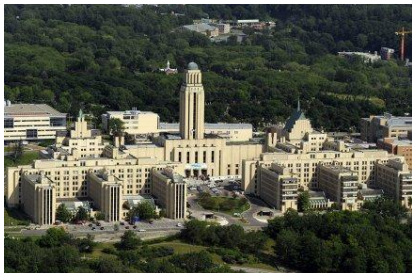


Attitudes and risk of addiction in Patients Suffering from Chronic Pain and Treated with Long-Term Opioid Therapy



Université  de Montréal


CHUM



Centre d'expertise
en gestion de la
douleur chronique
RÉSEAU UNIVERSITAIRE
INTÉGRÉ DE SANTÉ


RUIS
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Canada

Conflict of interest

	Research funds	Conferences	Services: travel expenses, accommodation	Medical Advisory
Astra Zeneca		X		
Bayer		X	X	
Jansen-Ortho	X	X		X
Lille		X		X
Merck Frosst		X		X
Pfizer			X	
Purdue Pharma	X	X	X	

Moral commitment

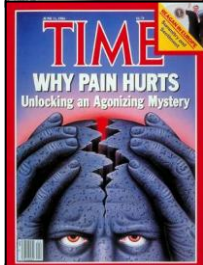


If, in my presentation I suggested off-label for a drug, I agree to inform the audience.

I agree to use as far as possible, the pharmacologic terminology instead of brand names.

Changes in the Treatment of Chronic Pain

- Tremendous progress has been made in the study and treatment of pain in the past 2 decades.
- Efforts have been undertaken to make pain assessment and treatment a priority of medical care and to use all of the weapons in our arsenal to bring relief to the millions of people with chronic pain.
- However, this progress has been somewhat tempered by the souring of the regulatory climate and the growth of prescription drug abuse.



Changes in the Treatment of Chronic Pain

- Despite these setbacks, the use of long-term opioid therapy to treat chronic non-cancer pain is growing, based in part on evidence from clinical trials and a growing consensus among pain specialists.
- The appropriate use of these drugs requires skill in the prescription of opioids, knowledge of the issues related to addiction, and a commitment to performing and documenting a comprehensive assessment repeatedly over time.

Equipoise

We are neither opiophobic nor opiophilic we are supportive of an adequate pain treatment for our patients.



3A-CP Study

- **A**ttitude
- **A**ddiction
- **A**lexithymia

In **C**hronic **P**ain Patients
with long-term opioid therapy.



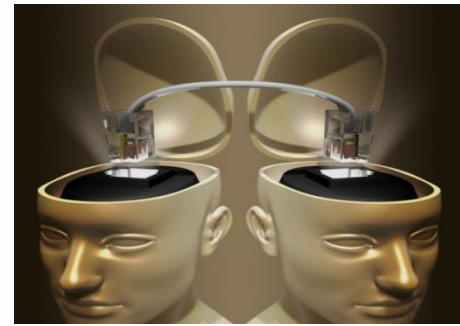
3A-CP Study



How many of you believe that patients with chronic pain have a negative attitude towards opioids?

How many of you believe that chronic pain patients have a high risk addiction?

Original Hypotheses



1. We hypothesized that patients attending the chronic pain center would have high pain scores, a highly negative attitude towards taking opioids
2. We also wished to evaluate the level of risk of addiction in patients with long-term opioid therapy.

Study Overview

- University based chronic pain center.
- The protocol was approved by the university hospital ethics committee.
- Patients received an invitation to participate in the mail and completed the questionnaires over the phone.
- We used French language validated questionnaires.
- Data analysis was carried out by Montreal Heart Institute Coordinating Center (MHICC).

Study exclusion criteria

- Patients do not take any opioids.
- Patients with less than 12 month of treatment with opioids.
- Patients do not speak French.
- Patients excluded for hospitalisation.
- Patients who died.
- Patients-unreachable (tried to reach to at least 3 times with no response)

Study inclusion criteria

- Patients signed the inform consent.
- Patients with more than one year of treatment with opioids.

PRELIMINARY

Study Population

303 patients



Study Population (N=303)

PRELIMINARY



Age

Mean age	59.6 years
Age range	26 to 91 years
Under 65 years	74%



PRELIMINARY

Level of Education (N=303)

Level of Education	N	Percent
<i>Elementary school</i>	29	9.6
<i>High school</i>	98	32.3
<i>College</i>	76	25.1
<i>University</i>	89	29.3
N/D	11	3.6

54.4%



PRELIMINARY

Job Status

(N=303)

<i>Job status</i>	<i>Frequency</i>	<i>Percent</i>
Workman's compensation or similar	113	37.3
Retired	89	29.4
Working (full or partial time)	55	18.1
Unemployed	37	12.2
Others (housework, N/D)	9	3.0

66.6%

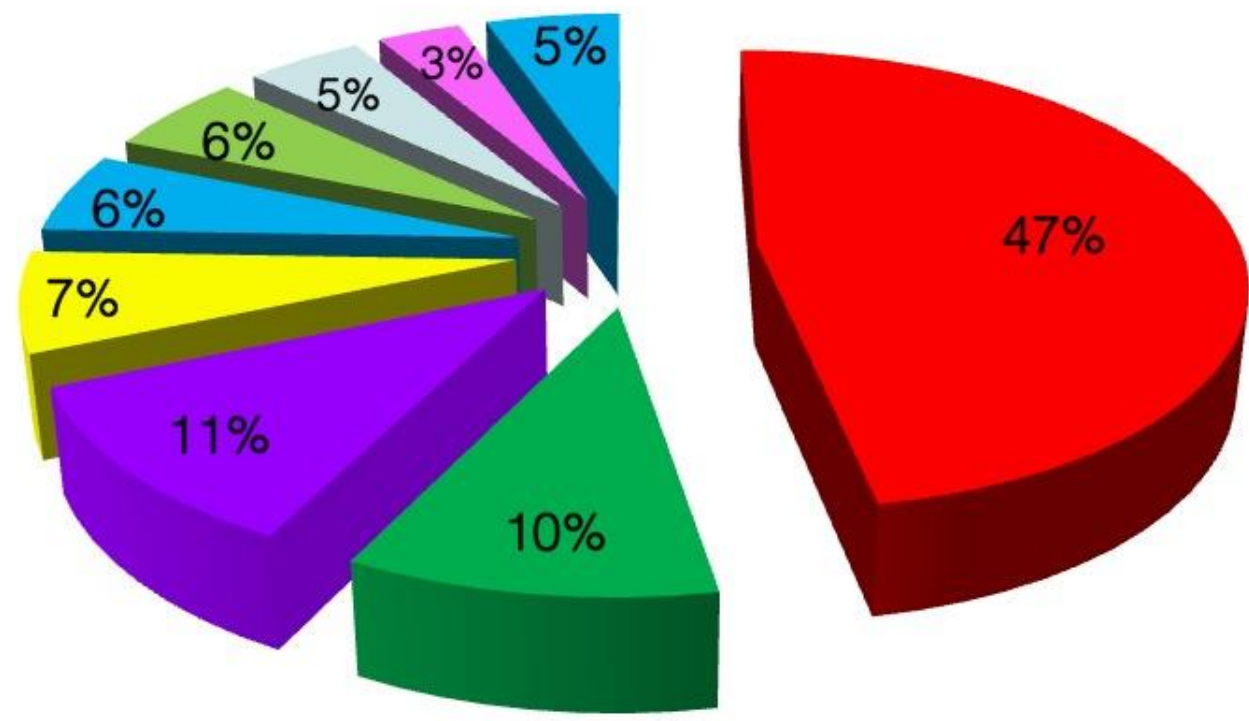


PRELIMINARY

Types of Pain

(N=303)

- Spinal pain
- Fibromyalgia
- Arthritis, arthrosis pain
- Neuropathic pain
- CRPS
- Chest pain
- Musculoskeletal pain
- Abdominal pain
- Others



Type of pain

(N=303)

PRELIMINARY

<i>Type of pain</i>	<i>Frequency</i>	<i>Percent</i>
Spinal pain	143	47.2
Musculoskeletal pain	34	11.2
Neuropathic pain	31	10.2
Fibromyalgia	21	6.9
CRPS	17	5.7
Abdominal pain	17	5.7
Arthritis, arthrosis pain	14	4.6
Chest pain	10	3.3
Others	16	5.2

75.5%

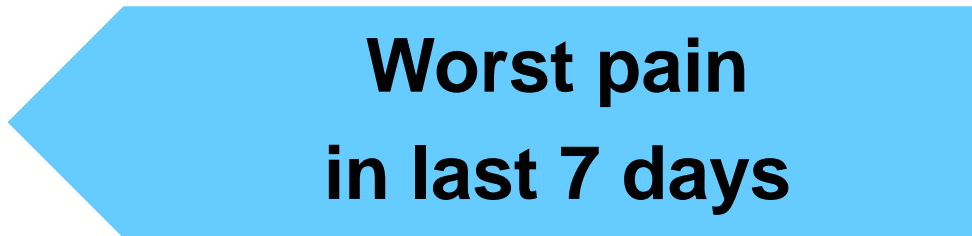
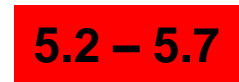


Mean Pain Intensity

(N= 303)

NRS (0-10)

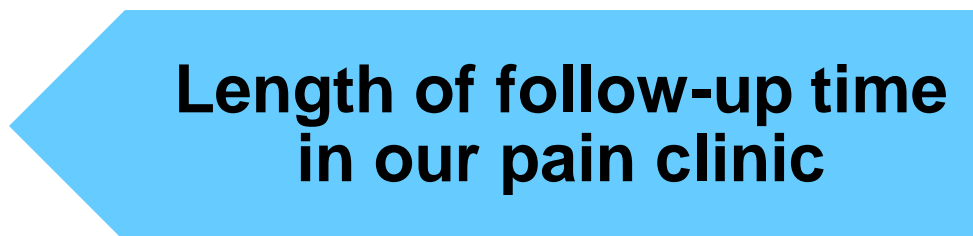
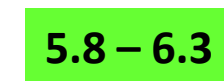
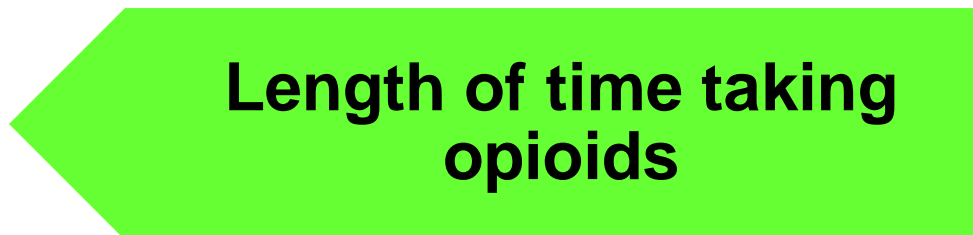
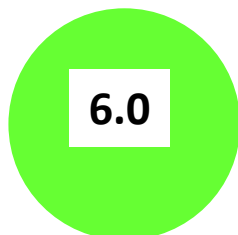
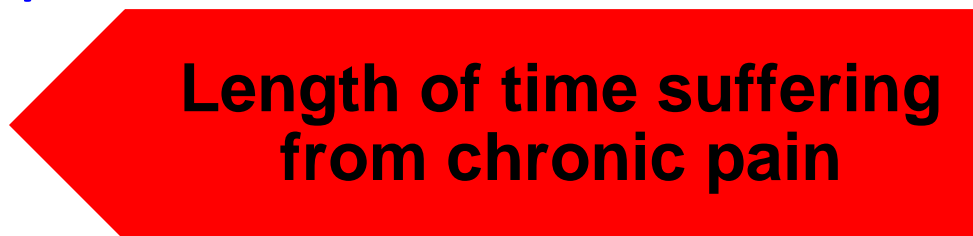
95% CI



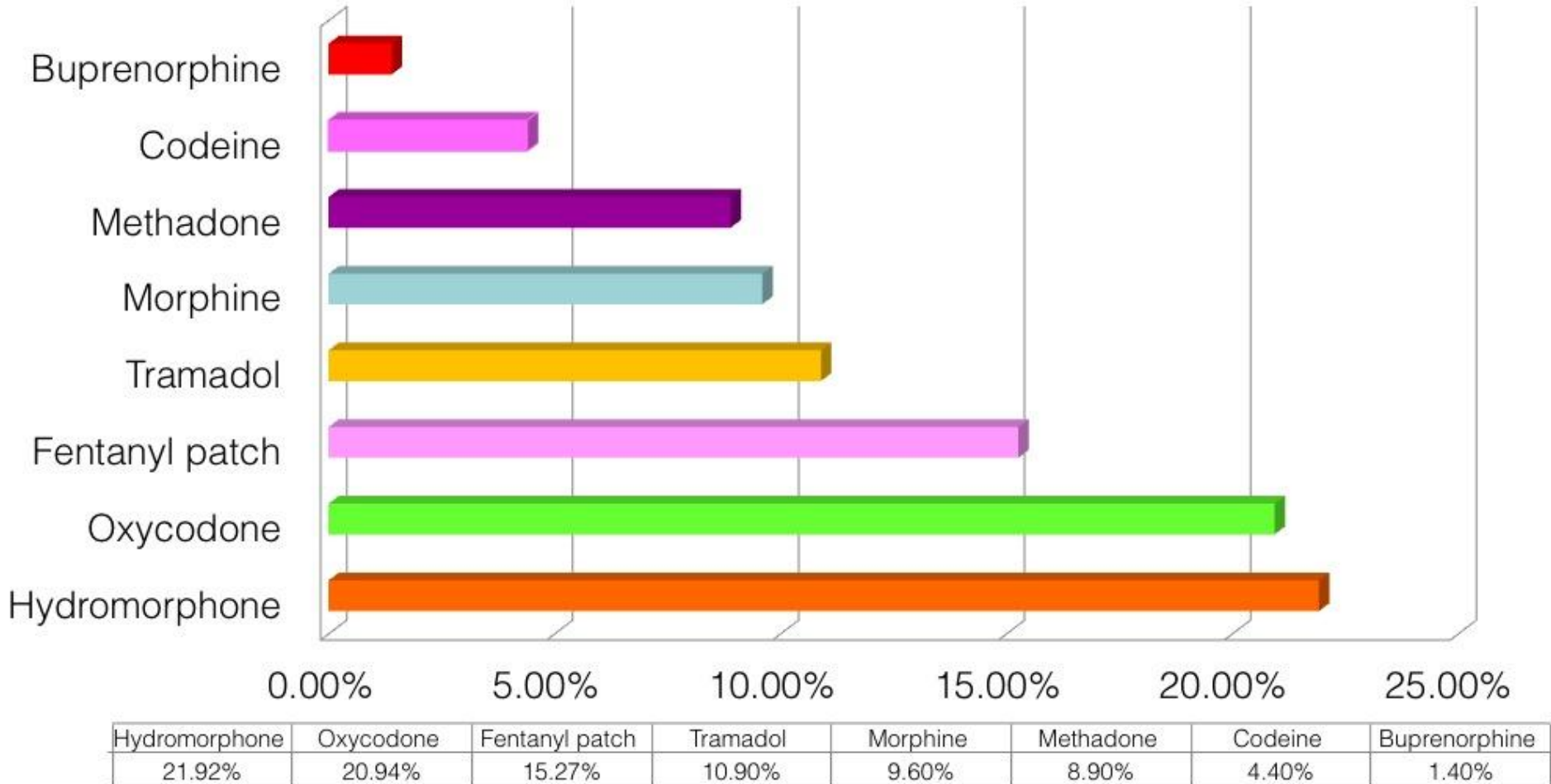
Time Course of Suffering, Treatment and Medication (N=303)

Mean (years)

95% CI



The Proportion of Patients Taking Various Opioids



Morphine Equivalents (mg per day) (N=303)

PRELIMINARY

<i>Opioids used for treatment</i>	<i>N</i>	<i>Median (mg)</i>	<i>Q1 – Q2</i>
Codeine	18	3.7	3.7 – 7.5
Tramadol	44	15.6	9.3 – 39.8
Buprenorphine	6	11.5	11.5 – 69
Morphine	38	32.5	10.0 – 130.0
Oxycodone	84	48.0	20.0 – 96.0
Hydromorphone	89	40.0	15.0 – 90.0
Fentanyl	62	180.0	90.0 – 270.0
Methadone	36	300.0	100.0 – 675.0

Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain

Recommendations:

- Chronic non-cancer pain can be managed effectively in most patients with dosages at or below **200 mg/day** of morphine or the equivalent.
- Consideration of a higher dosage requires careful reassessment of the pain and of the risk for misuse, and frequent monitoring for evidence of improved patient outcomes.

Median Number of Morphine Equivalents Per Day for Patients Taking Several Opioids Concurrently (N=291)

<i>Number of opioids</i>	<i>N</i>	<i>Median</i>	<i>Q1 – Q2</i>
1	196	48.0	14.5 - 128
2	83	151.0	53.0 - 310.0
3	12	289.0	109.5 - 574.6



Cannabis



- Morphine equivalents not available.
- 5 patients taking cannabis and another opioid.
- 7 patients taking only synthetic cannabis.

The Drug Attitude Inventory (DAI)



Attitudes Towards Medications

- A multitude of factors play a role in a patient's decision as to whether or not to take medication.
- Attitudes and beliefs about health and illness have been consistently identified as the major factors in such decisions.
- A patient's attitudes towards drugs that have a social stigma may play an important role in whether or not they commit to a treatment.

The Drug Attitude Inventory (DAI)



- The aim of this questionnaire is to gain some understanding of what people think about medications and their experiences while taking them.
- It was designed to identify the subjective responses of patients with schizophrenia taking neuroleptic drugs and their attitude towards disease and treatment.

Similarities Between the Patients with Chronic Pain and Patients with Schizophrenia

- The chronic use of medication.
- The social stigma attached to these medications.
- The need to take these drugs to be functional.



Creating the DAI-M

- Using this questionnaire for patients in a pain clinic required a few small wording changes.
- We contacted Dr. Awad (DAI author) who approved the changes.
- The French validated version was used.

The Drug Attitude Inventory DAI-10 Modified with Author's Permission

<i>Questions</i>	<i>T</i>	<i>F</i>
1) For me, the good things about medication outweigh the bad		
2) I feel strange, "doped up", on medication		
3) I take medications of my own free choice		
4) Medications make me feel more relaxed		
5) Medication makes me feel tired and sluggish		
6) I feel more normal on medication		
7) I take medication only when I feel pain*		
8) It is unnatural for my mind and body to be controlled by medications		
9) My thoughts are clearer on medication		
10) Taking medication will prevent me from having crises of pain **		

* I take medication only when I feel ill

** Taking medication will prevent me from having a breakdown

Results of the DAI-M

<i>DAI-M</i>	<i>N</i>	<i>Percent</i>
<i>Positive Attitude</i>	103	33.99
<i>Negative Attitude</i>	116	38.28
<i>Neutral Attitude</i>	73	24.09
<i>Incomplete</i>	11	3.63



Questions to Assess Feelings of Dependence and Stigma

We created five additional questions to assess the following items:

- ✓ Feelings of dependence
- ✓ Sense of stigmatism while taking opioids

The Dependence and Stigma Questions

(N=303)

Questions

T *F*

1) I feel dependent on painkillers to be functional

2) I'm afraid of the medication, but I take it because it decreases the intensity of pain.

3) I take medication without telling my family that they are opioids

4) I feel dependent on my medication to relieve pain

5) I feel criticized by my family and/or my friends when I take opioids for pain relief.

The Dependence and Stigma Questions

(N=303)

PRELIMINARY

- Questions 1 and 4 were added to assess feelings of dependence.
- Questions 3 and 5 were added to assess the potential sense of stigma that patients may experience when taking opioids for chronic pain management.
- Question 2 is a measure of the presence of fear.

Questions Regarding Feelings of Dependence

(N=303)

PRELIMINARY

Questions

	T %	F %
<i>I feel dependent on opioids to be functional</i>	67.0*	33.0
<i>I feel dependent on my medication to relieve pain</i>	77.8*	21.4

Questions Regarding Feelings of Stigma

(N=303)

Questions

	T %	F %
<i>I take medication without telling my family that they are opioids</i>	10.8*	88.4
<i>I feel criticized by my family and/or my friends when I take opioids for pain relief.</i>	23.1*	76.5

Question Regarding Fear of Taking Opioids (N=303)

Question

T
%F
%

I'm afraid of the medication, but I take it because it decreases the intensity of pain.

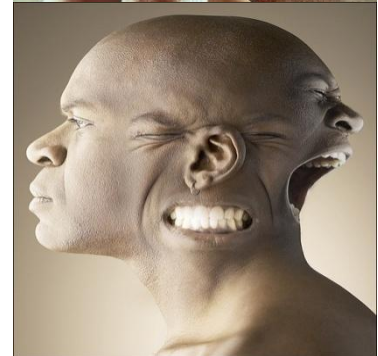
41.6*

58.4

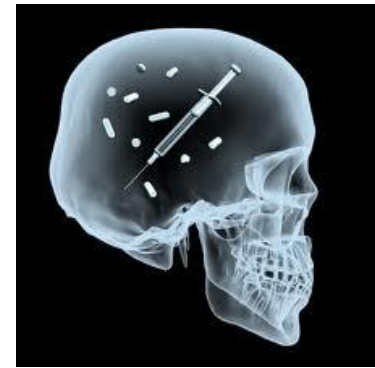
3A-CP Study

- **A**ttitude
- **A**ddiction

In **C**hronic **P**ain Patients
with long-term opioid therapy



Addiction in Patients with Chronic Pain



- We used two questionnaires to assess the risk of addiction in patients treated with long-term opioid therapy (LtOT).
- The Opioid Risk Tool (ORT).
- The Screening Tool for Addiction Risk (STAR).

Opioid Risk Tool (ORT)

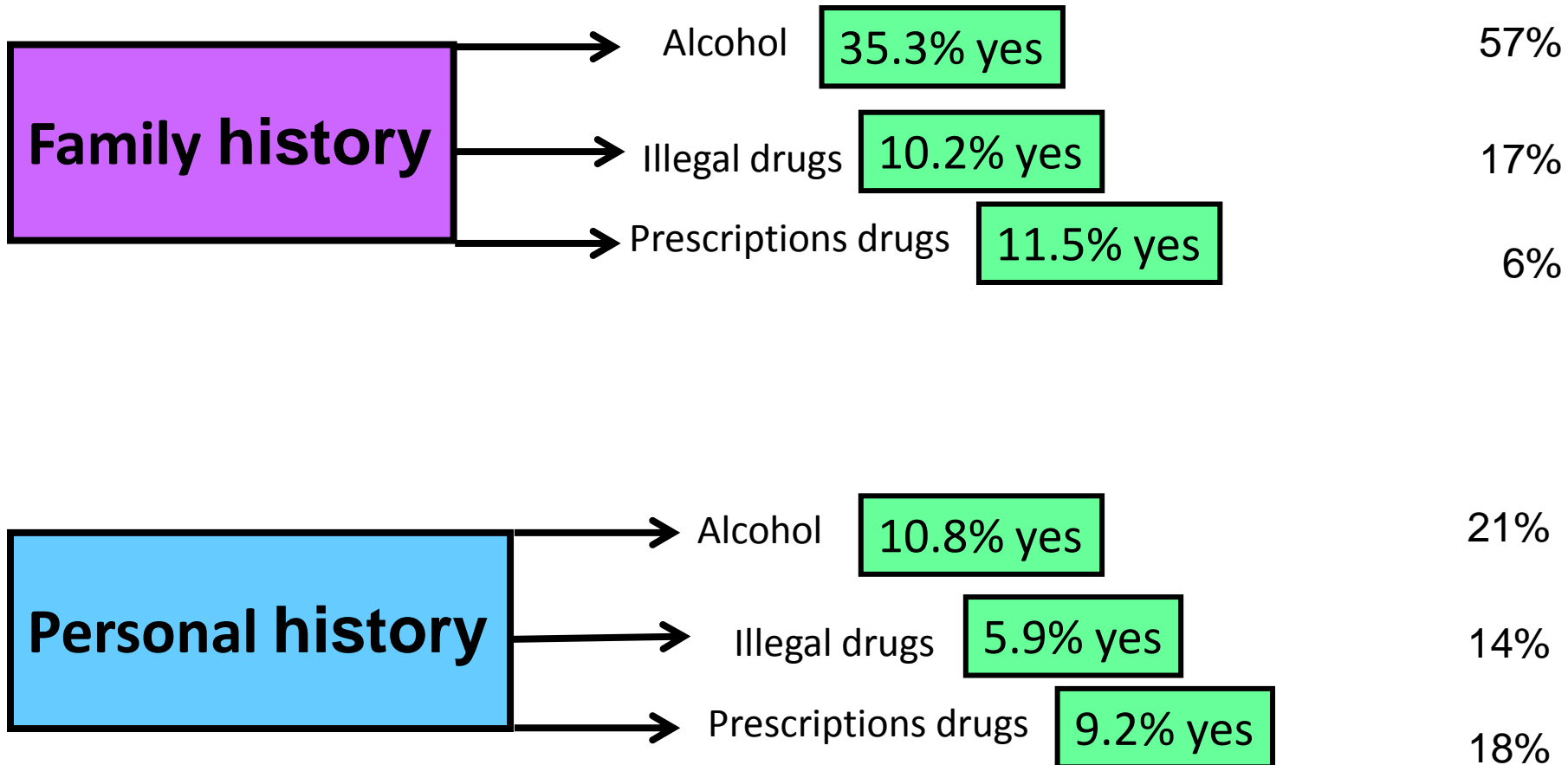


- 5-item questionnaire with yes or no answers.
- Designed to predict the probability of patients displaying aberrant drug behavior when opioids are prescribed for chronic pain.
- Recommended tool both nationally and provincially for the safe and effective use of opioids for non-cancer pain.

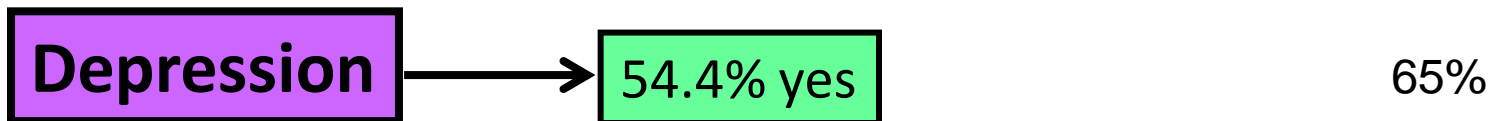
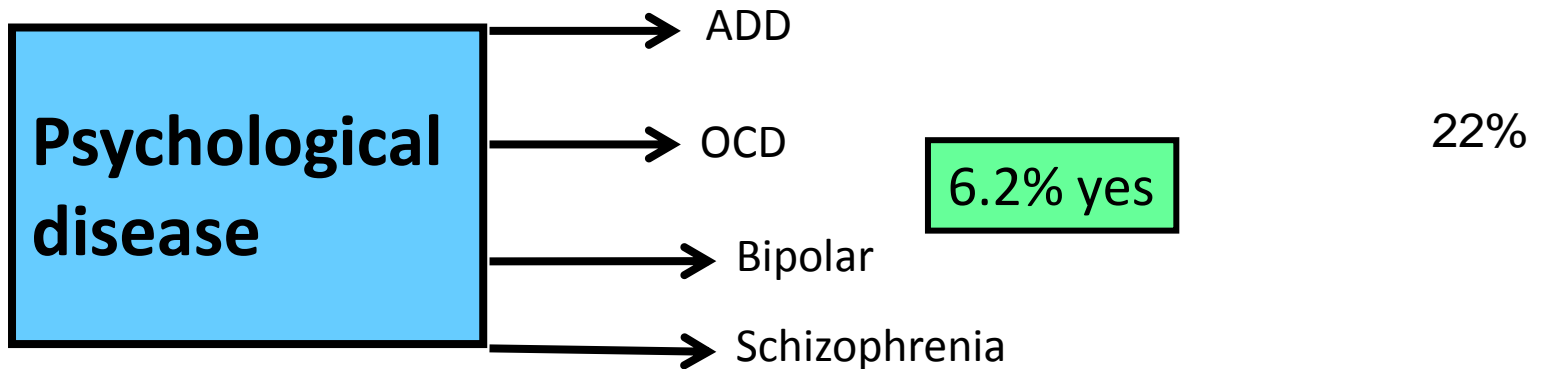
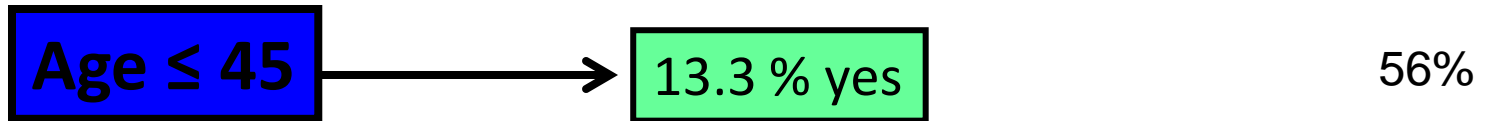
Opioids Risk Tool (ORT)

OPIOID RISK TOOL				
		Mark each box that applies	Item Score If Female	Item Score If Male
1. Family History of Substance Abuse	Alcohol	[]	1	3
	Illegal Drugs	[]	2	3
	Prescription Drugs	[]	4	4
2. Personal History of Substance Abuse	Alcohol	[]	3	3
	Illegal Drugs	[]	4	4
	Prescription Drugs	[]	5	5
3. Age (Mark box if 16 – 45)		[]	1	1
4. History of Preadolescent Sexual Abuse		[]	3	0
5. Psychological Disease	Attention Deficit Disorder, Obsessive Compulsive Disorder, Bipolar, Schizophrenia	[]	2	2
	Depression	[]	1	1
TOTAL			_____	_____
Total Score Risk Category				
Low Risk 0 – 3				
Moderate Risk 4 – 7				
High Risk ≥ 8				

History of Substance Abuse (N=303)



History of other Relevant Risk Factors



Opioid Risk Tool (ORT)

Low risk: 0-3

Unlikely to abuse opioids

Moderate risk: 4-7

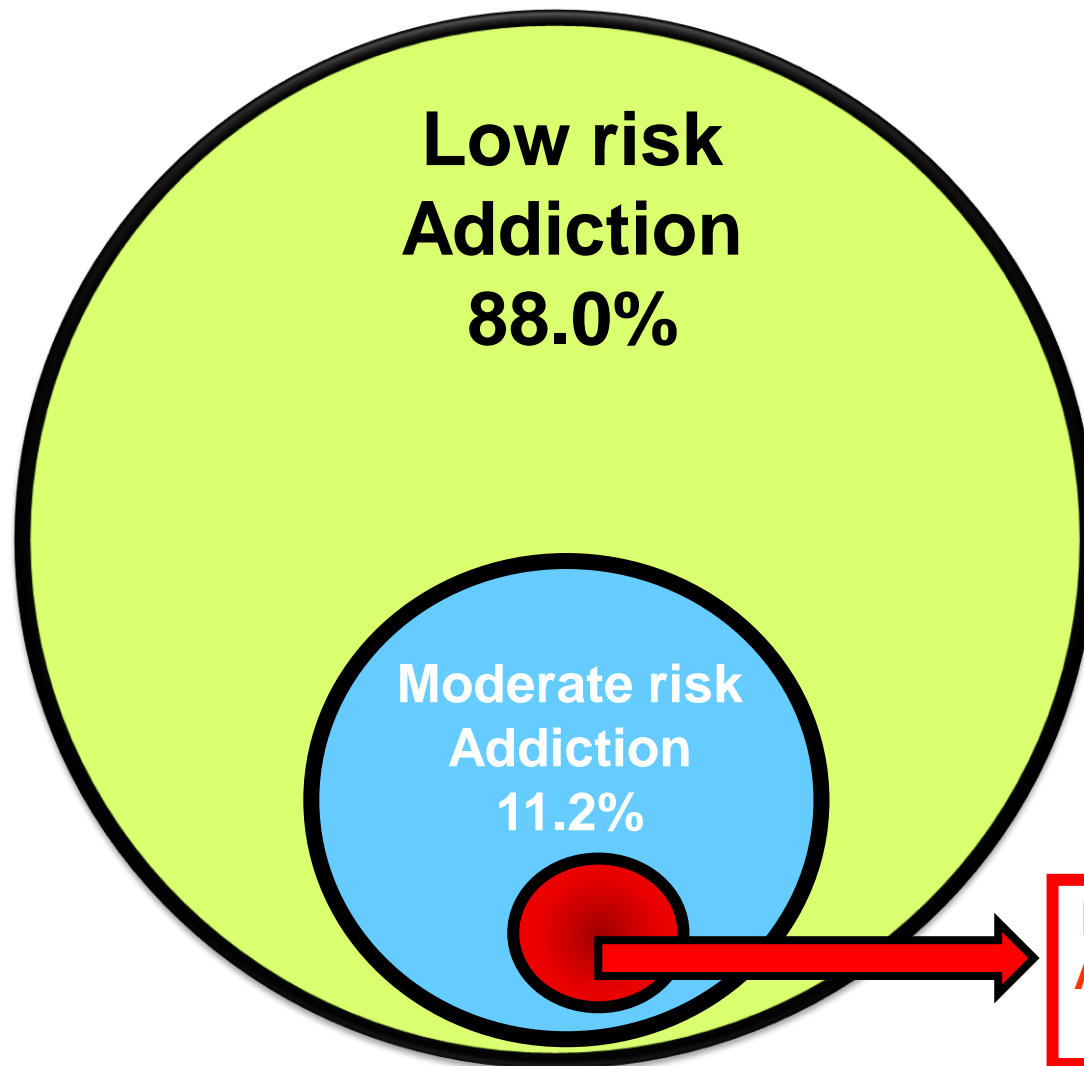
As likely will as won't abuse opioids

High risk: ≥ 8

Likely to abuse opioids

PRELIMINARY

Results of ORT



Low risk: 0-3

Moderate risk: 4-7

High risk: ≥ 8

The Screening Tool for Addiction Risk (STAR)

- The STAR questionnaire was reported for the first time in 2003.
- 14-item (yes/no) questionnaire.
- It was developed to identify the cases of substance abuse in patients with chronic pain and long-term opioid treatment.

The Screening Tool for Addiction Risk (STAR)

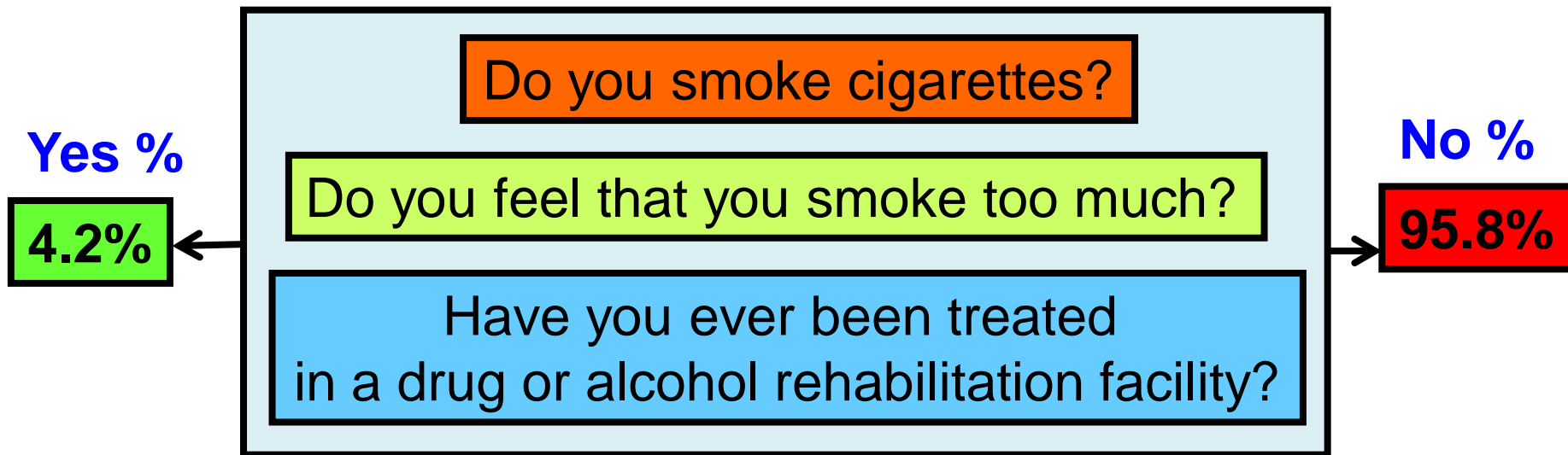
Questions

	T	F
1. Have you felt depressed or anxious over the last 6 months?	68.6	31.4
2. Have you noticed frequent mood swings over the last 6 months?	64.6	35.4
3. Are you currently employed?	81.6	18.4
4. Do you smoke cigarettes?	34.3	65.7
5. Do you feel that you smoke too much?	21.4	78.6
6. Do you drink more than three alcohol drinks/day?	2.3	97.7
7. Have you used recreational drugs during the last year?	11.8	88.2
8. Have you ever been treated in a drug or alcohol rehabilitation facility?	6.9	93.1
9. Do you get pain medicine from more than one doctor?	16.8	83.2
10. Have you been to a pain clinic before?	98.4	1.6
11. Have you visited an emergency room for pain treatment in the past year?	26.7	73.3
12. Has anyone in your family (relatives you don't live with) had problems with drug or alcohol abuse?	39.0	61.0
13. Has anyone in your household (partner, children) had problems with drug or alcohol abuse?	5.6	94.4
14. Did any family member physically or verbally abuse you when you were a child?	25.7	74.3

The Screening Tool for Addiction Risk (STAR)

- Logistic regression showed that history of treatment in a drug or alcohol rehabilitation facility was a significant predictor of addiction with a positive predictive value of 93% and a negative predictive value of 5.9%.
- Factor analysis revealed that questions relating to tobacco abuse and prior treatment for drug and alcohol abuse distinguished between patients with addiction and pain from patients with chronic pain and long-term opioid therapy.

The Screening Tool for Addiction Risk (STAR)

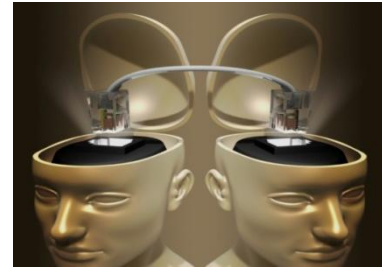


Level of Addiction in Our Population

- We had no idea what the risk of addiction would be in our population,
- The generally held opinion is that risk of addiction in patients with long-term opioid therapy is high,
- We expected to find high levels such as those cited by Friedman of 27%.

We found that the level of risk of addiction in our population is extremely low. **ORT: 0.6 % and STAR 4.2%.**

Conclusion (1)



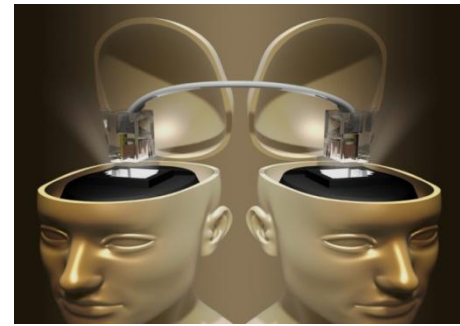
- **Attitude**

- 38.2 % of patients had a negative attitude towards taking opioids.
- Patients taking long-term opioid therapy do not feel stigmatized.

- **Addiction**

- **ORT:** 11.8% with a moderate or high risk of addiction.
- **STAR:** 4.2% were found to be at risk for addiction.

Conclusion (2)

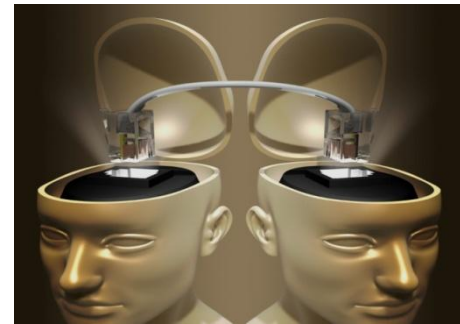


We suggest for the evaluation of risk of addiction:

- complete the ORT
- add the 3 relevant questions from STAR

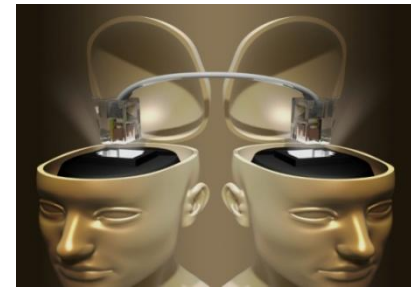
This may increase the power to detect patients who are at higher risk for abuse or addiction.

Conclusion (3)



Because patients do not suffer from the stigma related to long-term opioid therapy, and have a low risk of addiction we can go further in relieving pain by adequately prescribing and adjusting medication.

Conclusion (4)



Main study limitation:

- Our results are specific to a tertiary care pain center population therefore may not be easily generalizable to the primary care setting.
- This study concerns patients with an average of 6 years of LtOT and 5 years of follow-up therefore it is likely that patients with a high risk of addiction have undergone a natural attrition from the pain clinic.

Take home message



- Despite public opinion to the contrary, patients in chronic pain treatment programs are not addicts.
- We need to listen to our patients, believe their descriptions of their pain and treat them accordingly.
- We have the opportunity to encourage our patients to be more pro-active in their treatment.

Take home message



How can we do this?

- By educating patients and practitioners.
- By treating patients and not blaming them.

Thanks for your attention ...



Questions?...

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