

Prozac: Twitter versus FAERS Data

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Introduction

Prozac was selected because it is one of the most common antidepressants.

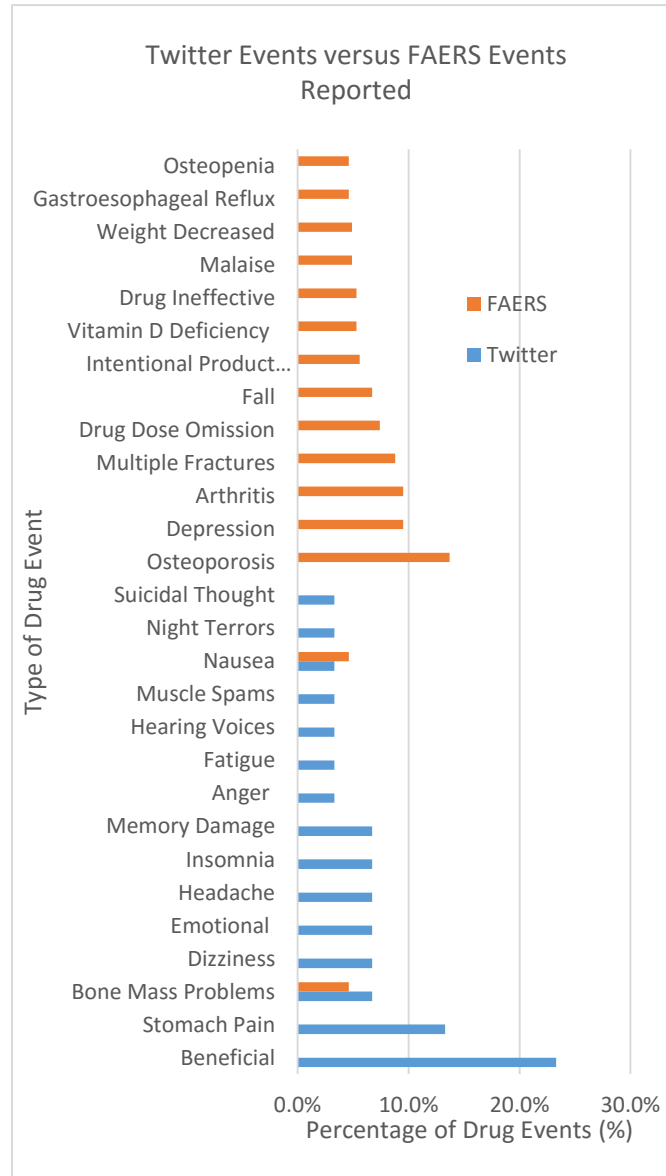
Twitter Data Analysis

300 tweets were randomly selected on October 26, 2016 (n= 300). The dates of the tweets ranged from January 15, 2016 to October 24, 2016.

- 30/300 tweets reported at least one drug event when using Prozac (10%).
- 15 drug events were reported in total.

Top 15 Twitter Events

Event	Number of Event
Beneficial	7
Stomach Pain	4
Bone Mass Problems	2
Dizziness	2
Emotional	2
Headache	2
Insomnia	2
Memory Damage	2
Anger	1
Fatigue	1
Hearing Voices	1
Muscle Spasms	1
Nausea	1
Night Terrors	1
Suicidal Thought	1



FAERS Data Analysis

340 events were reported to FAERS that contributed to the use of Prozac as an antidepressant. However, we selected the top 15 events to get a total of 284 events (n=284).

Top 15 FAERS Events

Event	Number of Event
Osteoporosis	39
Depression	27
Arthritis	27
Multiple Fractures	25
Drug Dose Omission	21
Fall	19
Intentional Product Misuse	16
Vitamin D Deficiency	15
Drug Ineffective	15
Malaise	14
Weight Decreased	14
Nausea	13
Bone Problems	13
Gastroesophageal Reflux	13
Osteopenia	13

Conclusion

The Twitter data was not consistent with the FAERS data because osteoporosis is not the most common event. More studies should be completed to see more of the most common event on Twitter. It was interesting to see the difference in the primary event when taking Prozac because the sample sizes of the two data sets were similar. However, the difference may be due to time restraint and under coverage of the people selected on Twitter. Since there was no date range listed for the FAERS data, this may have limited the findings as well.