

Assessment of Post-Traumatic Stress Disorder Among Emergency Medical Services Workers: A Survey Study

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INTRODUCTION

- Mental health illnesses have a high prevalence in the United States.
- An estimated 47 million American adults experienced a mental illness in 2017 with 10 million having an unmet need for treatment.
- Post-traumatic stress disorder (PTSD) is a mental illness characterized by anxiety, dysfunction, re-experience, and depression following exposure to trauma. The lifetime prevalence of PTSD in the general population is estimated to be 6.1-9.2%¹.
- First responders and emergency medical service (EMS) face challenging, dangerous, and draining situations regularly.
- Particularly traumatic events such as Hurricane Katrina (2005) and the COVID-19 Pandemic could contribute to development of PTSD in this susceptible population.

OBJECTIVES

1. Identify the prevalence of PTSD in individuals who worked in EMS compared to the general population.
2. Separate two cohorts of EMS workers and identify those who worked during both Hurricane Katrina and COVID-19, and those who only worked during COVID-19.
3. Determine if experiencing traumatic events such as Hurricane Katrina build resilience to future events.

METHODS

- New Orleans EMS workers over the age of 18, employed by June 8, 2020, and who worked during COVID-19 and/or Hurricane Katrina were included for this study.
- The survey consisted of 31 questionnaire items including demographics, work experience and training, and the PTSD Checklist—Civilian Version (PCL-C) validated by the DSM IV².

SCORING CRITERIA

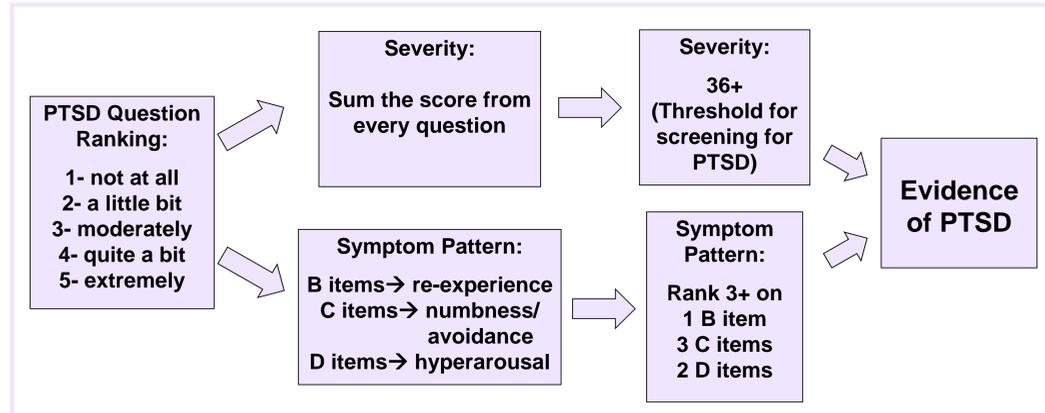


Figure 1: Scoring Criteria. Using the 17-item PTSD Checklist Questionnaire, participants would rank how often they experienced a symptom described by the question in the past month. Participants with a combination of a severity score above 36 and who met the symptom pattern were considered to show evidence of PTSD.

DEMOGRAPHICS

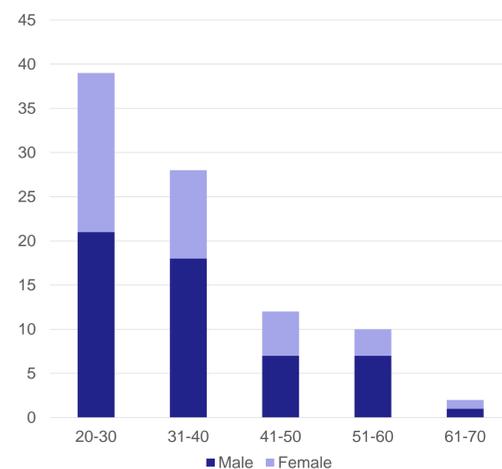


Figure 2: Age and Gender. The number of participants that are in each age category and gender group are depicted above. The average age is 35.9 ± 1.14, and 59.8% of the sample is male.

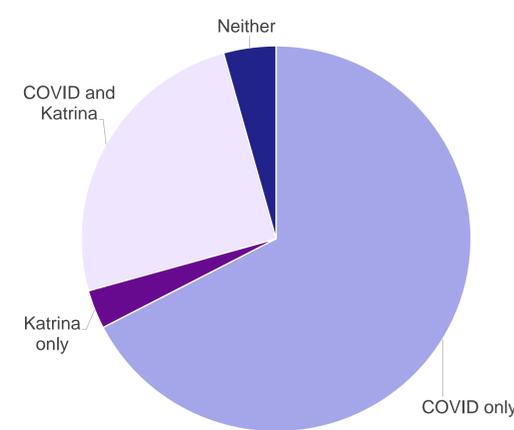


Figure 3: Cohorts. Participants were grouped into cohorts by which events they worked during. Of the 92 participants, 62 worked during COVID only, 3 during Katrina only, 23 worked during both, and 4 worked neither.

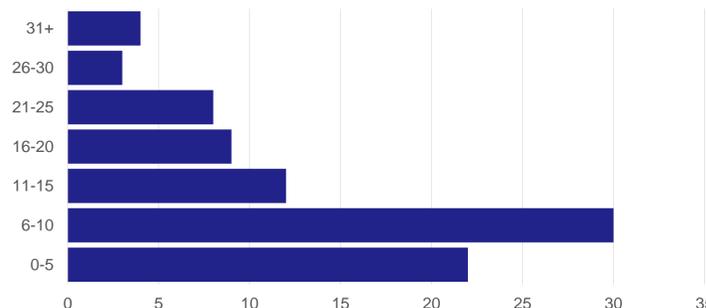


Figure 4: Experience. The years of experience for each participant is charted and grouped into 5-year increments. The majority, 56.5%, of participants have less than 10 years experience.

RESULTS

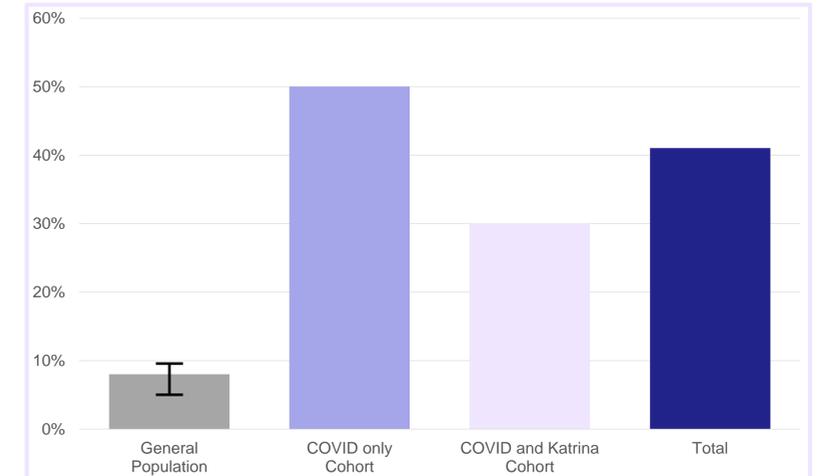


Figure 5: Participants with Evidence of PTSD. The percentage of the cohorts of interest that showed evidence of PTSD is compared to the lifetime prevalence of PTSD in the general population, 6.1-9.2%¹. The highest prevalence was seen in the COVID only cohort, with 50% of the sample showing evidence for PTSD. Those EMS workers who worked both COVID and Katrina showed lower rates at 30.4%, and the entire sample of EMS workers (total) showed a prevalence of 41.3%.

CONCLUSIONS

- The prevalence of PTSD in New Orleans EMS personnel is approximately five times higher than the general population.
- EMS workers who worked during COVID had higher rates of PTSD than those who worked during Katrina and COVID.
- This shows that experiencing previous traumatic events can build resilience for future events.
- A strong support system and access to mental health treatments is especially important for this susceptible population.

REFERENCES

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- ²Using the PTSD Checklist (PCL). National Center for PTSD. <https://sph.umd.edu/sites/default/files/files/PTSDChecklistScoring.pdf>. Published July 2012. Accessed October 7, 2020.