




Medication Assisted Treatment University of Kansas Health System



- Methadone
 - Kansas City Metropolitan Methadone Program
 - Buprenorphine (Suboxone)
 - Buprenorphine/naloxone
 - Sublocade
 - Vivitrol
- 

Methadone Program Overview

- Admission requires dx opioid dependence for minimum 1 year
- Federal and State law and regulations stipulate attendance and medication administration
- Direct contact with patient is essential component of treatment
 - First 3 months: daily dose observed in clinic Mon-Sat, one 'carry' for Sunday
 - Second 3 months: daily dose observed in clinic with two carries including Sunday
 - Subsequent decisions for additional carries based on time in treatment, progress in counseling; abstinence in urine drug screens

Regulatory changes related to Covid restrictions


Increase number of carries through clinician assessment of patient stability

Allow methadone dose to be given by nursing staff outside clinic


Conduct some admission assessments by video; note that PE is required



Quarantined patients allowed methadone delivered to home

Strict social distancing inside clinic, monitoring patients outside clinic




Buprenorphine Clinics

- DATA 2000 and CARES ACT regulate office based practice
 - Physical exam not required for admission to treatment
 - No requirement for facility dose observation
 - Counseling provided off-site
 - Group and community support meetings shift to online
 - Telehealth transition supported by SAMSHA
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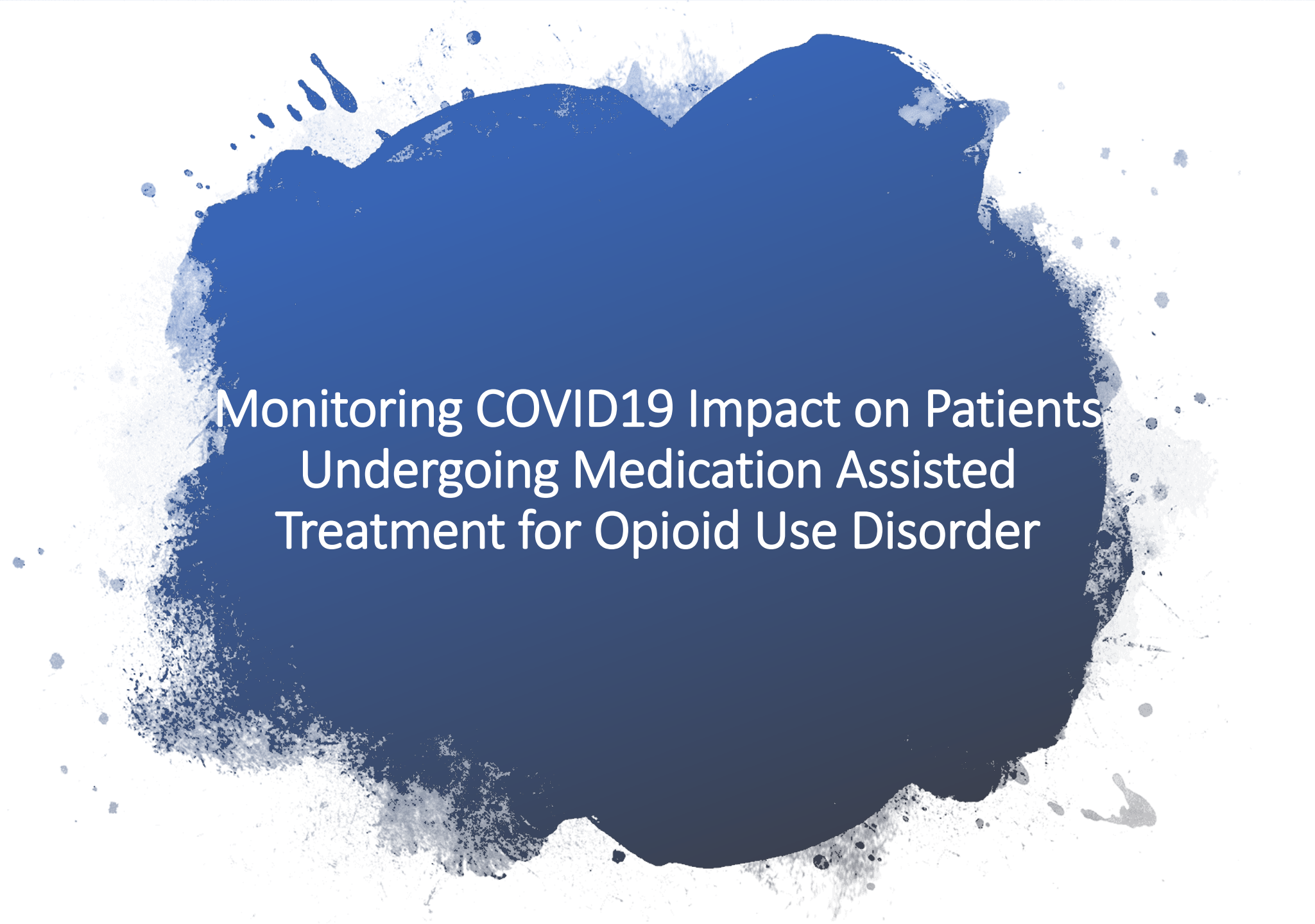
Covid Impact on Patients



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Monitoring COVID19 Impact on Patients Undergoing Medication Assisted Treatment for Opioid Use Disorder

Methods

- Two surveys of COVID19-related factors administered to ATC outpatients to assess the impact of the outbreak
 - Survey 1; 31-items; administered March 24 - April 29, 2020, corresponding with the early phase of the economic shutdown for the Kansas City Metropolitan area. N=200
 - Survey 2; 38-items; administered July 21 - October 5, 2020. N=177
- Probed known vulnerability factors including security of basic needs of food, housing and employment during the shutdown.
- Clinical benchmarks included self-reported ratings of anxiety, drug craving, drug withdrawal, and concerns related to clinic exposure and access to MAT.
- Most questions had dichotomous {"yes" or "no"} or categorical answers. Anxiety and craving ratings were reported on a numerical scale from 1 to 10.

SAMPLE CHARACTERISTICS IN COVID 19 SPRING SURVEY

	Overall		Males, N=117	Females, N=80	Sex difference	
Question		N (%) / Mean (SD)	N (%) / Mean (SD)	N (%) / Mean (SD)	X ² /F	p-value
MAT Used	Buprenorphine	49 (25%)	19 (16%)	30 (38%)	11.6	0.0006
	Methadone	149 (75%)	97 (84%)	49 (62%)		
Age		42.6 (13.8) Range 21 to 75	45.7 (14.4) Range 24 to 75	38.1 (11.6) Range 21 to 69	15.7	0.0001
Age drug use initiation		21.4 (9.6) Range 11 to 58	21.1 (9.5) Range 12 to 58	21.4 (9.2) Range 11 to 55	0.03	0.86
Anxiety rating		4.4 (2.7) Range 1 to 10	4.1 (2.6) Range 1 to 10	4.9 (2.7) Range 1 to 10	5.2	0.02
Craving rating		2.4 (2.1) Range 1 to 10	2.3 (1.9) Range 1 to 10	2.7 (9.2) Range 1 to 10	1.7	0.19

Analyses used ANOVA or Chi-squared test to compare male and female responses.

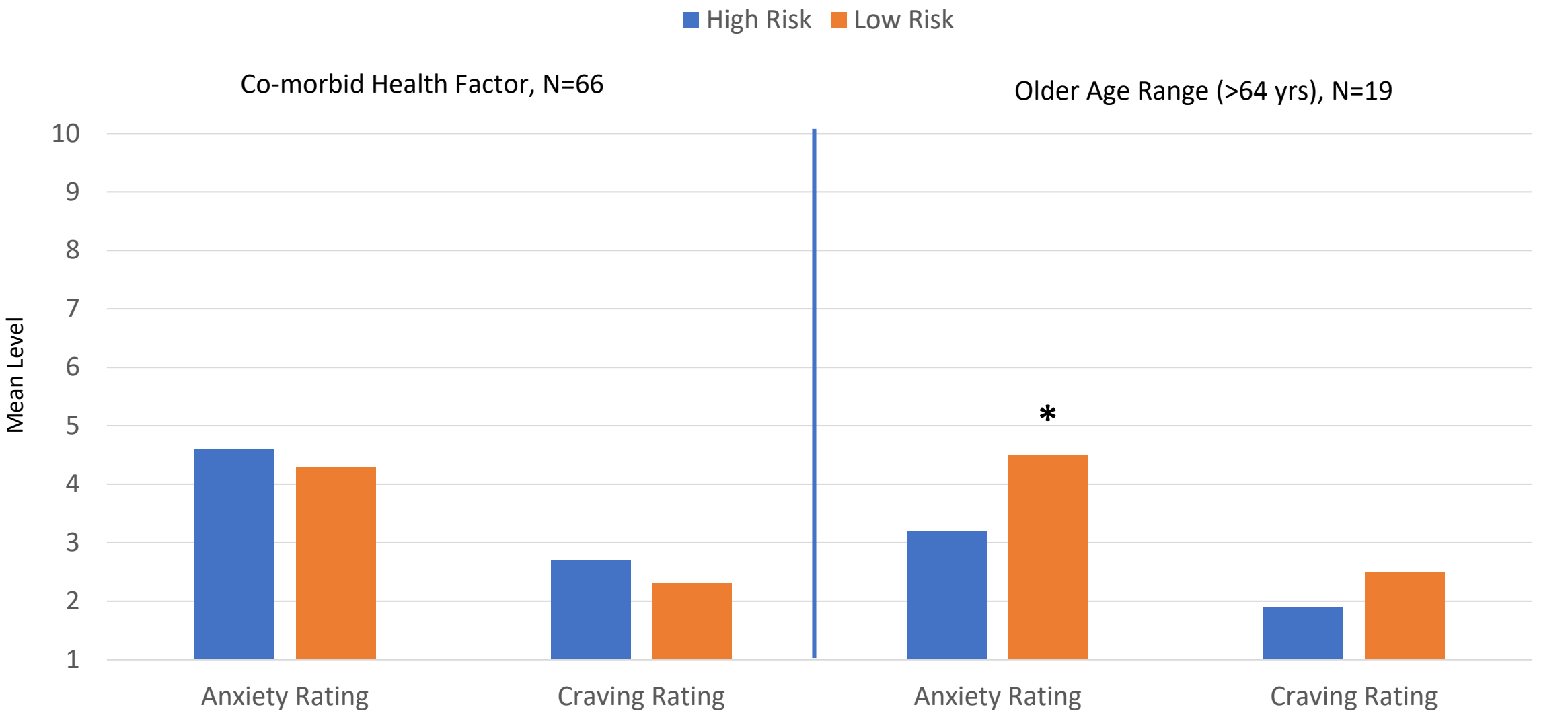
Race/Ethnicity: N=15 African American (7.5%); N= 1 Asian (0.5%); N=3 declared Hispanic ethnicity (1.5%).

Do you have a secure living arrangement to stay during the current COVID19 outbreak?	YES	184 (93%)	107 (91%)	75 (94%)	0.3	0.5**
	NO	10 (5%)	7 (6%)	3 (4%)		
	NOT SURE	5 (2%)	3 (3%)	2 (2)		
Do you have access to food to get through the COVID19 outbreak?	YES					
	NO					
	NOT SURE					
Do you have enough financial security to cope with the effects of the COVID19 outbreak on our economy?	YES					
	NO					
	NOT SURE					
Are you worried that you might lose your job or source of income because of the COVID19 outbreak?	YES				0.2	
	NO					
Do you have any children or dependents in your care?	YES	89 (45%)		47 (60%)	12.5	0.0004
	NO	108 (55%)		31 (40%)		
Do you worry about your ability to care for your children or other dependents during the COVID 19 outbreak?	YES	48 (26%)	20 (18%)	27 (37%)	9.1	0.003
	NO/NA	140 (74%)	93 (92%)	45 (63%)		

** Chi-squared analyses combined NO and NOT SURE for 2 x 2 comparison

Are you worried about coming to the addictions clinic to see the doctor because of COVID19 and its spread?	YES NO	59 (30%) 140 (70%)	30 (26%) 86 (74%)	29 (36%) 51 (64%)	2.4	0.1
Are you worried to go to the pharmacy to pick up your prescription because of COVID19 and its spread?	YES NO	37 (19%) 163 (81%)	20 (17%) 97 (83%)	17 (21%) 63 (79%)	0.54	0.5

Role of Risk Factors for Severe COVID Illness on Anxiety and Craving Ratings, Spring 2020



ANOVA comparison of means, * p<0.05

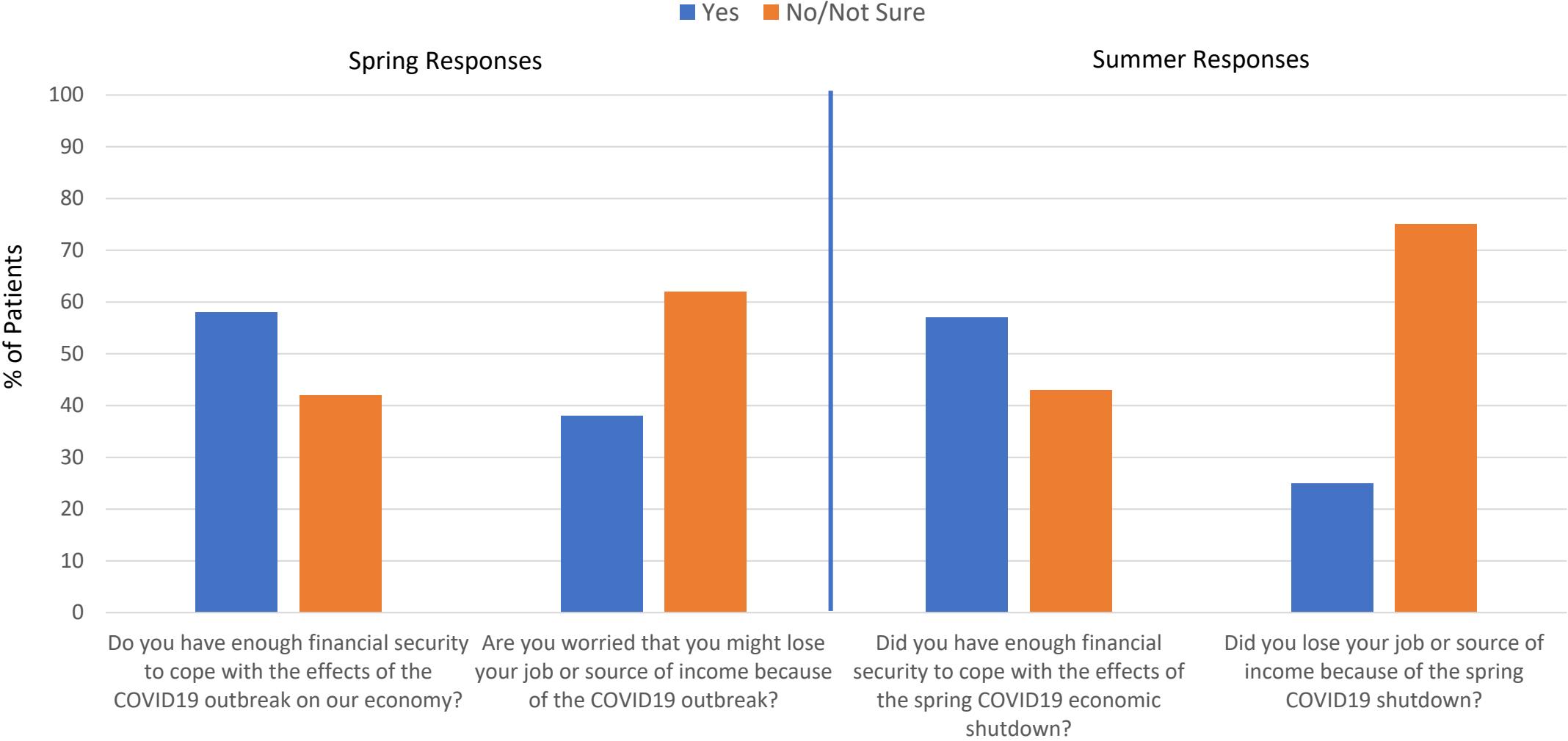
Relationship Between Financial Insecurity and Clinical Metrics in the Early Phase of Shutdown					
Financial Security		No/Not sure Mean (SD)	Yes Mean (SD)	F	p value
Craving rating		2.9 (2.4)	2.1 (1.7)	6.8	0.01
Anxiety rating		5.2 (2.9)	3.8 (2.3)	13.3	0.0003
Concern	Response	No/Not sure N (%)	Yes N (%)	X ²	p value
Do you have a health condition or conditions that might increase your risk of severe illness if you become infected with COVID19?	Yes	24 (29%)	42 (36%)	1.3	0.26
	No	60 (71%)	74 (64%)		
Have you experienced any panic attacks since the COVID19 outbreak that you didn't have in the past?	Yes	28 (33%)	18 (15%)	8.7	0.003
	No	56 (67%)	98 (85%)		
Have you been having more cravings since the COVID19 outbreak began?	Yes	17 (20%)	9 (8%)	6.7	0.01
	No	67 (80%)	107 (92%)		
Have you increased your dose of medication since the COVID19 outbreak?	Yes	12 (17%)	15 (14%)	0.3	0.59
	No	60 (83%)	94 (86%)		
Are you worried that the stress of the COVID19 outbreak might make you relapse?	Yes	11 (13%)	6 (5%)	4.0	0.05
	No	73 (87%)	110 (95%)		
Have you experienced an increase in withdrawal symptoms since the COVID19 outbreak began?	Yes	12 (14%)	16 (14%)	0.01	0.9
	No	72 (86%)	100 (86%)		
Are you worried that the COVID19 outbreak might impact your ability to obtain your addiction medicine?	Yes	41 (49%)	36 (31%)	6.5	0.01
	No	43 (51%)	80 (69%)		
Have you relapsed on Methamphetamines in past 4 weeks?	Yes	13 (16%)	8 (7%)	4.2	0.04
	No	67 (84%)	108 (93%)		
Have you relapsed on Nicotine in past 4 weeks?	Yes	44 (56%)	46 (40%)	4.4	0.04
	No	35 (44%)	68 (60%)		

SAMPLE CHARACTERISTICS OF PATIENTS ENROLLED IN METHADONE TREATMENT FOR OUD IN THE SUMMER OF 2020

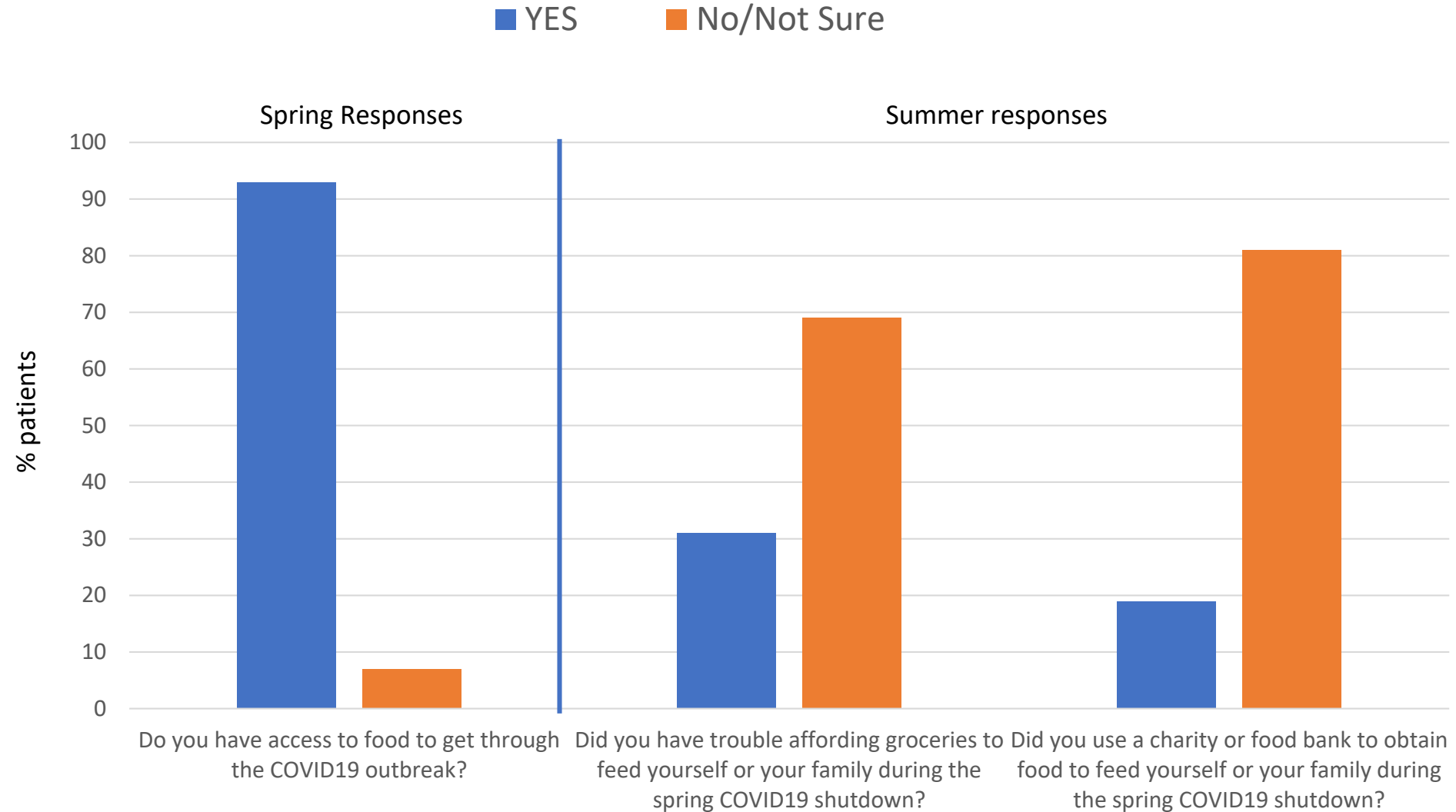
Overall sample, N=177

		Range
Age	45.3 (14) yrs	22-75 yrs
Anxiety rating	5.0 (2.4)	1-10
Craving rating	2.9 (2.5)	1-10
COVID19 HISTORY	Response	N (%)
Have you developed a flu-like illness since February 1, 2020 that you suspect or that was confirmed to be from COVID19?	YES	12 (7%)
	NO	165 (93%)
Have you ever been tested for COVID19?	YES	53 (30%)
	NO	124 (70%)
Have you ever tested POSITIVE for COVID19 or been diagnosed with COVID19-related illness?	YES	4 (2%)
	NO	173 (98%)
Have you ever been hospitalized for COVID19-related illness?	YES	0
	NO	177 (100%)
Do you have a health condition or conditions that might increase your risk of severe illness if you become infected with COVID19?	YES	52 (29%)
	NO	125 (71%)

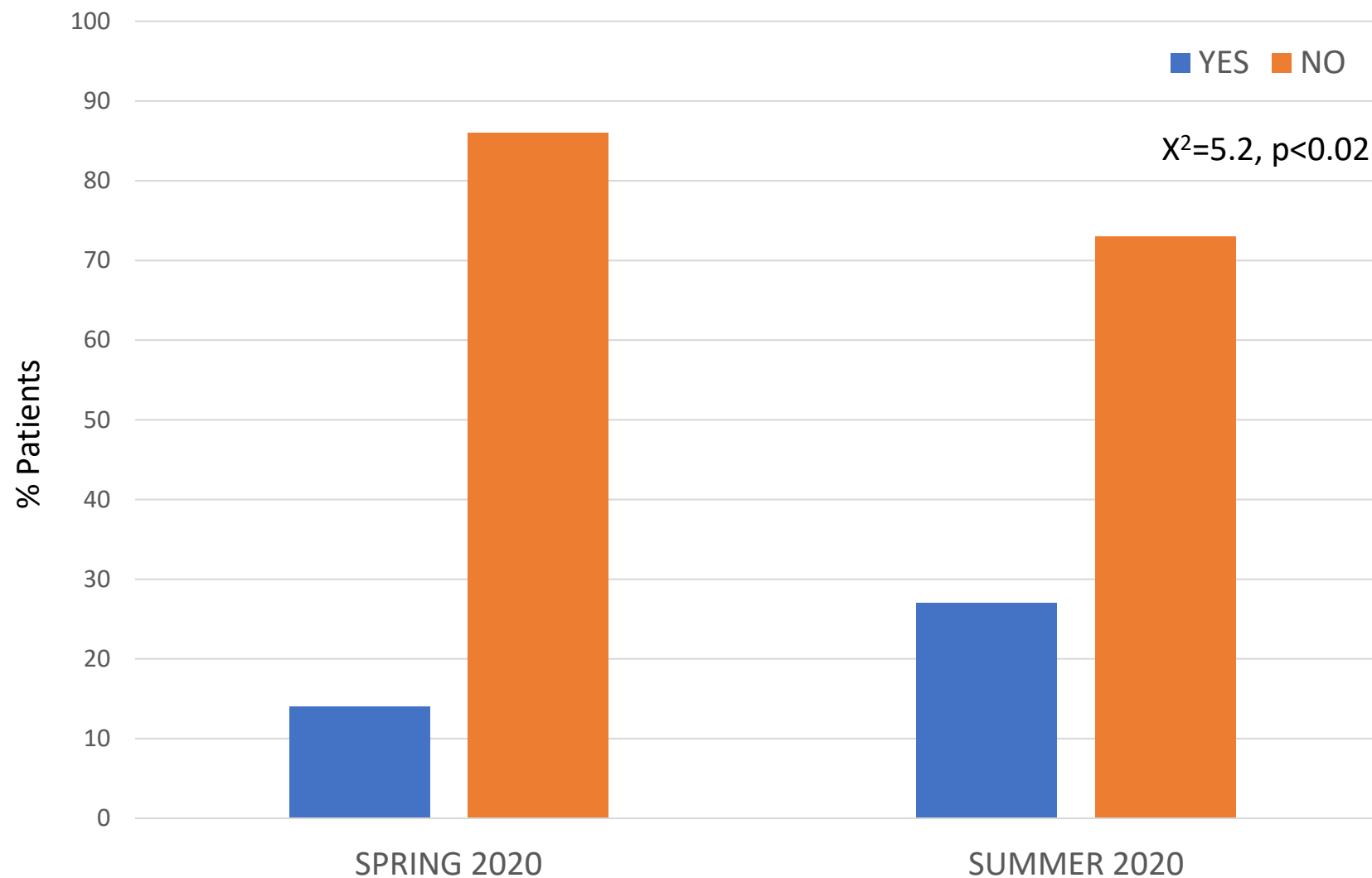
Financial security of ATC patients enrolled in treatment for OUD during the COVID19 pandemic



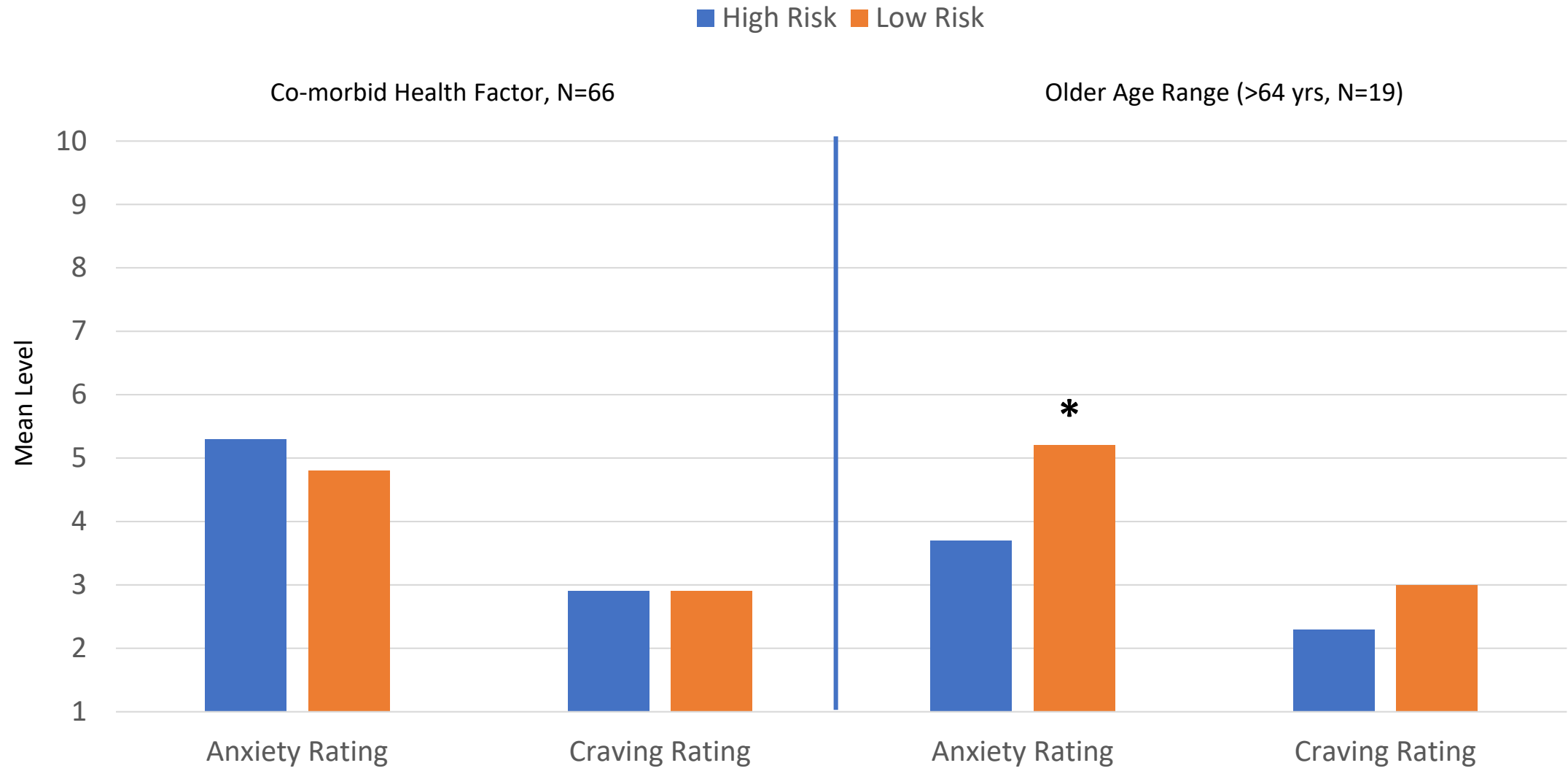
Food security of ATC patients enrolled in treatment for OUD during the COVID19 pandemic



Have you experienced an increase in withdrawal symptoms since the COVID19 outbreak began?



Role of Risk for Severe COVID Illness on Anxiety and Craving Ratings, Summer 2020

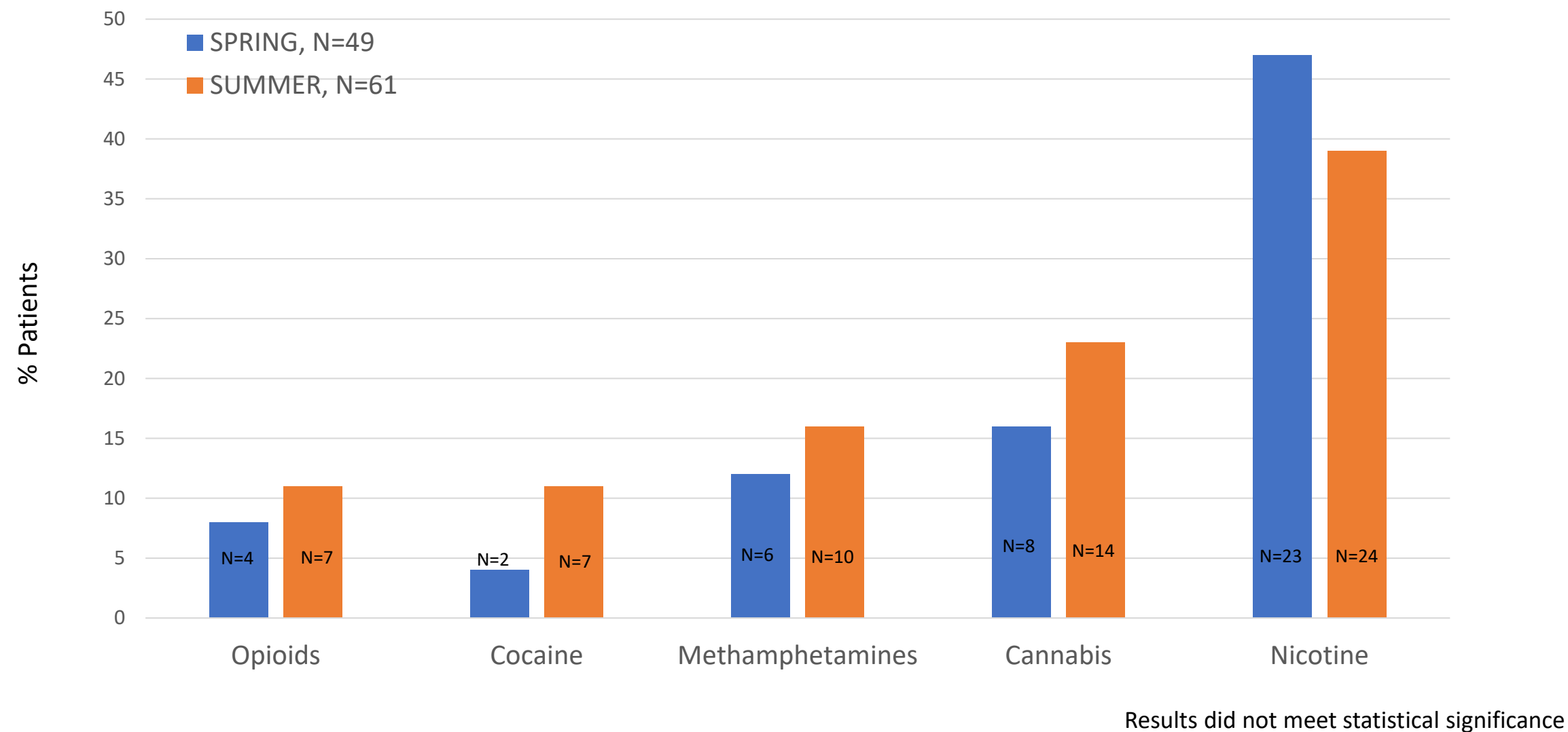


ANOVA comparison of means, * $p < 0.05$

CHARACTERISTICS OF PATIENTS IN METHADONE TREATMENT DURING THE COVID 19 OUTBREAK, SUMMER 2020				
	Males/Non-binary	Females	Sex difference	
Question	Mean (SD)	Mean (SD)	F	p-value
Anxiety rating	4.7 (3)	5.4 (2)	3.1	0.08
Craving rating	3.0 (2.5)	2.8 (2.5)	0.2	0.7
	N (%)	N (%)	X ²	p-value
Did you use a charity or food bank to obtain food to feed yourself or your family during the spring COVID19 shutdown?	15 (13%) 99 (87%)	18 (30%) 43 (70%)	6.9	<0.01
Were you forced to move or lose your place of residence due to the spring COVID19 shutdown?	4 (4%) 110 (96%)	6 (10%) 54 (90%)	3.1	0.08
Did you become homeless due to the spring COVID19 shutdown?	3 (3%) 111 (97%)	5 (8%) 55 (92%)	2.9	0.09
Are you worried that the stress of the COVID19 outbreak might make you relapse?	8 (7%) 105 (93%)	11 (18%) 50 (82%)	4.9	0.03
Have you experienced an increase in withdrawal symptoms since the COVID19 outbreak began?	25 (22%) 89 (78%)	22 (36%) 39 (64%)	4.0	0.04
Have you relapsed on Opioids in past 4 weeks	13 (11%) 101 (88%)	7 (11%) 54 (88%)	0	1
Have you relapsed on Cocaine in past 4 weeks	3 (3%) 111 (97%)	7 (11%) 54 (89%)	5.8	0.02
Have you relapsed on Methamphetamines in past 4 weeks	8 (7%) 106 (93%)	10 (16%) 51 (84%)	3.8	0.05
Have you relapsed on Cannabis in past 4 weeks	42 (37%) 72 (63%)	14 (23%) 47 (77%)	3.5	0.06
Means and frequencies for females relative to all others were compared using Analysis of Variance and Chi Square test with p<0.05 criteria for significance. Responses for patients identifying non-binary gender were aligned with males and grouped together.				

Female patients enrolled in methadone program

Have you relapsed to substance in the past 4 weeks?



Summary

- Financial insecurity was the most salient reported concern throughout the pandemic with high rates of reported job loss and food insecurity – driving early models of anxiety and craving rating.
- The presence of co-morbid risk factors for severe COVID19 reaction did not increase anxiety or cravings. Older age was protective.
- Females reported higher anxiety ratings and were less likely than males to report financial security early in the pandemic.
- Mathematical models of craving and anxiety ratings in summer driven by relapse to opioids and methamphetamines among females.
- COVID testing also a major contributor to anxiety rating possibly reflecting increased exposure risk in vulnerable groups

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