Impact of Drug Adherence on Oppositional Defiant Disorder and Conduct Disorder Among Patients With Attention-Deficit/Hyperactivity Disorder

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Abstract

OBJECTIVE:
Attention-deficit/hyperactivity disorder (ADHD) may be a predecessor of oppositional defiant disorder (ODD) and conduct disorder (CD), and medication is an effective treatment option for ADHD. This study aims to examine whether adherence to medication treatment is associated with developing ODD and CD among youths with ADHD.

METHODS:
A total of 33,835 youths (4 years ≤ age of diagnosis ≤ 18 years) with ADHD (ICD-9-CM code 314.X) undergoing medication treatment for at least 90 days were selected from Taiwan's National Health Insurance Research Database during the period of January 2000 through December 2009. Patients' medical records were monitored through December 31, 2011, or until they had a diagnosis of ODD or CD. We categorized participants as compliant or noncompliant on the basis of a medication possession ratio (MPR) of 50%.

RESULTS:
The patients with better drug adherence (MPR ≥ 50%) exhibited a significantly decreased probability of developing ODD (53% reduction, P < .001) or CD (58% reduction, P < .001) when compared to the patients with poor drug adherence (MPR < 50%). The results in our sensitivity analyses showed that good drug adherence consistently exerted protective effects on ODD or CD, irrespective of patients' characteristics. Moreover, the patients with the best drug adherence (MPR ≥ 75%) had the lowest risks of developing ODD or CD.

CONCLUSION:
Among patients with ADHD undergoing drug therapy, a better drug adherence is associated with a lower likelihood of their developing ODD or CD in later life.