Attention-deficit hyperactivity disorder and suicidality: The mediating effects of psychiatric comorbidities and family function

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Abstract

OBJECTIVE:
To explore the association between Attention-Deficit Hyperactivity Disorder ("ADHD") and suicidality in children. Mediating effects of family function and psychiatric co-morbidities were also explored.

METHODS:
This is a national representative cross-sectional survey of school-based sample of 4739 children aged 7-15. Logistic regression was used to assess the excess risks of suicidality (i.e., suicidal ideation, suicide plan, and suicide attempts) in 412 children with ADHD. Serial multiple mediator models were conducted to assess the mediating effects of family function and psychiatric comorbidities.

RESULTS:
The prevalence of suicidality in children with ADHD was approximately 20% in Taiwan. After adjusting for potential confounders, the risk of suicidality among children with ADHD was approximately four times higher than among non-ADHD children [(adjusted Odds Ratio ["OR"] = 3.82, 95% Confidence Interval ["CI"] (2.73, 5.34)] for suicidal ideation, adjusted OR = 4.18, 95% CI (2.57, 6.80) for suicide plan and adjusted OR = 4.45, 95% CI (1.99, 9.93) for suicide attempts. The mediating effects of anxiety/depression and conduct problems were about 20% and 8%, respectively, across all suicide outcomes. The mediating effects of family function were around 6-7% for suicidal ideation and 16-18% for suicide plan and suicide attempts. The effects of ADHD on suicidality, in general, remained after considering the mediating roles of family function and psychiatric comorbid conditions.

CONCLUSIONS:
Children with ADHD are at a high risk of suicide. Although the family function and psychiatric co-morbidities partially mediate this association, ADHD in itself is a potent suicide risk factor and should be an important target for suicide prevention.