

# Adderall: Twitter versus FAERS the

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## Introduction

Adderall was selected because it is a commonly used drug among all age groups. The FDA Adverse Event Reporting System (FAERS) contains multiple reports of Adderall reactions. 300 tweets (ranging from 6/3/2014-10/26/2016) were collected to compare adverse effects to the reported FAERS data.

## Twitter Data

### Analysis of Tweets:

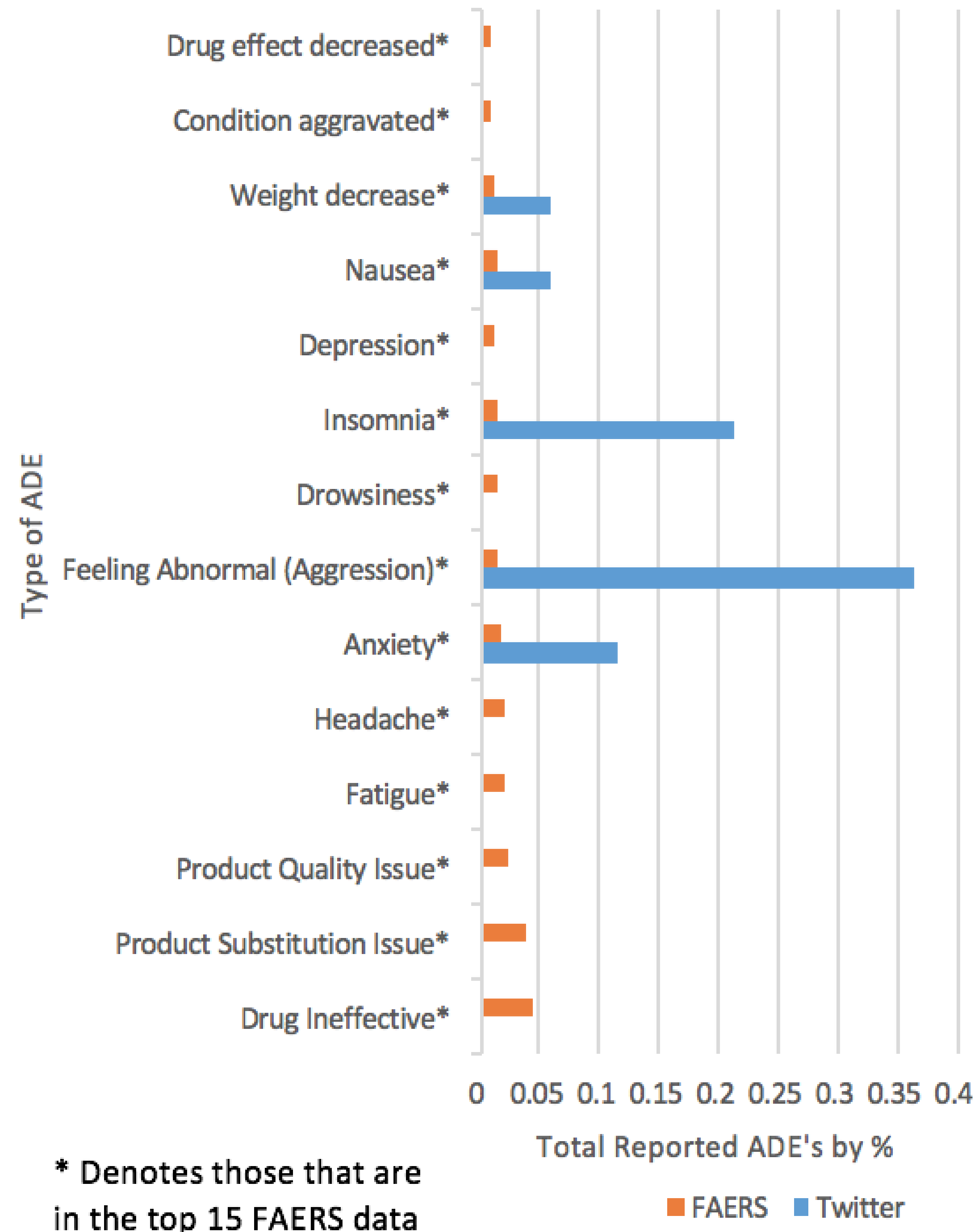
- 138/300 tweets stated at least 1 adverse effect (46%)
- 156 adverse events were reported
  - 5 tweets expressed two adverse events

## Top 15 Twitter Reactions

Event	Number of Events
Weight loss	9
Decreased appetite	20
Insomnia	33
Anxiety	18
Heart Palpitations	11
Hair Loss	4
Restlessness	3
Shaking	4
Aggression	8
Paranoia	2
Nausea	9
Diarrhea	2
Dry mouth	7
Vision loss	2
Excessive Sweating	6

## Adverse Drug Event Monitoring: Twitter v. FAERS

### Comparison of the Top 15 ADE's Reported



Some of the Twitter data was not included in the chart above because the tweets did not coincide with the top 15 events found on FAERS.

## FAERS Data

### Analysis of FAERS:

- Of the 749 entries for Adderall, there were 3,375 events.
- Of the entries FAERS received, problems with chemical composition rather than side effects (11.2%)

## Top 15 FAERS Reactions

Event	Number of Events
Drug Ineffective	148
Product Substitution Issue	127
Product Quality Issue	76
Fatigue	73
Headache	67
Disturbance in Attention	56
Anxiety	55
Feeling Abnormal	52
Drowsiness	48
Insomnia	47
Depression	44
Nausea	41
Weight decreased	39
Condition aggravated	29
Drug effect decreased	28

## Conclusions

The top adverse events on FAERS did not match up to any of the twitter results. However, there were multiple adverse events that did overlap such as anxiety, insomnia, and weight loss. The most common FAERS topics did not appear on twitter because the causes of the adverse events are not easily self-diagnosable. Therefore, more data should be collected on other media sources in order to obtain more accurate data.