

Descriptive Analysis of an Air Force Aeromedical Staging Facility

Eneya Hugh Mulagha M.D.

University of Virginia Master of Public Health Candidate Spring 2013



Introduction

The 779th Medical Group Aeromedical Staging Facility at Joint Base Andrews, Maryland serves as the primary East Coast hub for aeromedical evacuation aircraft returning sick or injured patients from Europe, Africa and the Middle East to the United States for care. They are the first stop on American soil for Wounded Warriors as they transit from CENTCOM Theater of operation to their next treatment facility or home in the U.S.



Objective

The aeromedical staging facility is a very unique health care setting that has not been researched with regard to patient outcome. This study provides a descriptive analysis of this population.



Methods

The study population consists of all patients that stayed the night at the facility in the calendar years of 2009- 2012. Data for these patients were obtained from two sources: the Armed Forces Health Longitudinal Technology Application - theater (AHLTA-t) system and the Army Liaison office patient record system at the 779th ASF. Analysis of data was done using SAS and Microsoft Excel.



Results

- On average, Marines were younger in age than patients from other services; the average age Marine was 25 years compared to an average age for the other services of 30 years.
- There were over 400 different diagnoses recorded. Five out of the ten most frequent diagnoses seen were psychiatric in nature.
- In the ASF in individual years from 2009-2012 , 22%-33% of patients were seen for mental health diagnoses. During those same years, 17%-28% of patients were seen for combat related diagnoses.



Table 1: Demographic Characteristics of 2012 Sample

	n (1155)	%
Age		
17-22	230	20
22-27	374	32
28-37	220	19
32-37	123	11
38-42	101	9
42+	107	9
Service		
USA	705	61
USAF	99	9
USMC	145	13
USN	91	8
CIV	5	1
Unknown	110	9

Table 2: Top Ten Most Frequent Diagnoses

Diagnosis	n	% of Total
Adjustment Disorder	466	5
Depression	382	4
Post Traumatic Stress Disorder	266	3
Back Pain (Lumbago)	245	2
Convulsions/Seizures	142	1
Anxiety	82	1
Fracture of ankle	67	1
Syncope	62	1
Cervicalgia (Neck Pain)	51	1
Bipolar Disorder	45	1

Figure 1
Percent of Diagnoses that were Combat Each Month, Pooled 2009-2012

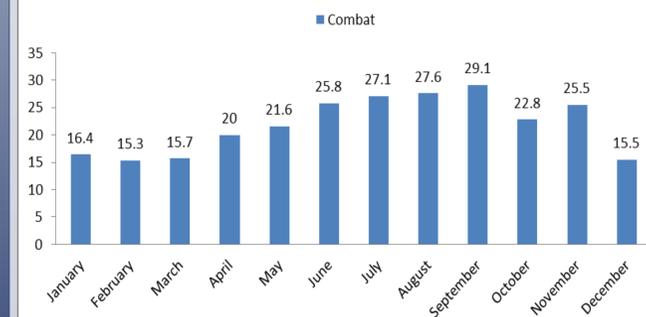


Figure 2
Percent of Diagnoses that were Psychiatric Each Month 2009-2012

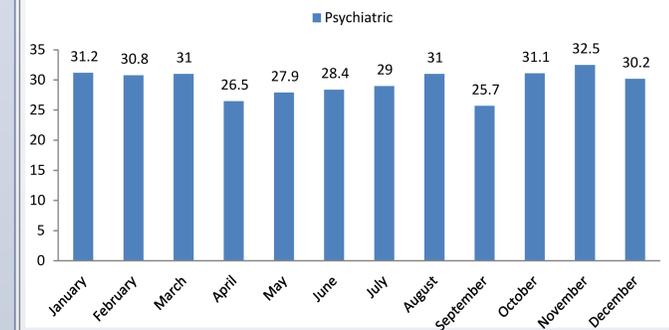
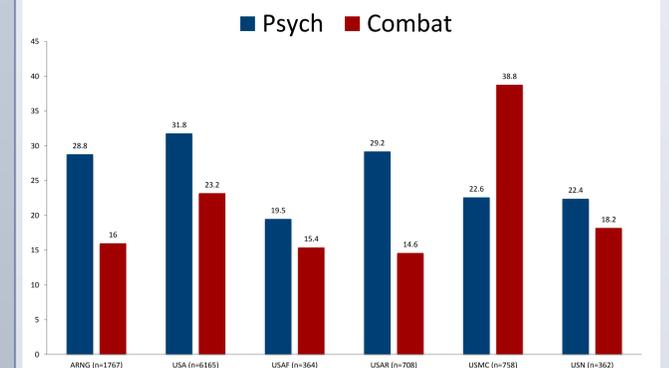


Figure 3
Percentage of Psychiatric and Combat Diagnoses by Military Service 2009-2012



Discussion

- Among military service members, combat exposures are reported as the strongest predictors of subsequent PTSD. PTSD is part of a bigger picture of mental health problems that the US military needs to address.
- The rate of usage in this aeromedical staging facility for members with psychiatric diagnoses was compelling. These disorders are associated with higher risk of suicide and suicidal behavior, worsening outcomes of comorbid medical disorders, or interference with their treatment.
- A significant limitation in the study is the use of the AHLTA-t electronic medical record (EMR) to track clinical data since vital signs, medications, and pain level can not be transferred to a spreadsheet.
- As this facility EMR continues to be upgraded, primary characteristics such as, wound care, pain management, injury severity, injury type, and mental health status will be able to be evaluated to assess patient outcome.