

Medication non-adherence increases risk of frequent emergency room and urgent care visits among patients on antidepressants

Erin E. Roberts, MPH

Walgreens Center for Health and
Wellbeing Research



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Summary

- Random sample of 0.5% of adult patients between ages 18-64 with at least one antidepressant prescription in the 2017 outpatient emergency Marketscan dataset (n=1,194,718)
- Mean age = 44.9 years
- Mean PDC = 80.59%
- Mean number of ED visits in 2017= 0.37
 - One patient had 216 ED visits
 - 942,819 (78%) patients had no ED visits
- 59% of patients were female

Summary

- Men are slightly more likely to have a low PDC (<80%) than women (36% vs 35%)
- Compliant patients are more likely to have no ED visits
- Non-compliant patients are 1.5 times more likely to have 4+ ED visits than compliant patients

PDC80	No Visits	1	2	3	4+
<80%	332,091 (77.15%)	60,413 (14.47%)	19,217 (4.60%)	7,336 (1.76%)	8,430 (2.02%)
≥80%	596,382 (79.93%)	101,460 (13.60%)	28,561 (4.84%)	9,852 (1.32%)	9,917 (1.33%)

Mean PDC by ED Visit Frequency

- Lower PDC is correlated with increased ED visit frequency

Number of Visits	N	Mean PDC
4+	18,830	75.45%
3	17,658	77.10%
2	49,111	78.36%
1	166,300	79.87%
0	942,817	81.00%

Additional Factors

- Patients with excessive (4+) ED Visits were on average four years younger than those without.
- Additionally, patients with excessive ED visits were more likely to be female, on long term disability, and live in small metropolitan areas.
- For every 10 percentage point decrease in PDC, the odds of excessive ED visits rises by 7.1%.

Potentially Preventable ED Visits

- Patients who are not adherent to their antidepressant medications are more likely to use the Emergency Department for potentially preventable visits than those who are adherent.

PDC	N	Not Preventable	Avoidable	PC Treatable*	Non-Emergent
<80%	156,542	15.65%	4.42%	21.42%	18.78%
≥80%	230,901	16.35%	4.33%	21.20%	18.26%

PDC	Alcohol	Drug	Injury	Psychiatric	Unclassified*
<80%	1.43%	0.42%	15.20%	4.44%	18.23%
≥80%	0.99%	0.22%	17.17%	3.44%	18.04%

* Not significant

Conclusion

Improving patient adherence to their antidepressants will not only improve a patient's depressive symptoms, but reduce the burden of excessive and inappropriate visits to emergency departments and urgent care facilities.

