Mental Health, Suicide and Trauma among Asians and Pacific Islanders: Policy Insights from Substance Abuse Treatment Admissions in Ohio
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Background

Asians and Pacific Islanders (APIs) face widespread treatment and service disparities in the behavioral health system. Nationally, an estimated 529,000 APIs needed but did not receive specialty substance abuse treatment in 2012.1 APIs, contrary to the model minority myth, are at risk of a range of behavioral health issues. Of the 1.8 million substance abuse treatment admissions nationally in 2010, 19,000 (1%) were APIs, with 64% naming alcohol as a problem.2 In 2008, only 5% of Asian American adults received mental health treatment or counseling.3 Rates of suicidal thoughts and suicide deaths among API adolescents are concerning. In 2009, close to 19% API students in grades 9-12 reported suicidal thoughts;4 and mortality rates for suicide was 5.9% for API adolescents (ages 15-19).5 The age-adjusted death rates for suicide for Asian Americans were lower (6.3%) compared to Whites (14.3%).6 Research is lacking especially on suicidal ideation and trauma exposure among APIs in Ohio. This paper analyzes available APIs treatment admission data to explore select disparities related to mental health history, suicidal thoughts, and exposure to trauma.

Methods

The Ohio Health Disparities Bulletin (OHDB) is a new public health informatics effort from the Ohio Department of Mental Health and Addiction Services (OhioMHAS), which analyzes Ohio’s statewide substance abuse treatment episode data to investigate behavioral health disparities among clients in the public behavioral health system. Analyses may range from age, gender, race/ethnicity disparities to drugs of choice, clients with mental health history and other areas of interest. The OHDB is patterned after SAMHSA’s Treatment Episode Data Set (TEDS) reports, but it presents in-depth analyses on trends and disparities unique to Ohio. The OHDB also expands upon traditional TEDS reports by incorporating information exclusive to OhioMHAS’ Ohio Behavioral Health (OHBH) data system. OHBH data are collected at admission, transfer and discharge, and contain a variety of socio-demographic items and fields used to report federally mandated treatment outcomes. Using OHBH data, this bulletin examines trends among 593 APIs from state fiscal years (SFYs) 2008 to 2012. Every API who was involved in the treatment system was...
included in analyses and statistically significant differences are reported when possible. Data for this study were pulled from the OHBH dataset in the first half of 2013.7 A variety of univariate and bivariate statistical tests were used in data analysis to: (a) explore mental health, suicidal thoughts, and exposure to trauma and violence; and (b) highlight disparate trends in API treatment admission rates by select demographic characteristics and primary drugs of choice. SPSS version 21.0 was used for the analyses.

## Results

### Treatment Admissions

Select demographic characteristics provide interesting insights on API treatment admissions (Appendix A provides a demographic overview of the sample). Pooled data for SFYs 2008 through 2012 yielded 593 APIs representing a total of 709 treatment admissions in the public behavioral health system. A majority of these APIs were male (64.5%), single or never married (72.9%), and either had a high school education or greater (70%). Asians were more prevalent than Pacific Islanders in the sample (69.6% vs. 30.4% respectively). Treatment admissions rate for APIs has decreased over time from 8.35% per 10,000 APIs in 2008 to 6.38% per 10,000 APIs in 2012 (Figure 1).8 The average age for API admissions was 31.5 years, fairly close for both males (31.2 years) and females (32.0 years).9 During the five year period, most APIs were admitted to levels of care associated with non-intensive outpatient services (74.9%), followed by pretreatment services (10.8%), intensive outpatient services (6.9%), non-medical community residential services (4.0%) and other services (3.4%). The average length of treatment for APIs was 2.6 months with males staying in treatment longer than females (3.0 vs. 1.9 months respectively). Pacific Islanders remained in treatment slightly longer than Asians (3.0 vs. 2.4 months respectively).

![Figure 1: Treatment admissions rate per 10,000 Ohio APIs by year, SFYs 2008 -2012](source: OhioMHAS Behavioral Health Data)

7. For maintaining client confidentiality, the study follows Protected Health Information (PHI) guidelines follow Multi-Agency Community Services Information System (MACSIS) Notice of Privacy Practices, which is available at: [http://mha.ohio.gov/Portals/0/assets/Learning/Legislation/2013-notice-of-privacy-practices–macsis.pdf](http://mha.ohio.gov/Portals/0/assets/Learning/Legislation/2013-notice-of-privacy-practices–macsis.pdf)
8. Treatment rates are computed with 2010 census data for Asians and native Hawaiians and other Pacific Islanders.
9. To read more about national gender differences among AAPI treatment admissions for ages 18 to 25, visit: [http://www.oas.samhsa.gov/2k10/233/233Asian2k10.htm](http://www.oas.samhsa.gov/2k10/233/233Asian2k10.htm)
Primary Drug of Choice

Just over 85 percent of APIs in treatment report a drug of choice. When clients were asked about their primary drug of choice, a majority of clients said they preferred alcohol (52.2%), followed by marijuana (27.6%). Close to 18% reported cocaine, heroin, or pharmaceutical opioids as their drug of choice (Figure 2). Comparably, national 2009 data from SAMHSA's Treatment Episode Data Set show primary drug of choice of Asian and Pacific Islanders as: alcohol (39.8%); marijuana/hashish (20.7%), methamphetamine and other amphetamines (20%); heroin/non-prescription methadone/other opiates/synthetics (11.4%); and cocaine/crack (5.8%). APIs reporting drug use typically only used one drug (51.1%). Use of two or three drugs was more infrequently reported (32.7% vs. 15.9% respectively). APIs using four or more drugs was rare (0.4%).

Figure 2: API primary drug of choice, SFYs 2008 -2012

Mental Health

Almost 21 percent of APIs reported a mental health history. Pacific Islanders were slightly more likely to report a mental health history than Asians (21.1% vs. 20.3% respectively).11 When stratifying mental health history by gender, females were more likely than males to report this history (23.3% vs. 19.1% respectively). Differences were also apparent when examining mental health history by age group. Most APIs (27.4%) reporting a mental health history were aged 45 to 64 while the fewest APIs (17.9%) reporting this history were aged 18 to 24 (Figure 3).


11. No differences in this analysis or other analyses are statistically significant unless otherwise stated.
Suicidal Ideation

A minority (2.9%) of APIs said they experienced suicidal ideation. Asians were more likely to report suicidal ideation than Pacific Islanders (3.4% vs. 1.8% respectively), which is similar to the national average (2.8%) of suicidal thoughts for this group. There were gender and age disparities in API reported suicidal thoughts. API females displayed double the rate of suicidal ideation than their male counterparts (4.6% vs. 2.0% respectively). APIs aged 45 to 64 had highest level of suicidal ideation. Suicidal ideation was the same in other age groups (3.3%), with those aged 18 to 24 reporting less frequent suicidal ideation than other age groups (1.4%). It may be worth noting here that research highlights higher rates of suicidal thoughts, suicidal plans, and attempted suicides among adults with a past year substance use disorder.

Source: OhioMHAS Behavioral Health Data


Exposure to Violence & Trauma

Nearly 11% percent of APIs reported either being domestic violence victims or witnesses. Pacific Islanders were more likely to be a domestic violence victim or witness than Asians (13.0% vs. 9.7% respectively). API females were twice as likely as API males to be domestic violence victims or witnesses (16.9% vs. 7.3% respectively), which was statistically significant as per Chi-square analysis ($\chi^2 (1) = 12.19, p < 0.001$). APIs aged 35 to 44 were the most likely to be victims or witnesses of domestic violence (14.6%), followed by those aged 25 to 34 (11.3%; Figure 4).

![Figure 4: Percent of APIs as domestic violence victim or witness by age, SFYs 2008 -2012](image)

Analysis of trauma exposure was based on APIs reported history on sexual and physical abuse. Just over 16% of APIs said they were victims of abuse. Of those APIs who reported abuse, about 42% experienced physical abuse, 24% experienced sexual abuse and 34% experienced both types of abuse (Figure 5). Pacific Islanders were more likely than Asians to report physical abuse (12.4% vs. 8.9% respectively) and sexual abuse (10.1% vs. 6.8% respectively). API females were significantly more likely than API males to experience both physical abuse, 19.5% vs. 4.8% respectively ($\chi^2 (1) = 30.35, p < 0.0001$); and sexual abuse, 14.9% vs. 3.9% respectively, ($\chi^2 (1) = 20.95, p < 0.0001$). APIs in the 25 to 34 age group were the most likely people to report some type of abuse (28.3%) closely followed by those 18 to 24 years old (24.5%). APIs aged 35 to 44 and those ages 45 to 64 reported similar abuse histories (17.0% and 16.0% respectively), while those aged 12 to 17 were the least likely to have experienced abuse (4.7%).
This paper sought to explore mental health history, suicidal thoughts, and trauma exposure in 593 APIs seeking substance abuse treatment in Ohio during state fiscal years 2008 to 2012. The demographic information provided in the report gives an overview of API treatment in Ohio. Majority of APIs were male (64.5%), single or never married (72.9%); admitted to non-intensive outpatient services (74.9%). API males stayed in treatment longer than API females. Alcohol, marijuana/hashish and cocaine were the most preferred drugs of abuse. Just over 16% of APIs reported past physical or sexual abuse and 11% were victims of or witness to domestic violence. About 21% (more females than males) reported a mental health history; and with most falling into ages 45 to 64. As for suicidal ideation, twice as many females (5%) than males (2%) reported having such thoughts.

Results on APIs treatment admissions support the fact that preventive efforts should be predominantly targeted towards male, mostly single or never married, and those with some formal education. Since close to 75% API treatment admissions were in levels of care associated with non-intensive outpatient services, the majority of preventive screening and counseling for API clientele seeking substance abuse treatment should be aligned to this level of care. Findings also point to the policy that the bulk of prevention and treatment programs need to be tailored to reach API clients who are at risk of alcohol, marijuana/hashish and some level of services to those abusing cocaine, heroin and pharmaceutical opioids.

Findings on mental health history were insightful from a policy implication standpoint and encourage a broader discussion. One important implication that was especially apparent for API males and APIs aged 45 to 64 years, was the need to be screened for mental health issues and be referred to appropriate therapeutic interventions. From a behavioral health disparities framework, it is also critical to understand the socio-cultural barriers among APIs. Asian Americans and Pacific Islanders have been found to be least likely to seek mental health services because of a variety of factors such as stigma, cultural impact of shame, language barriers, etc. and that little is known about the
mental health needs of API youth. The National Institute on Drug Abuse (NIDA) Strategic Plan argues that there is a great need to understand better API communities’ prevention, treatment, and health services needs because: (a) “these populations are perhaps most adversely affected by this stigma, leading to misperceptions about drug abuse and addiction in minority communities;” and (b) there are great disparities in drug use outcomes for racial/ethnic minorities. Precisely so, researchers advocate for cultural sensitivity and training to encourage better outcomes.

Findings on suicidal thoughts in APIs reflect some interesting disparities: Asians were more likely to report suicidal ideation than Pacific Islanders (3.4% vs. 1.8% respectively); API females displayed double the rates of suicidal thoughts than their male counterparts (4.6% vs. 2.0% respectively); suicidal ideation was highest amongst those APIs aged 45 to 64. This suggests preventive screening should also focus more on API females and older adults. The behavioral health field, however, needs to stay equally cognizant of API adolescent and young adults at risk of serious mental health outcomes especially given the high rates of suicidal ideation and attempted suicides and outcomes among students in grades 9-12. When CDC’s High School Youth Risk Behavior Survey (YRBS) 2011 data were analyzed for Asian students in Ohio, it was found that 17 had seriously considered attempting suicide; 16 had attempted suicide one or more times; and for 16 students, suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse, during the 12 months before the survey. Hence, it is critical to pay equal attention also to preventive measures to educate the API adolescents and young adults and provide early screening and therapy to avoid potential suicide deaths. To this end, a SAMHSA report recommends: (a) routinely screening substance abuse treatment clients for suicidal thoughts at intake as well as at specific points during treatment; (b) screening for clients with high risk factors regularly throughout treatment; and (c) sharing public health information that not only highlight the fact that effective preventive interventions exist, but also attempt to reduce the stigma associated with mental and emotional problems and mental health treatment. This is an important policy implication given that in a bivariate analysis between mental health history and suicidal thoughts, we found that among APIs who had suicidal thoughts (n = 16), 56% had mental health history.

Exposure to violence and trauma reveals wide ranging disparities in terms of gender, age, and intra-race/ethnicity. APIs were found to be victims of physical/sexual abuse and domestic violence, to a varying degree thus necessitating additional screening for trauma issues as well and to recommend additional services. APIs, especially females should be screened for trauma because of the fact that they are significantly: (a) twice as likely as males to be either a domestic violence victim or witness to one; and (b) more likely than API males to experience both physical and sexual abuse. Screening should be targeting those APIs aged 35 to 44 followed by 25 to 34 ages, who were most likely to be victims or witnesses of domestic violence. Within APIs, Pacific Islanders should be screened more for trauma related to the fact that they were most likely than their Asian counterparts to report physical and sexual abuse and be a domestic violence victim or witness than Asians.

This study had several limitations that affected the analyses and conclusions drawn. First, the results from this study may not be generalizable to the general population since the API admissions are exclusively from the publicly funded behavioral system and do not represent the total state demand for substance abuse treatment. Second, more than half of the APIs in this study are referred from the criminal justice system, leading to results that may not be similar to APIs in the private health system because of the unique behaviors and/or demographics for the criminal justice population. Third, findings of this study are also vulnerable to several potential forms of bias. Sample bias is possible in the data because service providers and community boards may not have contributed information to the OHBH dataset. Social desirability bias may also have impacted the findings if APIs told the clinicians what they wanted to hear. Generally, it is more likely that the results underestimate some of the trends in substance use because APIs may not accurately self-report their drug history.

**Conclusion**

Findings from this study offer important implications for research on prevention and treatment strategies to assist underserved or at-risk APIs. First, this research may spur efforts to examine mental health status and help seeking behavior among Asian immigrants/refugee population in Ohio, an emergent population for which not much data is available. Second, research may explore substance use disorders and/or co-occurring behaviors along with mental health disparities among API population in Ohio. Third, it may be insightful to investigate what percent of APIs are successful treatment completers. This may be critical given their behavioral health issues that make them vulnerable to increased morbidity and mortality. Fourth, research may look into behavioral health disparities to seek insights for the development of culturally sensitive interventions to help racial/ethnic minorities. Lastly, as one SAMHSA report succinctly advocates, further research needs to focus on “additional factors associated with suicidal behaviors (i.e., race/ethnicity, employment and occupation, and mental health and substance abuse problems) to help guide the development of screening tools and prevention and treatment programs.”

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20. Ohio Behavioral Health Data set is an admission-based system and admissions do not represent individuals. However, the analyses in this paper are based on unduplicated clients. Records that included missing or invalid data for a specific variable were excluded from tabulations of that variable. The State of Ohio reports data to SAMHSA who create the national Treatment Episode Data Set (TEDS). For a detailed discussion of TEDS and limitations, visit: [http://wwwdasis.samhsa.gov/webt/information.htm](http://wwwdasis.samhsa.gov/webt/information.htm).

21. For instance, Ohio is a home to recently resettled (2,335 in Federal fiscal years 2008-12) Bhutanese refugees brought in from Nepal ([http://www.acf.hhs.gov/programs/orr/resource/refugee-arrival-data](http://www.acf.hhs.gov/programs/orr/resource/refugee-arrival-data)). One recent CDC study highlighted the high levels of suicidal deaths in Bhutanese refugees, 21.5 per 100,000, and the age-adjusted suicide rate using the U.S. 2000 population as the standard was 24.4 per 100,000. For a detailed report, read “Suicide and Suicidal Ideation among Bhutanese Refugees — United States, 2009–2012,” available at [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6226a2.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6226a2.htm).
### Table 1: Demographics of API Participants

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<thead>
<tr>
<th>Demographics</th>
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<th>Percent*</th>
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</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
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</tr>
<tr>
<td>Male</td>
<td>382</td>
<td>64.5%</td>
</tr>
<tr>
<td>Female</td>
<td>210</td>
<td>35.5%</td>
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<tr>
<td><strong>Race/Ethnicity</strong></td>
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<td></td>
</tr>
<tr>
<td>Asian</td>
<td>413</td>
<td>69.6%</td>
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<tr>
<td>Pacific Islander</td>
<td>180</td>
<td>30.4%</td>
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<tr>
<td><strong>Marital Status</strong></td>
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<tr>
<td>Single/Never Married</td>
<td>318</td>
<td>72.9%</td>
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<tr>
<td>Married</td>
<td>64</td>
<td>14.7%</td>
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<tr>
<td>Divorced/Separated</td>
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<td>11.7%</td>
</tr>
<tr>
<td>Widowed</td>
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<td>0.7%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
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<td></td>
</tr>
<tr>
<td>12-17</td>
<td>68</td>
<td>11.5%</td>
</tr>
<tr>
<td>18-24</td>
<td>151</td>
<td>25.5%</td>
</tr>
<tr>
<td>25-34</td>
<td>164</td>
<td>27.7%</td>
</tr>
<tr>
<td>35-44</td>
<td>126</td>
<td>21.2%</td>
</tr>
<tr>
<td>45-64</td>
<td>84</td>
<td>14.2%</td>
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<td><strong>Education</strong></td>
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<td>31.7%</td>
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<tr>
<td>High School/GED</td>
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<td>32.2%</td>
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<tr>
<td>Trade/Technical School</td>
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<td>Some College/Associates Degree</td>
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<td>Bachelor’s Degree</td>
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<tr>
<td>Advanced Degree</td>
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<td>1.9%</td>
</tr>
</tbody>
</table>

*Totals for each variable may not total to 100% due to rounding.

Source: OhioMHAS Behavioral Health Data
Appendix B
Glossary of Select Key Terms

Admissions Rate — The total number of API admissions divided by the number of APIs in Ohio. All units are expressed in a ratio per 10,000 persons. The denominator for this calculation is based off data from the 2010 US Census fields for Asians along with Native Hawaiians and other Pacific Islanders.

Drug of choice – A client’s preferred drug of choice. A client may identify up to four drugs of choice, which fall into the following categories: primary, secondary, tertiary or quaternary.

Health disparity – gaps in the quality of health and health care across gender, racial/ethnic, sexual orientation and socioeconomic groups. These gaps may affect how frequently a disease affects a group, how many people get sick, or how often the disease causes death. 22

Levels of care – An indication of the intensity of care being provided by a health care facility. In Ohio’s treatment system, there are 10 possible levels of care: pre-treatment, non-intensive outpatient, intensive outpatient, day treatment, non-medical community residential treatment, medical community residential treatment, ambulatory detoxification, sub-acute detoxification, acute detoxification, or acute hospital detoxification.

Mental health history – A variable in OHBH in which a client self-identifies whether they have a mental health history. The interpretation of this variable may vary from client to client and by provider.

Ohio Behavioral Health (OHBH) Dataset – Data that are collected at admission, transfer and discharge and contain a variety of socio-demographic items and fields used to report federally mandated treatment outcomes.

Suicidal Ideation – This is one of the four types of suicide-related concepts. According to SAMSHA, “Suicidal ideation which is much more common than suicidal behavior, lies on a continuum of severity from fleeting and vague thoughts of death to those are persistent and highly specific; and serious suicidal ideation is frequent, intense and perceived as uncontrollable.”13

Trauma – For our study purpose, we have analyzed trauma in the context of experience or exposure to past physical abuse, sexual abuse, and being victim of domestic violence or witness to domestic violence. The American Psychological Association defines trauma as “…an emotional response to a terrible event like an accident, rape or natural disaster. Immediately after the event, shock and denial are typical. Longer term reactions include unpredictable emotions, flashbacks, strained relationships and even physical symptoms like headaches or nausea…”23


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