - Focus on symptom relief and functional improvement
  - Unusual combination of medication effects

SYMPTOM-BASED APPROACH

- ANXIETY
  - ENVIRONMENT
    - Actual threat; Myth; Shadows; Stories
  - WORRY
    - Anticipated situation; past experience
    - Global v specific
  - FEAR: phobias
  - REPEAT TRAUMA
    - Hyperarousal, reactivity; defensive posturing
  - MASS HYSTERIA
    - Group think; copycat symptoms

DRUG POSSIBILITIES

- Benzodiazepines
- SSRIs
- SNRIs
- TCAs
- Antipsychotics
- CBD oil?
- Kava-kava

- Require CBT

SYMPTOM-BASED APPROACH

- ANXIETY SECONDARY TO DEPRESSION/PSYCHOSIS/ETC.
  - Must have adequate treatment of underlying condition
  - Additional medication to decrease anxiety symptoms
- AGITATION
  - Often made worse by benzodiazepines (disinhibition similar to alcohol)
  - Purposeful v purposeless
- INSOMNIA
  - Quality of sleep: difficulty falling asleep/intermittent awakening/early morning awakening
  - Non-habit forming medications are preferred
  - Maintaining good sleep hygiene; exercise; relaxation techniques

SYMPTOM-BASED APPROACH

- MOOD DISORDER (Depression)
  - VEGETATIVE SYMPTOMS
    - Decreased appetite, Impaired concentration, Persistent sadness, Difficulty with sleep
  - ANHEDONIA: lack of pleasure
  - AMOTIVATION: lack of motivation/initiative
  - LABILE AFFECT: crying, anger, irritability
  - CHANGES IN SLEEP: usually decreased; Atypical = increased sleep
  - AGITATION: restlessness, irritability
  - With PSYCHOTIC DELUSIONS
    - Sense of somatic deterioration; mood congruent/incongruent

SYMPTOM-BASED APPROACH

- DEPRESION: MEDICATIONS
  - SSRI
    - Zoloft, Prozac, Paxil, Cymbalta, Lexapro, Celexa,
  - SNRI
    - Wellbutrin, Effexor, Vibriid
  - TCA
    - Amitriptyline, Imipramine, Desipramine, Nortriptyline
  - MAOI
    - Nardil, Parnate
  - ATYPICAL ANTIPSYCHOTIC
    - Seroquel, Abilify
  - AUGMENTATION STRATEGIES:
    - Lithium, Haldol
  - SLEEP
    - Trazodone, Deseryl, Amitriptyline

SYMPTOM-BASED APPROACH

- PSYCHOSIS/REALITY DISTORTIONS/THOUGHT DISORDER
  - SLEEP DEPRIVATION
    - Everyone can become psychotic
  - PRIMARY PSYCHOSIS
    - Onset in 2nd & 3rd decades; often prodrome of idiosyncratic beliefs
  - SECONDARY PSYCHOSIS
    - Antipsychotics: Typical and Atypical
    - Risk of Involuntary Movement Disorder
    - Pill/liquid/injection/long-acting forms
- BIPOLAR AFFECTIVE DISORDER
  - Swings in mood: mania/irritability – depression/sadness/inability to initiate
  - Lifespan disorder: temper tantrums in children; mood lability and impulsivity in adults; impulsive capricious decision-making in elders

SYMPTOM-BASED APPROACH

- COGNITIVE
  - Stimulants
  - Memory aids (anti-dementia)
  - Enhancers – may be a serious risk
- ATTENTIONAL
  - Stimulants
  - Reduce anxiety
  - Treat depression
- IMPULSIVITY
  - AEDs: decrease swings; reactivity
  - Mood stabilizers
  - Antipsychotics (rare)

POLYPHARMACY

- ARGUMENT AGAINST
  - MULTIPLE DRUGS CAUSE UNINTENDED INTERACTIONS
  - MONOTHERAPY SHOULD BE PROMOTED
  - DECREASE COUNTER-PRODUCTIVE EFFECTS OF MULTIPLE-RECEPTOR DRUGS
  - INCREASED LIKELIHOOD OF ENCEPHALOPATHY (especially in elderly/ I/DD)
- ARGUMENT FOR
  - MULTIPLE SEPARATE SOURCES FOR CONSTELLATIONS OF SYMPTOMS
  - USE OF EFFECTS FOR DIFFERENT SYMPTOMS
  - JUDICIOUS APPLICATION OF MEDICATIONS

POLYPHARMACY

- REVIEW OF RECORDS
  - Onset of symptoms
  - Medication prescribed
  - Medications ingested
  - Duration of medication used
  - Dose range of medication
- ESTABLISH ACCURATE HISTORY
  - Holistic appraisal of strengths and weaknesses in functioning
  - Lifeline of symptoms, diagnoses, effective and ineffective treatments

POLYPHARMACY CONSIDERATIONS

- MONOAMINE THEORY OF DEPRESSION
  - Insufficient norepinephrine/others available
- NOREPINEPHRINE
  - Locus coeruleus → frontal cortex (mood, attention)
    → limbic cortex (energy, agitation, emotions)
- DOPAMINE
  - Blockade of D2 is thought mechanism of antipsychotic action
- SEROTONIN
  - Brainstem (raphe nucleus) → frontal cortex (mood)
    → basal ganglia (O/C)
    → limbic areas (anxiety)
    → hypothalamus (appetite/eating)
    → sleep centers (Swsleep)

DYNAMIC CONSIDERATIONS

- PHARMACOKINETICS
  - HOW THE BODY ACTS ON DRUGS
    - Absorption, distribution, clearance
- PHARMACODYNAMICS
  - HOW DRUGS ACT ON THE BODY, ESPECIALLY THE BRAIN
    - Specificity for receptors; blocking actions or mimicking
    - Modulated by other neurotransmitters

DIAGNOSIS-BASED HYPOTHESIS

- MAXIMIZE DOSE
  - Determine that clinical efficacy is following dosage
- ADDITIVE USES OF SIDE EFFECTS
  - Regularize wake/sleep cycles
- TREATMENT OF SIDE EFFECTS
  - Prevent involuntary movements
  - Choice of medications to make use of sedation/alertness

CLUE TO PROBLEM SITUATIONS

- MULTIPLE LOW DOSES
  - Multiple drugs in same class
  - Many drugs from different classes
  - No drug given in usual therapeutic range
- ONE DIAGNOSIS, MULTIPLE MEDICATIONS
  - Without determination of treatment-resistance, adding of multiple medications
  - Suspicion for non-adherence
  - Question if result of side effect of other substance use
  - Fear of prescriber and/or demanding patient

QUESTIONS TO ASK

- WHAT IS INDICATION FOR THIS MEDICATION?
- HIGHEST DOSE TO BE USED
- CRITICAL SIDE EFFECTS/INTERACTIONS?
- WRITE DOWN THE ANSWERS; COMMUNICATE WITH THE TEAM

ADVOCACY, UNDERSTANDING, & DIALOG

- ADVOCATE FOR BENEFIT OF PATIENT
  - PURPOSE OF ALL MEMBERS/PROFESSIONALS ON TEAM
  - IMPROVE QUALITY OF LIFE
- UNDERSTAND
  - PROBLEMS IN FUNCTIONING
  - LIMITATIONS OF PROPOSED THERAPIES
  - BENEFITS VS RISKS OF MEDICATIONS
- CREATE AND SUSTAIN DIALOG
  - AVOID CATEGORICAL STATEMENTS ABOUT INTENTIONS OR MISTAKES

COMPLEX DISORDERS

- PTSD
  - REACTIONS TO OVERWHELMING EXPERIENCE
  - Anxiety/Reactivity/Sleep problems/Reality disortions
- TBI
  - Mood dysregulation
  - Cognitive challenges
  - Integration of sensory inputs/perceptual challenges
- MENTAL D/O DUE TO MEDICAL CONDITIONS
  - Secondary to cardiac disease, inflammatory disease, lung disease, neurodegenerative disorders

SUMMARY

- PSYCHOTROPIC MEDICATIONS
  - DO NOT WORK IN ISOLATION TO IMPROVE FUNCTIONING
  - USEFUL TO REPAIR ABNORMAL FUNCTIONING
- RETAIN AWARENESS OF COLLECTIVE RESPONSIBILITY
- EVALUATE REAL FUNCTIONING
- SHARE OBSERVATIONS
- ASSESS BENEFITS VS RISKS
- THERE ARE NO ABSOLUTE ANSWERS

Thank you for your attention and participation!