

Report on Paper 1: Comorbid Substance Use Disorders

Abstract:

This report will generate the information required for the tables and figures of the paper.

Description of Table 1:

The three races considered and their abbreviations are as follows: Asian Americans - AA Native Hawaiian/Pacific Islander - NHPI Multi-Racial - MR

Other variables of interest are: Age Sex Setting

Race	Count
AA	1512
NHPI	2708
MR	7138
Total	11358

Number of patients grouped by race and age

Age	AA	%	NHPI	%	MR	%
1-11	128	8.5	341	12.6	1508	21.1
12-17	228	15.1	839	31.0	1182	16.6
18-34	543	35.9	710	26.2	1778	24.9
35-49	358	23.7	507	18.7	1455	20.4
50+	252	16.7	310	11.4	1210	17.0

Number of patients grouped by race and sex

Sex	AA	%	NHPI	%	MR	%
Male	651	43.1	1249	46.1	3192	44.7
Female	861	56.9	1459	53.9	3946	55.3

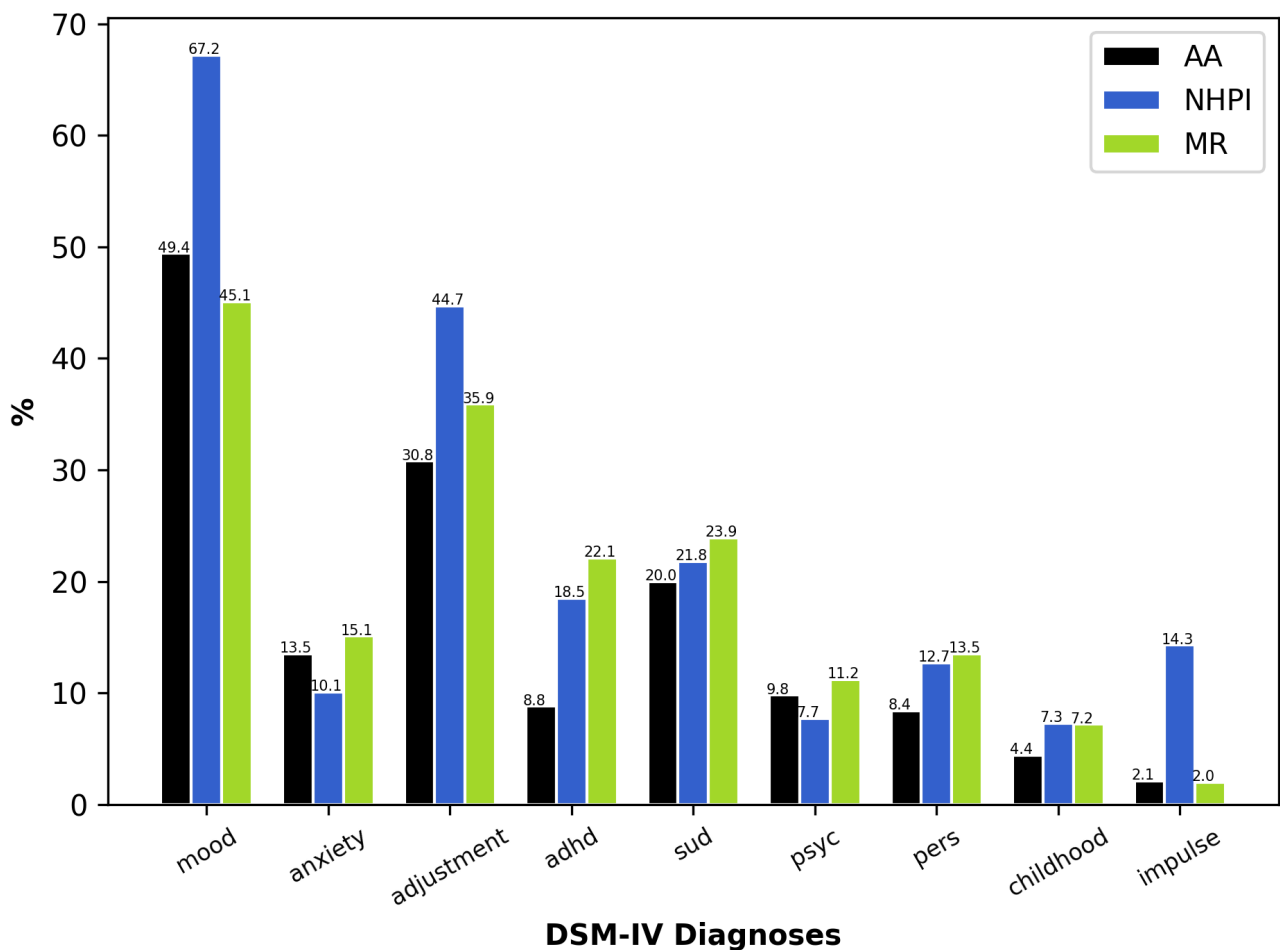
Number of patients grouped by race and setting

Setting	AA	%	NHPI	%	MR	%
Hospital	219	14.5	1418	52.4	475	6.7
Mental Health Center	1293	85.5	1290	47.6	6663	93.3

Description of Figure 1:

The Axis I/II disorders that are considered and their abbreviations are as follows: Mood - mood Anxiety - anxiety Adjustment - adjustment ADHD/CD/ODD/DBD - adhd Substance Use Disorder - sud Psychotic - psyc Personality - pers Childhood-onset - childhood Impulse-control - impulse Cognitive - cognitive Eating - eating Somatoform - smtf Dissociation - disso Sleep - sleep Factitious Disorders - fd

Disorders with less than 3% prevalence are not shown in the figure



Description of Table 2:

This table measures the prevalence of the below among the 3 races, as a percentage of the total or of the various ages:

Any SUD - any_sud ≥ 2 SUD - morethan2_sud Alcohol - alc Cannabis - cannabis Amphetamine - amphe
Hallucinogen - halluc Nicotine - nicotin Cocaine - cocaine Opioids - opioids Sedatives/tranquilizers - sedate
Other drugs - others Polysubstance - polysub Inhalants - inhalant

Total Sample

Prevalence, %	AA	NHPI	MR
DSM-IV diagnosis	Total = 1512	Total = 2708	Total = 7138
any_sud	20.0	21.8	23.9
morethan2_sud	5.5	4.5	7.2
alc	11.2	8.7	8.4
cannabis	6.7	8.3	8.1
amphe	0.9	0.3	0.7
halluc	0.3	0.1	0.1
nicotin	1.6	0.4	2.6
cocaine	2.1	2.0	3.8
opioids	2.6	2.0	5.9
sedate	0.5	0.3	0.8
others	0.3	0.1	0.3
polysub	-	-	-
inhalant	0.5	0.7	0.5

Asian Americans, separated into age bins

Prevalence, %	1-11 y/o	12-17 y/o	18-34 y/o	35-49 y/o	50+ y/o
DSM-IV diagnosis	Total: 128	Total: 228	Total: 543	Total: 358	Total: 252
any_sud	-	18.4	30.2	19.6	10.3
morethan2_sud	-	6.6	8.5	4.5	2.4
alc	-	8.8	17.1	9.5	8.7
cannabis	-	12.7	9.9	4.5	0.8
amphe	-	0.4	1.8	0.8	-
halluc	-	0.4	0.6	-	-
nicotin	-	0.9	2.4	1.7	1.2
cocaine	-	-	2.8	3.4	2.0
opioids	-	0.4	5.2	2.5	0.4
sedate	-	0.4	0.9	0.3	-
others	-	0.4	0.7	-	-
polysub	-	-	-	-	-
inhalant	-	0.9	0.9	0.3	-

Native Hawaiians/Pacific Islanders, separated into age bins

Prevalence, %	1-11 y/o	12-17 y/o	18-34 y/o	35-49 y/o	50+ y/o
DSM-IV diagnosis	Total: 341	Total: 839	Total: 710	Total: 507	Total: 310
any_sud	0.6	18.0	30.8	28.4	23.9
morethan2_sud	0.3	3.7	7.2	5.3	3.5
alc	0.3	3.9	12.7	13.4	14.2
cannabis	0.3	13.0	11.5	5.1	1.6
amphe	-	0.1	0.4	0.4	0.6
halluc	-	0.2	-	0.2	0.3
nicotin	-	0.2	0.3	0.6	1.6
cocaine	-	0.4	3.2	4.5	1.9
opioids	0.3	0.5	2.0	3.7	5.2
sedate	-	-	0.4	0.4	1.3
others	-	-	0.3	0.2	-
polysub	-	-	-	-	-
inhalant	-	0.4	2.0	0.6	-

Mixed-Race, separated into age bins

Prevalence, %	1-11 y/o	12-17 y/o	18-34 y/o	35-49 y/o	50+ y/o
DSM-IV diagnosis	Total: 1508	Total: 1182	Total: 1778	Total: 1455	Total: 1210
any_sud	0.6	9.4	36.1	39.0	30.9
morethan2_sud	-	2.1	10.9	13.5	8.3
alc	-	2.4	13.8	13.1	11.1
cannabis	0.4	7.6	18.2	8.4	2.8
amphe	-	0.2	2.2	0.3	0.4
halluc	-	-	0.4	-	0.2
nicotin	-	0.4	3.7	4.9	3.9
cocaine	-	0.1	4.2	8.6	5.6
opioids	-	0.1	3.4	13.5	13.6
sedate	-	0.2	0.8	1.9	1.3
others	-	0.2	0.3	0.8	0.3
polysub	-	-	-	-	-
inhalant	-	0.4	1.0	0.8	0.2

Description of Table 3:

This table contains the odds ratios and confidence intervals after a logistic regression is performed for the following samples:

- All races, aged 12 and older
- Asian Americans, aged 12 and older
- Native Hawaiian, aged 12 and older
- Mixed Race, aged 12 and older

Logistic regression is performed for:

- Any SUD
- 2 or more SUDs

All races, aged 12 or older

Logistic Regression, Any SUD	N = 9372	
Any SUD	Odds Ratio	95% CI
<i>Race</i>		
NHPI vs AA	1.12	0.94 - 1.33
MR vs AA	1.84	1.59 - 2.13
<i>Age in years</i>		
12 - 17 vs 50+	0.36	0.31 - 0.43
18 - 34 vs 50+	1.36	1.18 - 1.55
35 - 49 vs 50+	1.38	1.2 - 1.59
<i>Sex</i>		
Male vs Female	2.96	2.68 - 3.26
<i>Treatment Setting</i>		
Hospital vs Mental Health Center	1.99	1.74 - 2.26
2 or more SUDs	Odds Ratio	95% CI
<i>Race</i>		
NHPI vs AA	0.86	0.61 - 1.2
MR vs AA	1.13	0.86 - 1.5
<i>Age in years</i>		
12 - 17 vs 50+	1.15	0.81 - 1.63
18 - 34 vs 50+	1.31	1.02 - 1.69
35 - 49 vs 50+	1.4	1.08 - 1.81
<i>Sex</i>		
Male vs Female	1.19	1.0 - 1.42
<i>Treatment Setting</i>		
Hospital vs Mental Health Center	0.6	0.47 - 0.76

Asian Americans, aged 12 or older

Logistic Regression, Any SUD	N = 1381	
Any SUD	Odds Ratio	95% CI
<i>Age in years</i>		
12 - 17 vs 50+	1.64	0.95 - 2.81
18 - 34 vs 50+	3.57	2.26 - 5.64
35 - 49 vs 50+	2.01	1.22 - 3.29
<i>Sex</i>		
Male vs Female	3.22	2.45 - 4.23
<i>Treatment Setting</i>		
Hospital vs Mental Health Center	1.93	1.38 - 2.69
2 or more SUDs	Odds Ratio	95% CI
<i>Age in years</i>		
12 - 17 vs 50+	1.89	0.61 - 5.82
18 - 34 vs 50+	1.36	0.51 - 3.66
35 - 49 vs 50+	1.0	0.34 - 2.96
<i>Sex</i>		
Male vs Female	1.48	0.85 - 2.56
<i>Treatment Setting</i>		
Hospital vs Mental Health Center	0.61	0.32 - 1.16

Native Hawaiians/Pacific Islanders, aged 12 or older

Logistic Regression, Any SUD	N = 2366	
Any SUD	Odds Ratio	95% CI
<i>Age in years</i>		
12 - 17 vs 50+	0.5	0.36 - 0.7
18 - 34 vs 50+	1.22	0.89 - 1.68
35 - 49 vs 50+	1.23	0.87 - 1.73
<i>Sex</i>		
Male vs Female	2.97	2.43 - 3.62
<i>Treatment Setting</i>		
Hospital vs Mental Health Center	2.18	1.77 - 2.68
2 or more SUDs	Odds Ratio	95% CI
<i>Age in years</i>		
12 - 17 vs 50+	1.9	0.87 - 4.12
18 - 34 vs 50+	2.0	0.97 - 4.14
35 - 49 vs 50+	1.46	0.67 - 3.16
<i>Sex</i>		
Male vs Female	0.96	0.63 - 1.46
<i>Treatment Setting</i>		
Hospital vs Mental Health Center	0.43	0.28 - 0.66

Mixed Race, aged 12 or older

Logistic Regression, Any SUD	N = 5625	
Any SUD	Odds Ratio	95% CI
<i>Age in years</i>		
12 - 17 vs 50+	0.2	0.16 - 0.26
18 - 34 vs 50+	1.22	1.04 - 1.43
35 - 49 vs 50+	1.4	1.19 - 1.66
<i>Sex</i>		
Male vs Female	2.95	2.61 - 3.34
<i>Treatment Setting</i>		
Hospital vs Mental Health Center	1.59	1.3 - 1.95
2 or more SUDs	Odds Ratio	95% CI
<i>Age in years</i>		
12 - 17 vs 50+	0.77	0.47 - 1.27
18 - 34 vs 50+	1.22	0.92 - 1.62
35 - 49 vs 50+	1.46	1.1 - 1.95
<i>Sex</i>		
Male vs Female	1.22	0.99 - 1.51
<i>Treatment Setting</i>		
Hospital vs Mental Health Center	0.7	0.5 - 0.97

Description of Table 4:

This table contains the odds ratios and confidence intervals after a logistic regression is performed for each race:

- Asian Americans, aged 12 and older
- Native Hawaiian, aged 12 and older
- Mixed Race, aged 12 and older

Logistic regression is performed for comorbidity of any SUD with other mental health disorders in the list below: Mood - mood Anxiety - anxiety Adjustment - adjustment ADHD/CD/ODD/DBD - adhd Substance Use Disorder - sud Psychotic - psyc Personality - pers Childhood-onset - childhood Impulse-control - impulse Cognitive - cognitive Eating - eating Somatoform - smtf Dissociation - disso Sleep - sleep Factitious Disorders - fd

Asian Americans, aged 12 or older

Logistic Regression, Any SUD	N = 1381	
DSM-IV Diagnosis	Odds Ratio	95% CI
mood	0.18	0.13 - 0.25
anxiety	0.3	0.18 - 0.48
adjustment	0.19	0.13 - 0.28
adhd	0.43	0.23 - 0.8
psyc	0.27	0.16 - 0.45
pers	1.32	0.81 - 2.15
childhood	0.2	0.07 - 0.6
impulse	1.04	0.37 - 2.92
cognitive	-	---
eating	0.36	0.12 - 1.14
smtf	-	---
disso	-	---
sleep	0.08	0.02 - 0.36
fd	-	---

Native Hawaiians/Pacific Islanders, aged 12 or older

Logistic Regression, Any SUD	N = 2366	
DSM-IV Diagnosis	Odds Ratio	95% CI
mood	0.86	0.69 - 1.08
anxiety	0.51	0.36 - 0.72
adjustment	0.57	0.47 - 0.7
adhd	1.02	0.74 - 1.4
psyc	1.04	0.73 - 1.48
pers	2.46	1.92 - 3.16
childhood	0.41	0.24 - 0.71
impulse	1.06	0.76 - 1.48
cognitive	0.52	0.17 - 1.53
eating	1.16	0.44 - 3.02
smtf	-	---
disso	1.68	0.58 - 4.84
sleep	-	---
fd	-	---

Mixed Race, aged 12 or older

Logistic Regression, Any SUD	N = 5625	
DSM-IV Diagnosis	Odds Ratio	95% CI
mood	0.49	0.43 - 0.56
anxiety	0.51	0.43 - 0.61
adjustment	0.43	0.38 - 0.5
adhd	0.21	0.16 - 0.27
psyc	0.89	0.74 - 1.06
pers	2.23	1.91 - 2.6
childhood	0.5	0.36 - 0.71
impulse	0.9	0.59 - 1.37
cognitive	0.41	0.16 - 1.01
eating	1.03	0.45 - 2.36
smtf	0.27	0.08 - 0.92
disso	1.72	0.8 - 3.68
sleep	0.51	0.33 - 0.79
fd	-	- - -