

# Study of the Relationship of Undiagnosed Mental Illness to Violence in an Urban Emergency Department

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## Introduction

- Psychiatric patients frequent EDs across the country. However, the number of patients with undiagnosed psychiatric illness presenting to the ED is not well known.
- Studies show that an unplanned visit with the ED for treatment of physical illness or injury should be used as an opportunity to identify undiagnosed psychiatric disorders.
- Psychiatric illness may cause and/or contribute to a young patient's exposure or risk for violence and/or victimization to violence. Identification and referral of those patients provide an opportunity for improved patient care.
- The rate of violence in the inner city populations is at epidemic proportions. Much of this violence is gun related.
- Studies have examined risk factors for violence and violence victimization but have not examined mental illness as a risk factor.

## Objective

- This study seeks to determine if there is a relationship between undiagnosed psychiatric illness in patients aged 16-24 who present to the emergency department with non-psychiatric complaints and their risk for violent behavior.

## Methods

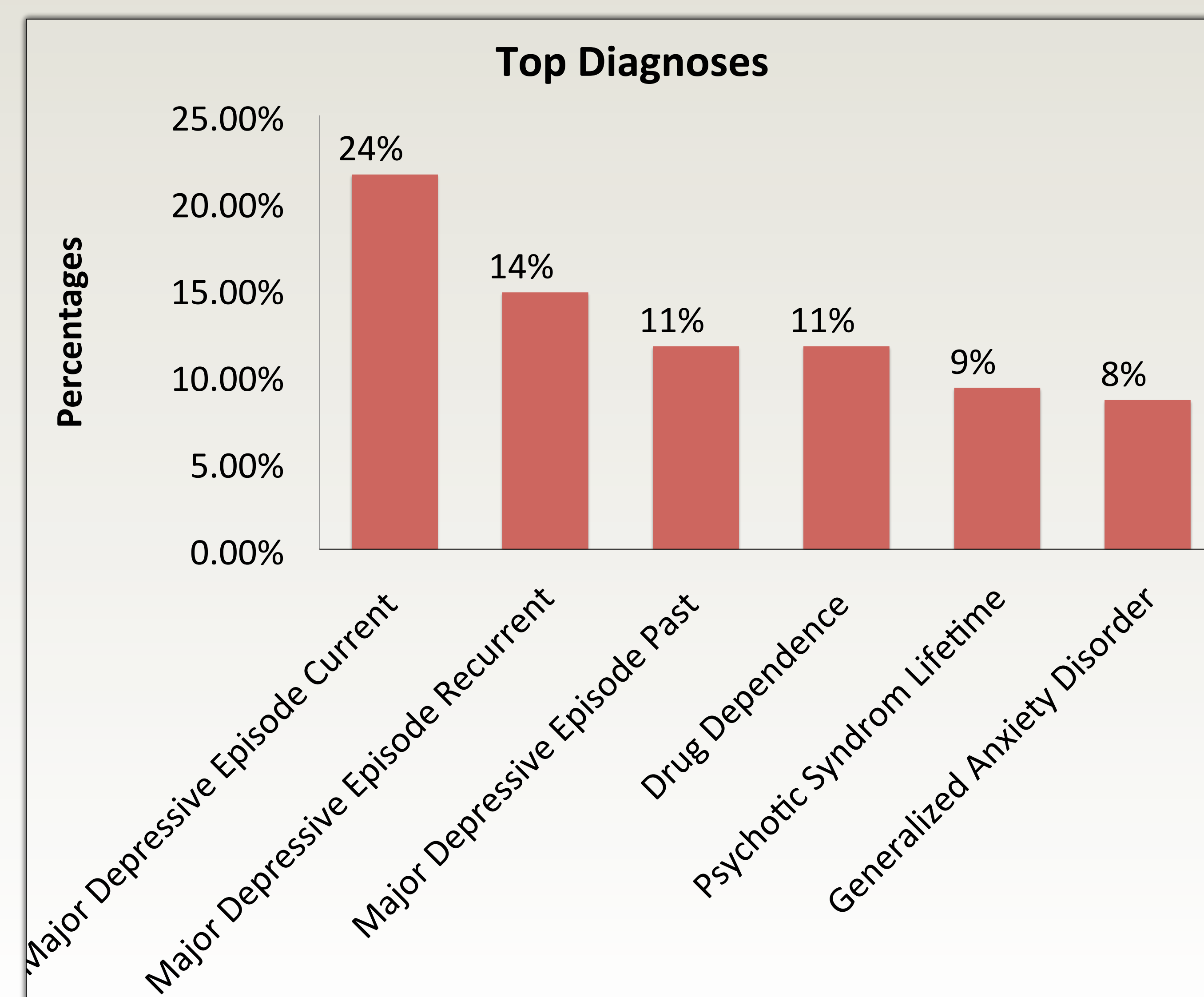
- The convenience sample included consenting English speaking youth aged 16-24 with stable vital signs who presented to the ED or have been admitted to inpatient with non-psychiatric complaints and documented history of being a victim of violence
- Patients were given a MINI International Neuropsychiatric Interview and three tests of violence risk
- The surveys are administered by trained research fellows during the patient's stay in the ED and took approximately 20 minutes to complete
- A comparison was done using ANOVA (SPSS V 25) to determine a correlation of those who screen in for mental illness and those that tested positive on the violence surveys.

- Surveys:
  - Short gun questionnaire- Asks for gun access and usage
  - NYC Youth Violence Survey- Asks about most recent violence
  - SAGE Baseline Survey- Asks about aggressive agents and threats of aggression
  - \*total of 28 questions and average time to complete is 5 minutes
- MINI International Neuropsychiatric Interview:
  - MINI provides validated, reliable DSM diagnoses for 16 psychological conditions within a short time frame including depression, PTSD, OCD...etc. It is fully structured to allow administration by non-specialized interviewers (i.e. research fellows). For each disorder, one or two screening questions rule out the diagnosis when answered
- Average time to complete= 10-15 minutes
- \*This study took ~20 minutes to complete and was IRB-approved.

### •Results continued

- There were undiagnosed mental illnesses out of 189 patients who took part in this study.
- In this patient population, depression was the most common
- 45% (n=85) tested positive for undiagnosed mental disorder
- There were no significant relationships showing that undiagnosed mental illness is positively correlated with risk of violent behavior or gun violence
- 2.5% of patients who tested (+) for recurrent major depressive episodes (n=24) were more likely required to seek medical treatment due to a violent, intentional injury within the past 6 months (P=0.005, n=3).
- 10.5% of patients who tested (+) for past major depressive episodes (n=19) were more likely to have carried a gun within the past 6 months (P=0.045, n=2).
- 26.3% of those who tested (+) for current drug dependence (n=19) were more likely to have carried a knife within the last 6 months (P=0.001, n=5).

## Results



## Limitations and Conclusions

- There were undiagnosed mental illnesses in this patient population, depression being the most common
- 45% (n=85) tested positive for undiagnosed mental disorder
- There were no significant relationships showing that undiagnosed mental illness is positively correlated with risk of violent behavior or gun violence
- but this could be due to small number of patients who engaged in the violent behavior.
- The results of this study suggest that it might be beneficial to screen this population for depression and other mental illnesses.