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Attention Deficit Hyperactivity Disorder was Associated with Increased Risk of Suicidal Behaviour

STUDY DESIGN

Design: Prospective cohort study.

STUDY QUESTION

Setting: Denmark

Patients: 2,924,780 people aged 10 and over, living in Denmark between 1st January 1995 and 31st December 2014.

Exposure: Diagnosis of attention-deficit hyperactivity disorder (ADHD), along with other psychiatric diagnoses.

Outcomes: Hospitalisation for suicidal behaviour or death by suicide

MAIN RESULTS:

Incidence rate ratios (IRRs) for suicidal behaviour were compared between individuals with ADHD and those without. Results are summarised in table 1 below.

	Number with suicidal behaviour	IRR (95% confidence intervals)	Number who died by suicide	IRR (95% confidence intervals)
No ADHD diagnosis (n=2,892,240)	35,058		4895	
ADHD diagnosis (n=32,540)	682	4.69 (4.34-5.06)	35	3.20 (2.29-4.47)
ADHD diagnosis plus other psychiatric diagnosis (denominator not reported)	499	10.43 (9.53-11.41)	Not reported	

Table 1: IRRs for suicidal behaviour and completed suicide in those with and without a diagnosis of ADHD, with or without co-morbid psychiatric diagnosis

CONCLUSION: Individuals with a diagnosis of ADHD were significantly more likely to display suicidal behaviour, including completing suicide. Those who also had co-morbid diagnoses were at even greater risk.

ABSTRACTED FROM: Fitzgerald, C., Dalsgaard, S., Nordentoft, M. and Erlangsen, A., 2019. Suicidal behaviour among persons with

attention-deficit hyperactivity disorder. *The British Journal of Psychiatry*, pp.1-6.

COMMENTARY:

There is an evolving literature linking ADHD with increased risk of suicide, however causality has not been established. It was previously hypothesised that factors such as co-morbid psychiatric disorder and family factors may account for this increased risk¹.

The study by Fitzgerald *et al.* is notable not only for its large size and lengthy follow-up, but also because efforts have been made to examine the impact of co-morbid psychiatric disorder and family history of suicidal behaviour. Their findings suggest that ADHD remains associated with increased risk of suicidality, even after accounting for potential confounders.

There is now some evidence that appropriate medication for ADHD is associated with reduced suicide risk². This study highlights just how important suicide risk is in patients with ADHD, and reminds clinicians that this is another factor to consider when deciding whether to initiate pharmacological therapy, although the study itself did not directly assess the impact of medication on suicidality.

Clinicians treating young people with ADHD should be aware of the increased risk of suicidal behaviour and should consider enquiring about any thoughts of suicide at routine appointments, so that appropriate support can be offered in a timely fashion to those who may be having difficulties.

1. Giupponi, G., Giordano, G., Maniscalco, I., Erbuto, D., Berardelli, I., Conca, A., Lester, D., Girardi, P. and Pompili, M., 2018. Suicide risk in attention-deficit/hyperactivity disorder. *Psychiatria Danubina*, 30(1), pp.2-10.

2. Liang, S.H.Y., Yang, Y.H., Kuo, T.Y., Liao, Y.T., Lin, T.C., Lee, Y., McIntyre, R.S., Kelsen, B.A., Wang, T.N. and Chen, V.C.H., 2018. Suicide risk reduction in youths with attention-deficit/hyperactivity disorder prescribed methylphenidate: A Taiwan nationwide population-based cohort study. *Research in developmental disabilities*, 72, pp.96-105.