## OPIOID REPLACEMENT THERAPY

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## Disclosures

• Nil

### **OBJECTIVES**

- Overview opioid crisis
- Opioid replacement options Methadone /Suboxone /Kadian
- Treatment goals and outcomes
- Identifying treatment barriers
- The science of it Does it make a difference?

# TEAM APPROACH - each & every member can have an impact

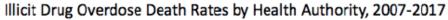
"If you want to go fast, go alone. If you want to go far, go with others."

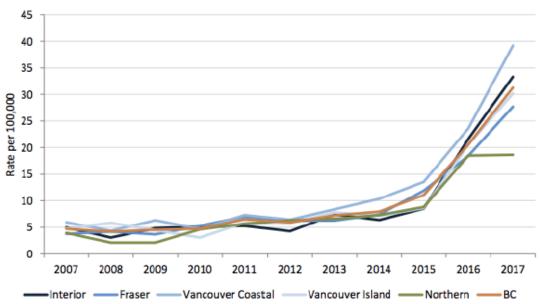
Ancient African Proverb

## OPIOID CRISIS – A VIEW FROM THE FRONTLINE

#### The current opioid crisis







http://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/death-investigation/statistical/illicit-drug.pdf



## METHADONE SUBOXONE KADIAN

- Treatment ready
- Bloodwork hbg/lft/HIV/ Hep B/C /pregnancy test
- Baseline urine drug screen
- Naloxone training and kit
- Not hinder starting treatment

## PHARMACOLOGY

METHADONE	SUBOXONE
<ul> <li>LONG-ACTING SYNTHETIC OPIOID</li> <li>mu OPIOD RECEPTOR AGONIST</li> </ul>	<ul> <li>SEMI-SYNTHETIC OPIOD</li> <li>mu PARTIAL OPIOD AGONIST</li> <li>KAPPA PARTIAL RECETPTOR ANTAGONIST -inhibits dysphoria</li> </ul>
• HALF-LIFE 24-36 HRS Can accumulate and lead to resp. depression (half-life 4-90 hrs)	<ul> <li>HALF LIFE 2-5 HRS         Lasts &gt;24hrs due to slow         dissociation from the receptor         mu Rc     </li> </ul>
PEAK EFFECT 4 HRS	PEAK EFFECT IN 90 MIN
<ul> <li>PREVENT OPIOD WITHDRAWAL</li> <li>REDUCE CRAVING OPIODS</li> <li>BLOCK EUPHORIA FROM HEROIN</li> </ul>	CAN DISPLACE FULL OPIOID AGONIST heroin /morphine SEVERE WITHDRAL
<ul> <li>RESPIRATORY DEPRESSION</li> <li>INTERACTIONS WITH DRUG ie Ciproflaxin</li> </ul>	<ul> <li>LESS LIKELY RESPIRATORY         DEPRESSION     </li> <li>CAN USE NARCANTO REVERSE         15MG     </li> </ul>

## INITIATION

Methadone	Suboxone
• SLOW WEEK TO MONTHS	• FAST 2-3 DAYS
• INCREASE EVERY 5-7 DAYS	<ul> <li>PT NEED TO BE IN         WITHDRAWAL         MILD TO MODERATE COWS</li> </ul>

## COWS 5-12 MILD 13-24 MOD 25-36 SEVERE

- 4 RESTING PULSE 80 above 120
- 4 SWEATING
- 5 RESTLESSNESS
- 5 PUPIL
- 4 BONE /JTS ACHES
- 4 RUNNY NOSE
- 5 GI UPSET
- 4TREMOR
- 4YAWN
- 4 ANXIETY
- 5 GOOSEFLESH SKIN

### **SUBOXONE**

#### LAST DOSE

- MORPHINE 8-12 HRS
- HEROIN 12-24 HRS
- OXYCODONE 12-24 HRS

SUGGESTION TAKE YOUR LAST DOSE BY 23:00

AND WE WILL MEET AT 1300 FOR INITIATION

SEETHEM AGAIN INTWO HOURS AND AGAIN INTWO HOURS

ON FIRST DAY.

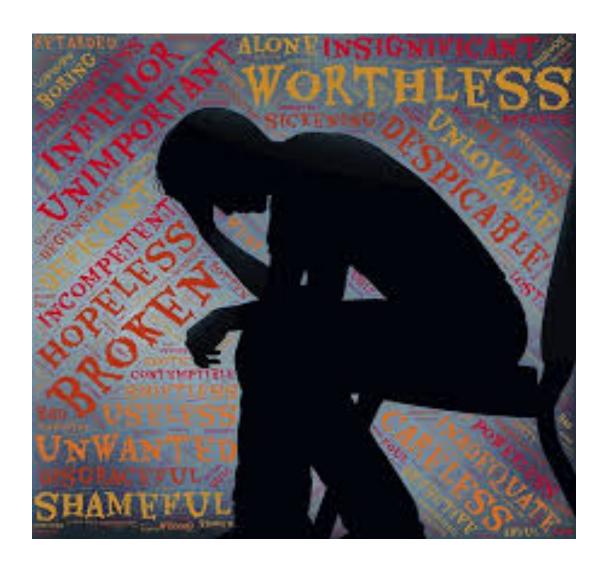
### STABILIZATION

METHADONE	SUBOXONE
MISSED 3 OR MORE DAYS LOWER DOSE	MISSED DOSE CAN RESTART AT PREVIOUS DOSE
MISSED 4-5 DAYS NEED TO RESTART	
DWI / CARRIES ONLY AFTER 8 M STABLE	DWI/ CARRIES ONLY AFTER 8M STABLE

## KADIAN rhythmic flow

- EXTEND RELEASE MORPHINE SULPHATE
- ORAL DOSE PEAK CONCENTRATION 8 HRS
- RESPIRATORY DEPRESSION CAN OCCUR MAINLY AT DOSE INCREASE OR INITIATION
- START LOW AND TITRATE UP
- DWI if pellets crushed etc uncontrolled delivery of drug resulting in overdose do no harm

## BARRIERS TO TREATMENT



#### **BARRIERS**

- TRUST/RAPPORT
- KNOWLEDGE: WHO WHAT WHEN HOW
- BIAS "METHADONE DRUG ADDICTS"
- ACCESS: FOOD SHELTER MONEY
- PHARMACY DWI
- HEATH VS LAW ENFORCEMENT
- POISONED DRUGS SUPPLY FENTAYL
- HOW TO USE COWS WHEN PT IS DIFFICULT TO ASSES
- HOW TO MANAGE WITHDRAWL AND SX
- SUBOXONE NEEDS MIN 12 HRS ABSTINENCE
- CO MORBITIY MENTAL ILLNESS /COGNIITVELY COMPROMISED / CHF / DM
- RISK OF RESPIRTORY DEPRESSION DO NO HARM

## GOALS & OUTCOMES

- TREATMENT RETENTION
- WITHDRAWAL SUPPRESSION
- DECREASE ILLICIT OPIOD ( & COCAINE ) USE
- REDUCED RISK OF HCV/HIV
- INCREASED ANTIRETROVIRAL ADHERENCE, LOWER HIV VIRAL LOAD
- DECREASED CRIMINAL ACTIVITY
- SIGINIFICANTLY REDUCED MORTALITY

**BOTH ALL- CAUSE AND SUBSTANCE – RELATED** 

## THE SCIENCE – what does the research show?



#### Mortality risk during and after opioid substitution treatment: systematic review and meta-analysis of cohort studies

Luis Sordo, 123 Gregorio Barrio, 4 Maria J Bravo, 12 B Iciar Indave, 12 Louisa Degenhardt, 56 Lucas Wiessing, 7 Marica Ferri, 7 Roberto Pastor-Barriuso 12

aths from all

ta extraction

es in and out

methadone

22 885 people s and 15 831 1-4.5 years.

ds in and out

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<sup>4</sup>National School of Public Health, carlos III Institute of Health, 20029 Madrid, spain <sup>5</sup>National Drug and Alcohol ABSTRACT OBJECTIVE

To compare the risk for all cause and overdose mortality in people with opioid dependence during and after substitution treatment with methadone or buprenorphine and to characterise trends in risk of mortality after initiation and cessation of treatment.

DESIGN

Systematic review and meta-analysis.

DATA SOURCES

Medline, Embase, PsycINFO, and LILACS to September 2016.

STUDY SELECTION

Retention in methadone and buprenorphine is associated with substantial reductions in the rate of all cause and overdose mortality

The induction phase and the time immediately after leaving treatment with both drugs are periods of particularly increased mortality risk.

Accepted: 17 Merch 2017

1000 person years in and out of methadone treatment (unadjusted out-to-in rate ratio 3.20, 95% confidence interval 2.65 to 3.86) and reduced to 4.3 and 9.5 in and pooled trend analysis, all cause mortality dropped sharply over the first four weeks of methadout treatment and decreased gradually two weeks after leaving treatment. All cause mortality remained stable during induction and remaining time on buprenorphine treatment. Overdose mortality evolved similarly, with pooled overdose mortality trates of 2.6 and 12.7 per 1000 person years in and out of methadone treatment (unadjusted out-to-in rate ratio 4.80, 2.90 to 7.96) and 1.4 and 4.6 in and out of buprenorphine treatment.

out of buprenorphine treatment (2,20, 1,34 to 3,61), In

#### CONCLUSIONS

Retention in methadone and buprenorphine treatment is associated with substantial reductions in the risk for all cause and overdose mortality in people dependent on opioids. The induction phase onto methadone treatment and the time immediately after leaving treatment with both drugs are periods of particularly increased mortality risk, which should be dealt with by both public health and clinical strategies to mitigate such risk. These findings are potentially important, but further research must be conducted to properly account for potential confounding and selection bias in comparisons of mortality risk between opioid substitution treatments, as well as throughout periods in and out of each treatment.

#### introduction

Optoid dependence is a rising drug use disorder with substantial contribution to the global disease burden. The absolute number (age standardised prevalence) of people with optoid dependence worldwide increased from 10.4 million (0.20%) in 1990 to 15.5 million (0.20%)

> Best-Practices in ORAL OPIOID AGONIST THERAPY Collaborative

http://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/death-investigation/statistical/illicit-drug.pdf

## What I have learned?

- EP -on suboxone for 8m
  - no overdose for 5 m

COWS GUIDELINE / USE CLINICIAL JUDGEMENT –
REINITIATE TREATMENT IMMEDIATELY AFTER HOSPITAL
D/C

- TR on methadone for 6 months
  - no overdoses for 4 m

**KEEP SHOWERING THEM WITH KINDNESS** 

"IAM MORE MINDFUL OF MY USE"

## What have I learned?

- LF new start Kaidan
  - -able to initiate treatment at first meeting

TEAM WORK /EMPOWERING THE PATIENT

- RS active use / marginal living 24 yrs old
  - first visit decline treatment

MADE EYE CONTACT / SHOWED CARE

STUDIES SHOW EVEN A FIVE MINUTE INTERACTION CAN HAVE AN IMPACT

**GOAL HARM REDUCTION** 

## Thank for all your care!



If you choose, even the unexpected setback can bring new and positive possibilities.

If you choose, you can find value and fulfillment in every circumstance. Ralph Marston