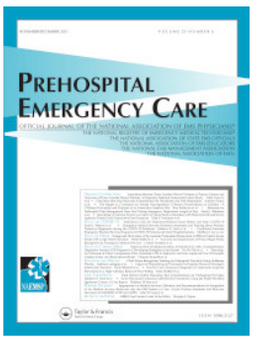

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Public Health Surveillance of Behavioral Health Emergencies through Emergency Medical Services Data

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Abstract

Objective: To identify the demographic, clinical and EMS characteristics of events documented as behavioral health emergencies (BHE) by EMS. **Methods:** This was a cross-sectional study using the 2018 National Emergency Medical Services Information System (NEMSIS) Version 3 dataset. All events that had patient care provided with a documented impression (field diagnosis) of ICD-10 codes F01–F99 (i.e., mental, behavioral, and neurodevelopmental disorders) were labeled a BHE and included. Descriptive statistics were calculated. **Results:** A total of 1,594,821 (7.3%) EMS calls had a BHE impression. The most common was mental and behavioral disorders due to psychoactive substance use (42.3%). More males than females had BHEs (54.6% vs. 45.4%), and most patients were ages 18–34 (31.5%). Most BHE occurred in urban settings (89.6%). Almost half (47.9%) were dispatched with a complaint unrelated to behavioral health. **Conclusion:** BHEs were noted in 7.3% of NEMSIS events, and the majority were associated with substance use disorders. EMS professionals need comprehensive training on best practices for BHE. Stakeholders should have information on prevalence of BHEs to ensure proper educational standards, training practices, and resource allocation. **Key words:** behavioral health; emergency medical services; mental health; substance use disorder

PREHOSPITAL EMERGENCY CARE 2021;00:000–000

Introduction

The prevalence of mental illness is on the rise in the United States, and it is estimated that as many as half of the population who are in need of care lack access to mental health resources (1, 2). Without sufficient access to appropriate mental health or rehabilitation services, behavioral health problems are likely to escalate to the point of an emergency, thus resulting in the need for emergency medical services (EMS) to intervene (3). Previous research has identified that more than ten percent of all EMS calls from 2012 to 2016 were related to a behavioral/psychiatric disorder, classifying it as one of the top five most common impressions, or field diagnoses, that EMS providers encounter in the United States (4). Mental and behavioral health are often involved in EMS activations, either as the primary issue or an underlying factor that influences or complicates the medical presentation or procedures. Many studies have shown the comorbidity of mental and behavioral health disorders with other chronic conditions such as diabetes, HIV, or asthma, as well as co-occurring substance use disorders (5–8). Despite the increase in mental illness in the United States (1, 9), little is known about how this patient population is cared for by emergency medical services.

The prevalence and characteristics of behavioral health emergencies (BHE) treated by EMS provides an important window into the emergent need for mental health resources within communities. Previous research has identified characteristics of

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MKR, PS, GK, ARP were involved in the design of this study. MKR was responsible for the literature review. MKR was responsible for the analysis of the data, and MKR, REC, KC, ARP were involved in the interpretation of the data. MKR was responsible for the drafting of the manuscript, and all authors (MKR, REC, KC, JP, PS, GK, ARP) were involved in the revision of the manuscript. All authors (MKR, REC, KC, JP, PS, GK, ARP) approved the final version.

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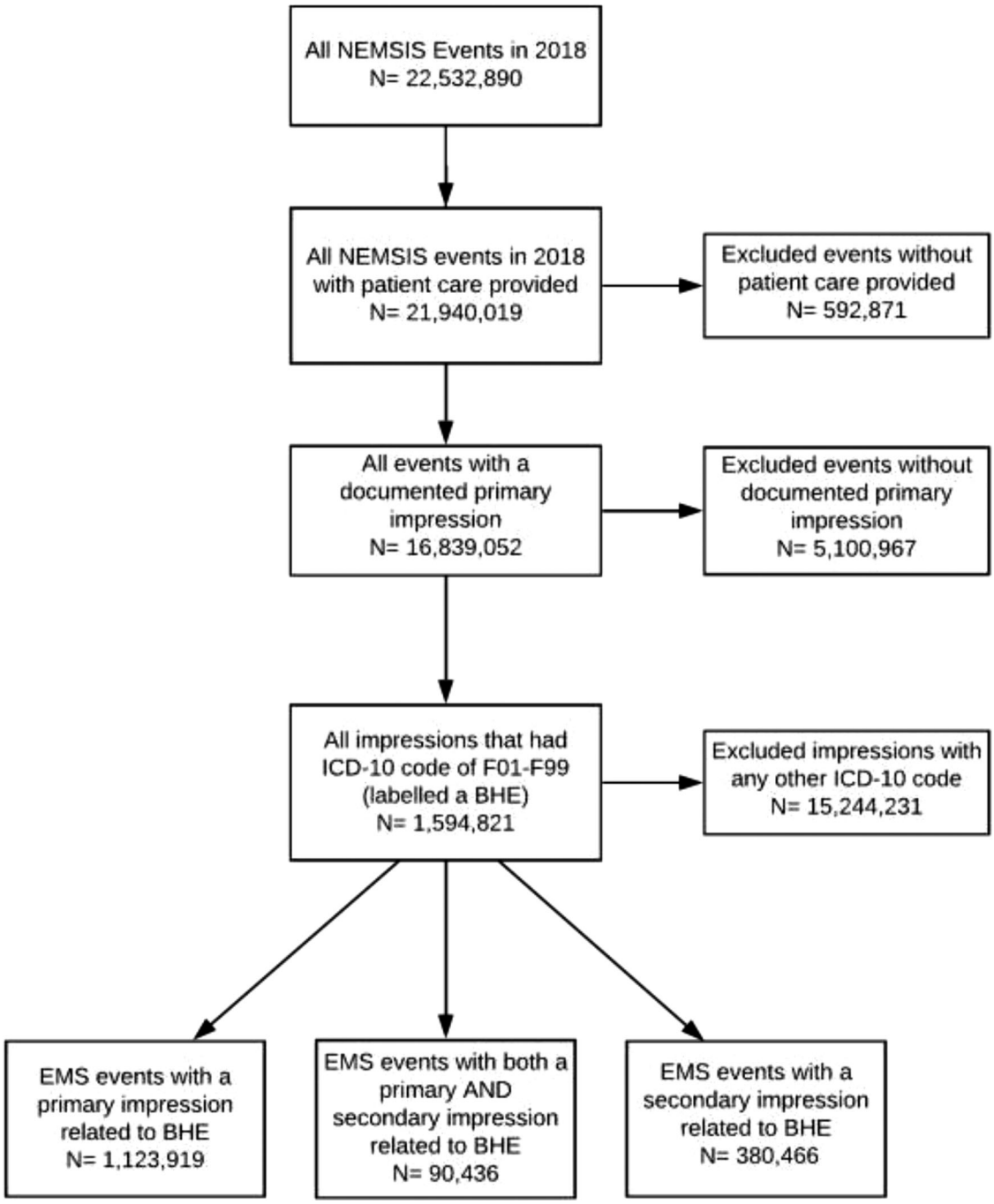

FIGURE 1. Flow chart of study population.

psychiatric patients in the emergency department (10, 11); however, the EMS setting is unique in that professionals respond to calls for help in patient's own environment in which they are experiencing the BHE. Thus, EMS is the frontline providers for these specific emergencies and the gateway into the healthcare system. It is unclear how often these types of EMS calls occur in the prehospital setting, as well as the impact this may have on both the patient and the EMS provider.

Mental and behavioral health symptoms may require different treatment and care by the EMS providers than the "typical" EMS response. The field lacks a clear understanding of how these patients present and subsequently, the response is often varied. Thus, to begin to understand prehospital presentation of behavioral health emergencies, this study characterizes the demographics, clinical, and EMS characteristics of events common in BHEs using a unique national database of EMS activations.

Methods

Study Design and Study Population

The study was an analysis of EMS activations for a BHE in 2018 from the NEMSIS Public Release Research Dataset Version 3. Included in this study are all EMS encounters that had a documented primary or secondary impression (field diagnosis) of a mental, behavioral and neurodevelopmental disorder (Figure 1), defined by use of an ICD-10 code between F01 to F99 recorded in the electronic medical record. All other calls without a primary or a secondary impression between ICD-10 codes F01 to F99, or records missing both a primary and secondary impression were excluded. All calls in which patient care was not provided were excluded; this includes calls with transport by EMS as well as non-transport calls where patient care was still provided, as determined by the presence of an impression. Patient care records with no primary or secondary impression recorded were also excluded. The Ohio State University Institutional Review Board approved this project and granted exempt status due to the de-identified and publicly available nature of the data.

Data Source

In 2001, the National Emergency Medical Services Information System (NEMSIS) was developed by the Office of EMS within the National Highway Traffic Safety Administration (NHTSA). This dataset was created in partnership with EMS stakeholder organizations and Federal and State partners to establish a national dataset and reporting standards for patient care records among the EMS community, and is organized and stored by the NEMSIS Technical Assistance Center (TAC) at the University of Utah (12). There is a standardized set of national data elements on EMS patient care records from across the United States and its territories; data elements may be required at the local/agency, state, or national level (13). NEMSIS Version 3 dataset includes patient care records from EMS activations in 2018 collected from 9,599 EMS agencies located in 43 states and territories, thus creating a national convenience sample of prehospital emergencies. Each EMS activation has a unique identifier linking all characteristics to the patient. The patient care records within this dataset are de-identified in nature, thus the unit of analysis is EMS activation or event and not patient.

Measures and Analysis

For this analysis, we used demographic, clinical, and EMS-related characteristics documented in the NEMSIS database. These specific characteristics were identified *a priori* by the researchers as relevant factors that were likely to be involved with BHE calls.

Demographic Characteristics. We analyzed demographics of the patients who were experiencing a BHE as recorded by the treating EMS professional. Sex was categorized as male/female. For this variable, "unknown (unable to determine)", "not applicable" or "not recorded" were classified as missing. Age was a continuous variable and analyzed in five age groups (0–17, 18–34, 35–49, 50–64, 65+). The variable of racial and ethnic category was defined as the mutually exclusive categories of American Indian or Alaska Native; Asian; Black or African American; Hispanic or Latino; Native Hawaiian or Other Pacific Islander; White; multiracial; and missing (14). The category of multiracial was generated to represent any patient that had more than one reported race or ethnicity. Race was ultimately not included due to the high rate of missing (60.2%), and as it was determined to be unreliable, due to the variable being documented by the EMS professional, not necessarily as the patient identifies. US Census regions were categorized as: island areas, midwest, south, northeast, and west (15). Urbanicity was categorized as rural, suburban, urban, and wilderness (16). The location where the patient was found was categorized as: healthcare (e.g. doctor's office, nursing home); residence; commercial (e.g. airport, restaurant/café, store); recreation (e.g. park, pool); public area/building; street; prison; and school (e.g. daycare, school dorm) using the coding used in NEMSIS (17).

Clinical Characteristics. We also assessed BHE-related primary and secondary impressions, as well as other care-related characteristics such as primary symptoms and administered medications relating to behavioral health. Primary or secondary impression was measured using the standard ICD-10 codes from NEMSIS. The categories included all subgroups within F01–F99: mental, behavioral and neurodevelopmental disorders. The subcategories include: F01–F09, mental disorders due to known physiological conditions; F10–F19, mental and behavioral disorders due to psychoactive substance use; F20–F29, schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders; F30–F39, mood [affective] disorders; F40–F48, anxiety, dissociative, stress-related, somatoform and other

TABLE 1. Demographics of patients from BHE-related EMS events in 2018

Characteristic	N = 1,594,821 n (%)
Sex	
Male	864,776 (54.6)
Female	718,826 (45.4)
Missing	*11,219*
Age (years)	
0–17	114,361 (7.3)
18–34	491,685 (31.5)
35–49	381,478 (24.4)
50–64	367,217 (23.5)
65+	206,417 (13.2)
Missing	*33,663*
US census region	
West	597,604 (37.5)
South	505,067 (31.7)
Midwest	246,912 (15.5)
Northeast	244,572 (15.3)
Island areas	666 (0.04)
Urbanicity	
Urban	1,395,528 (90.4)
Rural	74,030 (4.8)
Suburban	56,621 (3.7)
Wilderness	17,802 (1.1)
Missing	*50,840*
Location found[a]	
Residence	622,650 (39.0)
Healthcare facility	297,312 (18.6)
Street	263,004 (16.5)
Commercial	135,850 (8.5)
Other	47,303 (3.0)
Recreational	42,952 (2.7)
Prison/Jail	38,554 (2.4)
Public area	33,790 (2.1)
School	16,351 (1.0)
Missing	*97,055*

BHE—behavioral health emergency; EMS—emergency medical services.

[a]The location found was categorized using the coding used in NEMSIS. The following categories represent the different locations recorded for where a patient was found: healthcare (doctor's office, hospital, nursing home, other ambulatory care, urgent care); residence (apartment/condo, mobile home, private residence, other private residence); commercial (airport, gym, industrial/construction area, place of business, not otherwise specified (NOS), restaurant/café, store, warehouse); recreation (clubhouse, park, pool, recreational area, NOS, sports area); public area/building; street (parking lot, sidewalk, street/road/highway); prison (institutional residence, prison/jail); and school (daycare, school, school dorm).

nonpsychotic mental disorders; F50–F59, behavioral syndromes associated with physiological disturbances and physical factors; F60–F69, disorders of adult personality and behavior; F70–F79, intellectual disabilities; F80–F89, pervasive and specific developmental disorders; F90–F98, behavioral and emotional disorders with onset usually occurring in childhood and adolescence; F99, unspecified mental disorder. Primary symptom was measured using the following categories: abdominal, alcohol/drug exposure, cardiovascular, digestive, emotional state/behavior, endocrine/urinary, illness, injury, level of consciousness, malaise, nervous/musculoskeletal, neurological, no patient complaint, pain, reproductive system, respiratory, and skin. Specific medications were selected in order to identify medical interventions that could be used in a BHE-related EMS event. Administrations of naloxone, an opioid antagonist, was assessed due to its indication for substance use emergencies (18). Sedation medications that could be used to chemically restrain a patient that was physically combative or a danger to themselves or others were identified, including midazolam, ketamine, lorazepam, haloperidol, diazepam (19).

EMS-Related Characteristics. We also examined pertinent EMS-related characteristics surrounding the emergency, such as the complaint that was reported by dispatch, the level of practice of the EMS personnel, the type of service, scene and transport times, and characteristics describing barriers to care and reason for a scene delay, if present. A scene delay is a required element in NEMSIS to describe "any time delay that occurs from the time the unit arrived on scene to the time the unit left the scene" (13).

Specific complaints reported by dispatch, or reason provided for the call to EMS, were selected that were pertinent to behavioral health. These included: assault; healthcare professional/admission; overdose, poisoning, or ingestion; psychiatric problem, abnormal behavior, or suicide attempt; sick person; unconscious or fainting/near-fainting; unknown problem or person down; and well person check. The practice level of the EMS personnel was categorized into basic life support (BLS) (first responder/emergency medical responder; basic/emergency medical technician (EMT); BLS-intermediate), advanced life support (ALS) (advanced EMT; ALS-Intermediate; paramedic; community paramedicine), and other (nurse; physician; specialty critical care) (20). Type of service was categorized into 9-1-1 response; interfacility/medical transport; and other. Other was defined as any call that was labeled an intercept, mutual aid, public assistance, or standby. Scene and transport times were collected in minutes and reported as a median and interquartile range. Variables for pertinent barriers to care included psychologically impaired, state of emotional distress, and physically restrained. Variables for scene delay were included: directions or unable to locate; crowd; language barrier; patient access; safety of crew/staging; and safety of patient.

Analysis. Descriptive statistics were calculated for the individual demographics, clinical and incident characteristics of all BHE EMS calls. All analyses

Table 2. Clinical characteristics of patients from BHE-related EMS events in 2018

Characteristic	N = 1,594,821 n(%)
Impression	
Mental and behavioral disorders due to psychoactive substance use	672,347 (42.2)
Unspecified mental disorder	565,669 (35.5)
Anxiety, dissociative, stress-related, somatoform and other nonpsychotic mental disorders	265,331 (16.6)
Mental disorders due to known physiological conditions	105,497 (6.6)
Mood [affective] disorders	19,371 (1.2)
Disorders of adult personality and behavior	18,000 (1.1)
Behavioral and emotional disorders with onset usually occurring in childhood and adolescence	17,838 (1.1)
Schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders	17,049 (1.1)
Behavioral syndromes associated with physiological disturbances and physical factors	5,845 (0.4)
Pervasive and specific developmental disorders	317 (0.0)
Intellectual disabilities	57 (0.0)
Primary symptom	
Emotional State/Behavior	543,413 (39.0)
Level of consciousness	145,172 (10.4)
Alcohol/Drug exposure	110,457 (8.0)
Pain	89,144 (6.4)
Illness	83,919 (6.0)
Malaise	53,502 (3.8)
Respiratory	44,410 (3.2)
No patient complaint	41,807 (3.0)
Neurological	32,123 (2.3)
Injury	24,292 (1.7)
Digestive	23,707 (1.7)
Nervous/Musculoskeletal	15,566 (1.1)
Abdominal	14,180 (1.0)
Cardiovascular	9,130 (0.7)
Skin	6,457 (0.5)
Endocrine/Urinary	2,544 (0.2)
Reproductive system	242 (0.0)
Missing	*200,372*
Medications & Procedures[a]	
Naloxone	47,565 (3.0)
Any sedation medication[b]	26,055 (1.6)
Midazolam	16,425 (1.0)
Ketamine	3,078 (0.2)
Lorazepam	3,084 (0.2)
Haloperidol	3,009 (0.2)
Diazepam	382 (0.0)
Ziprasidone	77 (0.0)
Physical restraint	17,663 (5.8)

BHE—behavioral health emergency; EMS—emergency medical services.
[a]Multiple medications per patient may have been administered.
[b]Any Sedation Medication was a combined total of all sedation medications listed below.

were completed using STATA IC version 16 (StataCorp LP, College Station, TX).

Results

In 2018, there were a total of 1,594,821 EMS calls that had a primary or a secondary impression of a BHE, which represented 9.5% of all EMS calls in the NEMSIS dataset (Figure 1). Out of this sample, 1,123,919 (70.5%) calls had a BHE primary impression, and 380,466 (23.9%) calls had a BHE secondary impression, while 90,436 (5.7%) calls had both. More males than females presented to EMS with a BHE (54.6% vs. 45.4%) (Table 1). The most common age groups were 18 to 34 years (31.5%) and 35 to 49 years (24.4%). BHE patients who were 17 years or younger comprised the smallest proportion (7.3%). The majority of BHE-related events occurred in urban settings (90.4%). The west US Census region had the highest proportion of BHE events (37.5%), followed by the south (31.7%). The most common location that BHE patients were found was at a residence (39.0%), while 18.6% of BHE patients were found at a healthcare facility. Often, EMS may be called to a primary care office or urgent care if the patient requires a higher level of care (e.g. for diagnostics or for security of the patient or staff.

TABLE 3. EMS characteristics for patients from BHE-related EMS events in 2018

EMS characteristic	N = 1,594,821 n (%)
Complaint reported by dispatch	
Non-BHE complaint	763,227 (47.9)
Psychiatric problem/Abnormal behavior/Suicide attempt	269,266 (16.9)
Sick Person	209,693 (13.2)
Overdose/Poisoning/Ingestion	151,217 (9.5)
Unknown problem/Person down	87,866 (5.5)
Unconscious/Fainting/Near-fainting	86,663 (5.4)
Assault	19,787 (1.2)
Well person check	6,445 (0.4)
Healthcare professional/Admission	657 (0.0)
EMS personnel's practice level	
ALS	1,218,905 (76.4)
BLS	345,048 (21.6)
Other	30,868 (1.9)
Type of service	
911 response	1,343,925 (84.3)
Interfacility/Medical transport	242,720 (15.2)
Other (intercept, mutual aid, public assistance, standby)	8,176 (0.5)
Scene and transport times, minutes (median (IQR))	
Scene time	13.7 (9.0–20.0)
Transport time	12.0 (7.0–19.8)
Barriers to care	
Uncooperative	40,424 (2.5)
Psychologically impaired	26,482 (1.7)
Unconscious	13,574 (0.9)
State of emotional distress	9,492 (0.6)
Physically restrained	8,622 (0.5)
Scene delay	
Safety-crew/Staging	7,732 (0.5)
Patient access	6,692 (0.4)
Safety-patient	6,064 (0.4)
Directions/Unable to locate	1,383 (0.1)
Language Barrier	1,105 (0.1)
Crowd	674 (0.0)

BHE—behavioral health emergency; EMS—emergency medical services; ALS—Advanced Life Support; BLS—Basic Life Support; IQR—interquartile range.

The most common BHE was mental and behavioral disorders due to psychoactive substance use (42.2%), while 35.5% were categorized as an unspecified mental disorder and 16.6% were non-psychotic mental disorders (e.g. anxiety, stress-related) (Table 2). The primary symptom documented for this patient population was emotional state/behavior (39.0%). The second and third most common symptoms documented were altered level of consciousness, and alcohol/drug exposure (10.4% and 8.0%, respectively). A total of 26,055 (1.6%) BHE patients received sedation medication, while 17,663 BHE patients (5.8%) had documentation of physical restraints. Of all BHE calls, naloxone was administered in 3.0% of calls (n = 47,565). For all substance use-related BHE calls, naloxone was administered in 6.9% of cases (46,270/672,347) (data not shown).

Notably, of all BHE that EMS providers treated in 2018, 47.9% of them had a dispatched complaint that was unrelated to behavioral health emergencies (e.g., breathing problem, fall, person down). The more prevalent behavioral health-related complaints reported by dispatch for BHE events were psychiatric problem/abnormal behavior/suicide attempt (16.9%), sick person (13.2%), and overdose/poisoning/ingestion (9.5%) (Table 3). The majority of the BHE-related EMS events were treated by advanced life support (ALS) personnel (76.4%). The median (IQR) scene time was 13.7 (9.0–20.0) minutes and the transport time was 12.0 (7.0–19.8). Additionally, most of the events were a 9-1-1 response (84.3%) compared to 15.2% that were interfacility or medical transport. There were low proportions of events that had documented pertinent barriers to care. Additionally, low proportions of events had documented reasons for a scene delay; the highest proportion pertinent to BHEs was the safety of the EMS crew (0.5%), indicating that these events may require more time and care from the EMS crew to address the safety of themselves and the patient.

These low frequencies could be due to lack of reporting, or a true lack of barriers to care and minimal scene delays within the BHE patient population.

Discussion

This study provides a comprehensive description of the prevalence of BHEs treated by EMS at a national level. In 2018, a total of 1,594,821 (9.5%) EMS events were related to behavioral health within the NEMSIS database. The patient population who were experiencing a BHE were more male than female, between ages 18 and 34, encountered in urban settings, and most commonly located in a residence. Patients who are experiencing a mental or behavioral crisis and using emergency medical services are a vulnerable and at-risk population who are exhibiting a critical need for care. While there has been increasing research on this population in recent years, few studies have examined the characteristics and treatment of people who are experiencing a BHE in the prehospital setting.

Mental and behavioral health calls are often more complicated and may require more complex care for the patient. EMS providers should be adequately educated to identify the signs and symptoms of a BHE and trained in de-escalation tactics for patients who may be erratic or combative. One important overall finding was that of all BHE-related calls in 2018 in this database, almost half of these calls were dispatched with a complaint unrelated to behavioral health, such as a fall or breathing problem. This indicates that often EMS providers may unknowingly arrive on scene to an event that turns out to be a BHE. This indicates a need for education and training to address best practices for patient care with BHEs, so EMS personnel are prepared to care for this patient population appropriately. Another important finding was that the most common behavioral health category was mental and behavioral disorders related to substance use. Previous studies have identified similar trends of high rates of substance use, mood disorders and anxiety-related disorders specifically in the ED setting (21). Additionally, previous research has shown that a third of patients presented with both a mental health disorder and substance use disorder in the EMS setting (7). Naloxone was administered by EMS in a small proportion of these calls; however, it is unknown if it was administered prior to the EMS crew's arrival by police or a bystander (22). Naloxone administrations in the prehospital setting have been used as a surveillance mechanism to identify prevalence of opioid overdoses in previous studies (23). It is important to note that naloxone is a reactive medication for acute reversal of opioid overdose; however, long-term treatment and follow-up is likely needed for many who require naloxone administration.

As mental illnesses and substance use disorders are chronic conditions, they are likely better managed in alternative healthcare settings, such as a clinic or primary care office (24), rather than an ambulance or emergency department. Unfortunately, there is a large gap in accessing outpatient resources for this patient population (25). Therefore, patients experiencing BHEs who require support and resources may turn to emergency services as the most immediate method to receive care. Ultimately, most BHE patients are treated by EMS or in the emergency department and discharged soon after, therefore they may require follow up care outside of the EMS or emergency department setting (6, 26, 27). This patient population represents a high-risk population that should be further studied to evaluate interventions that may increase the efficacy of care and long-term health of these patients, and prevent the dependence on emergency services to manage their treatment and care.

Emergency medical services are often the entry point into the healthcare system. Therefore, the data from patient care records describing the presentation of patients to EMS who are exhibiting symptoms related to mental and behavioral health captures an at-risk population who is interfacing with the healthcare system. A study in the United States showed that of all mental health patients that presented to the emergency department, one in three arrived via ambulance (28). The prehospital setting is an underutilized source of clinical data that can be used as a proxy for the surveillance of public health issues. The use of EMS data provides an abundance of information on a vulnerable patient population and may provide an innovative method for public health surveillance of specific health outcomes and disease processes within communities both at the local and national level.

Limitations

The NEMSIS Public Release Research dataset includes the largest collection of EMS patient care reports in the U.S.; however, the dataset is considered to be a convenience sample from EMS agencies across the U.S. that may have different patient care record documentation standards and requirements. With the qualities of a convenience sample, there is the possibility for reporting bias. The regionality of the EMS events in this study is concentrated in the U.S. west census region as there were many states in this region that reported to NEMSIS, which may result in this bias. Thus, the relative frequencies seen in this region may be due to reporting and not necessarily indicative of BHE presentation trends.

For this analysis we included pediatric patients ages 0 to 17 in the study population in order to provide a comprehensive first description of prehospital behavioral health emergencies at the national level. It is important to acknowledge that the pediatric population has many different factors that can influence patient care and emergency response specifically for this age group. This is beyond the scope of this study and further analysis is needed to evaluate behavioral health emergencies of the pediatric population.

NEMSIS is a database of only EMS activations and does not account for individual patients. There are likely to be duplicate patients within this study population and the overall dataset which is a known limitation. Additionally, one of our main focuses of this paper was to highlight the exposure that EMS professionals are getting to behavioral health emergencies. In this manner, even if there were two ambulances arriving on scene to a BHE, the crews would still both be encountering a BHE in some capacity. The behavioral health activations are the unit of analysis, therefore this allows us to analyze the data accordingly without the issue of duplicate cases.

There are several variables for which a significant proportion of data that are missing. Missing data may be due to documentation practices in EMS agencies or reporting standards for states. In describing the individual demographics of this patient population, the variable of race and ethnicity has significant limitations, as it is recorded by the EMS provider who is caring for the patient. If the EMS provider did not elicit this information from the patient, it may not accurately represent a patient's self-identified race or ethnicity. We chose not to examine the EMS provider documented race as there is substantial risk of bias due to the listed race not being representative of the patient's self-identified race as well as inconsistencies in documentation that resulted in a high rate of missingness. The same is true of sex. There was also a potential for misclassification bias if documentation was not standardized. Additionally, each EMS event has a unique identifier. As the data are de-identified, it is not possible to link different EMS events to one patient even if they are the same individual. Another general limitation in the use of EMS patient care records is the lack of medical history available. It is not possible to ascertain if this is the first time the patient is presenting with the impression and symptoms, or if they have a diagnosis from a mental health professional.

This was a descriptive, hypothesis-generating study, examining a cross-sectional assessment of the BHEs encountered by EMS over a one-year period. Generalizability may be limited, both over time and to non-reporting EMS agencies and states. However, this work provides a needs assessment of this specific patient population that may inform and direct future work related to behavioral health in the prehospital setting.

Previous research has identified the comorbidities that exist with behavioral health and mental health emergencies. Behavioral health is an intersectional area of public health and EMS research that has been vastly understudied. The possible repercussions of this are applicable at the individual, community, and policy level. For individual EMS professionals, receiving comprehensive, up-to-date and accurate education and training on best practices for how to interact and treat patients experiencing a BHE would vastly impact both the provider and the patient. At the community and organizational level, it is important for EMS agencies to understand the prevalence of BHEs within their community and provide education and resources for both patients and health care providers. At the policy level, stakeholders should have access to research that defines the prevalence of behavioral health emergencies, thus demonstrating the need for proper educational standards, training practices, and resource allocation. Patients who are experiencing behavioral health emergencies deserve to receive quality care by EMS professionals and receive further help to assist them out of the crisis and into long-term support. These efforts often require collaboration among other health care providers, social services, and resource allocation from communities as well as policies to facilitate funding and protection for this patient population.

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