## Opiate Treatment and Benzodiazepines: Treatment Options.

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## Introduction

This presentation explores the use of benzodiazepines (bzd's)in the context of opiate maintenance treatment.

It explores the interaction between bzd's with opiates; the importance of dosing issues; safety issues; and detoxification issues.

### Alcohol or Bzd Dependence: Definition

- Alcohol dependence is defined according to 7 criteria.
  - Alcohol is important, central, or plays a major role in the individuals life
  - Alcohol has caused harm in that persons life. This is assessed in 3 areas:
    - Harm in their primary relationship
    - Harm in the primary occupation
    - Harm in their broader social and occupational role

## Definition.

The individual generally drinks more than they want to when they have a drink.

The individual has keep on drinking, despite believing there was a problem with alcohol.

They may have a strong urge to drink

### Definition.

The individual shows sign of physical addiction to alcohol:

 They have withdrawal symptoms or signs such as anxiety, shakes, sweats, nausea, or agitation on stopping alcohol

 They have increased or altered tolerance to alcohol over the years.

 A total of 3 out of 7 criteria makes the definition of alcohol dependence.

# What is the profile of Bzd abuse in the non-opiate dependent population?

- High rate of bzd users become dependent.
- In a general GP population, 40% of users become dependent.
  - In a self help population, 97% of users become dependent.
  - In a psychiatric out-patient population, 60-75% of users become dependent.

- Kan et al., Acta Psych Scand 1997 96: 85-93

# Psychiatric diagnoses of patients with severe Bzd dependence.

Current:

- Drug/alcohol dependence 83%
- Panic disorder 13%
- ♦ Generalised anxiety 20%

Lifetime:

- ♦ Major depression 40%
- Drug/alcohol dependence 100%
- Panic disorder 30%
- Personality disorder
  - \* Anti-social 42%
  - Avoidant 25%
  - ★ Borderline 17%

Busto et al., J Clin Pshchopharmacol 1996, 16: 51-57

### Interactions between Bzd's and opiates

- These medications work at different receptors.
  - Opiates work at opiate receptors, methadone predominantly works at the mu receptor, with some delta activity.
  - Bzd's work at the bzd receptor, stimulating the GABAergic system.

### Interactions between Bzd's and opiates

Both cause sedation and resporatory depression.

- There is a synergistic interaction between the systems: the combination may cause increased side effects over those of each one alone.
  - Both medication types are highly addictive.

## Opiate and Bzd dependence

- Most opiate abusers make opiate dependence criteria.
- Most bzd abusers will not make bzd dependence criteria, whether they abuse opiates or not.
- Thus a high index of suspicion is required when prescribing bzd's in this population, even if they do not make bzd dependence criteria.

## What is the profile of the Bzd abuser?

- Prevalence of bzd dependence in opiate dependent population in Dublin is 34%.
- Those who were co-dependent were:
  - ★ Older
  - More likely to be on a MMP
  - Using heroin longer
  - Using bzd's longer, at increased doses than non bzd dependent population
  - Used more drugs in general
  - Past history of depression
  - Past history of deliberate self harm

Rooney et al., IJMed Sci 1999 168: 36-41

## Israeli Bzd abuse in MTP study

- Prevalence and course of bzd abuse in existing MMTP using urine and self report data.
- Lifetime prevalence of bzd abuse 66%, current incidence 51%
- 44.6% of patients who abused during the first month ceased after 1 year.
  - 27.4% who had not abused did so after 1 year.
- Overall reduction by 12% over the course of the year.
- Flunitrazepam (93%)> diazepam (54%)> Oxazepam (39%).
- 93% oral ingesion, 43% smoked/snorted, 8% IV.
- Mainly "self-medication"

#### After 1 year on MMTP, Bzd abusers relative to non Bzd abusers:

- More time in prison
- Unemployed
- Greater degree of parental drug abuse or mental illness problems.
- Used heroin earlier
- Used more heroin, cocaine and cannabis
- More psychopathology and depression.
- More Hep c, more HIV risk behavior

## Follow on study

- Trial of of clonazepam maintenance treatment (CMT)
  - 20 subjects in open label trial
  - Daily dose 6mg gradual taper to maintenance dose.
  - Maintenance dose: patient satisfied, no cravings, no overdose.
  - Successful in 75% of patients over 6 months.
    - Bleich et al., Isr J Psychiatry 2002, 39: 104-112

## Outpatient Bzd Detox in MMTP patients.

Slow taper of whatever bzd medication the patient was taking.
4/22 refused the taper.
12 patients completed detoxification, on average 8 weeks later.

No long term follow up available.

McDuff et al., J SAT 1993, 10: 297-302

## Contingency reinforcement post detoxification.

- 14 patients on an MMTP with chronic bzd abuse admitted for inpatient detoxification from bzd's.
- 7-day detoxification.
- Contingency Management (CM): \$25 or take home dose of meth for drug free urine sample submitted (up to 3/week) versus Standary Care (SC).
- More drug free urines in CM group relative to baseline, no difference in SC group relative to baseline.

• Chutuape et al., Drug Alcohol Depend 1999, 54: 69-81

## Clinical predictors of outome in long term treatment.

- 82 patients with alcohol or bzd dependence treated over 6 months in outpatient setting.
- Both groups decreased bzd use over that time.
- Bzd dependent patients reported decreases in level of anxiety in follow up period despite lower bzd use.
- Bzd dependent patients had
  - Lower abstinence rates
  - More frequent drug use
    - Charney et al., JClin Psych 2000, 61: 190-195

## Bzd prescription practices in opiate dependent population: recommendations

- Use caution
- Bzd's should be prescrribed in as low dose as possible
- Short term only, not longer than 8 weeks
- Beware of diversion, multiple prescription seeking

### Bzd withdrawal: syndromes

High done withdrawal: begins 1-2 days after a short acting bzd is stopped, 3-8 days after a long acting bzd is stopped.

Characterized by: anxiety, insomnia, nightmares, seizures, psychosis, hyperpyrexia, death.

Treated with hynotic dose of bzd.

### Bzd withdrawal: syndromes

- Protracted low dose withdrawal: 1-2 days after short acting bzd is stopped/reduced, 3-8 days after a long acting bzd is stopped/reduced, lasts 7-14 days.
- Anxiety, agitation, tachycardia, palpitations, anorexia, blurred vision, cramps, insomnia, nightmares, confusion, spasms, startle, paraesthesia.
  - Vague symptoms may last for a number of months.

## **Bzd treatment strategies**

- Do nothing, leave on current bzd's.
- Gradually taper current bzd of choice over weeks, to patients level of tolerance, or to nil.
- Inpatient admission for detox followed by opd follow up.
- Switch to long acting bzd e.g. diazepam, and commence taper.
- Taper lasts 8 weeks on average, may take longer.

- Encourage re benefits, mood and anxiety levels.
- Contingency reinforcement to maintain abstinence.
- A significant reduction of bzd's is safer, decreases psychopathology, and leads to overall increase in well being than doing nothing.
   Abstinence from bzd's is ideal.

## Bzd equivalents

Dose equivalents:		
<ul> <li>Alprazolam</li> </ul>	(Xanax)	1
<ul> <li>Chlorodiazepo</li> </ul>	xide (Librium)	25
<ul> <li>Clonazepam</li> </ul>	(Klonopin)	2
<ul> <li>Diazepam</li> </ul>	(Valium)	10
<ul> <li>Flurazepam</li> </ul>	(Dalmane)	15
<ul> <li>Lorazepam</li> </ul>	(Ativan)	2
<ul> <li>Temazepam</li> </ul>	(Normison)	15
<ul> <li>Triazolam</li> </ul>	(Halcion)	0.25