INTRODUCTION

- Patients with substance abuse have a high likelihood of developing a mental illness. Likewise, patients with mental illness have a high likelihood of developing substance abuse.1
- Psychiatric illnesses such as schizophrenia, ADHD, and bipolar disorder have all been associated with the use of substances including ethanol, cannabis, cocaine, opiates, and amphetamines.2,3,4
- Individuals with substance abuse also demonstrate higher levels of measurable depression and anxiety than those who are not substances abusers.5

HYPOTHESIS

We predict that there is an association between substance abuse and psychiatric illness and that the drug of abuse differs based on the psychiatric diagnosis.

MATERIALS & METHODS

Retrospective Review at VMC Greenville in 2019

Charts pulled using ICD-10 codes:
- Schizophrenia: 122
- Major Depressive Disorder: 100
- Anxiety: 100
- Psychoactive substance abuse: 35
- Suicidal Ideations: 36
- Alcohol use: 0

Psychiatric history:
- Anxiety
- Depression
- Schizophrenia
- ADHD
- Bipolar Disorder
- Alcohol Use Disorder

Toxicology results:
- Urine Drug Screen
- EtOH level
- Acetaminophen
- Salicylates
- SPSS analysis

RESULTS

Figure 1. Of the 393 charts reviewed, 52.4% of the patients with psychiatric illness had a history of substance use, whereas 47.6% of patients with a psychiatric illness did not have a history of substance use.

Figure 2. Patients with anxiety and depression had lower rates of substance use than non-substance use. Patients with schizophrenia and schizoaffective disorders demonstrated the highest rates of substance abuse amongst the other psychiatric illnesses examined.

Figure 3. Cannabis, ethanol, cocaine, and benzodiazepines were the most commonly reported substances of abuse for both patients with depression and those with schizophrenia. Opioids were also commonly used by patients with depression.

DISCUSSION

- Our results thus far show that there is no significant correlation between psychiatric illness and substance abuse.
- Patients with anxiety and depression are more likely to not have a history substance abuse than to have a history of substance abuse.
- The highest rate of substance abuse was found in patients with schizophrenia or schizoaffective disorders.
- Cannabis was the most commonly abused substance in patients with schizophrenia and depression, followed by ethanol.
- The lack of correlation may be due to the order in which we are reviewing charts, as this is not a full representation of the population we will be reviewing.

NEXT STEPS

We will continue to review charts as we completed 393 out of the total 982 charts to be reviewed. This information will be used to examine a possible causal relationship between psychiatric illness and substance abuse. We will examine the three hypotheses:
1. The use of psychoactive substances predisposes a patient to develop a psychiatric illness.
2. Substances are used following a psychiatric diagnosis as a form of self treatment.
3. Patients with psychiatric illnesses have poorer judgment that can lead to poor choices.

ACKNOWLEDGEMENTS

Funding provided by the Summer Scholars Research Program at Brody School of Medicine. Special thanks to Allison Mainhart for her technical assistance.

REFERENCES