

Are ADHD drugs prescribed needlessly to disadvantaged children?

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ADHD medications are prescribed more than three times as much to children of parents with low-skilled jobs, compared with the children of more educated parents, new research shows.

A new study shows large differences in the prescription of ADHD medications amongst children in Denmark.

Children, whose parents have a university education, are prescribed ADHD medications less often than children whose parents finished their education after high school.

The new study also shows children are more likely to be prescribed ADHD medication if their mother had them at a young age, or if they come from a single parent family. The same was true if one or both parents have a mental illness.

"I think it is worrying as it may indicate that doctors prescribe ADHD drugs to some children for social adjustment issues, without the kids necessarily being sick," says Helle Wallach-Kildemoes, assistant professor in the Faculty of Health Sciences at University of Copenhagen, Denmark.

She is lead author of the new study, published in the *Journal of Developmental and Behavioral Pediatrics*.

Little support at school

In the study, researchers monitored 813,416 children between the age of 5 and 17 over a period of two years, using the Danish national registers.

The children had not previously been treated with psychiatric medications or had a psychiatric diagnosis. Using the drug register researchers could see that 5.54 in 1,000 children were started on ADHD medication each year, with regional differences throughout the country.

Overall, more boys than girls were prescribed ADHD medication, and so were the children of parents with lower education status, compared to children of parents with a higher education. Regions with the highest prescription rates also had the most marked the social differences.

"We have chosen to focus on the length of parental education or schooling based on the hypothesis that children suspected of having ADHD are often those that do not function very well in school, and that perhaps it is not only a question about heredity issues, but also a question of whether the parents are unable to support children in school, because they themselves did not stay very long in the school system. Or perhaps they don't have the energy to do it as single parents," says Wallach-Kildemoes.

When parents are less able to support the child in school, there is a greater risk that the child is doing badly

and it is perhaps more likely that the school suspects them of having ADHD.

Psychosocial treatment instead of drugs

In this situation according to Wallach-Kildemoes, ADHD medication is then primarily for relieving symptoms, so children may be better able to concentrate in school.

But the drug can also have unpleasant side effects in children, such as sleep problems, drug addiction, and possible growth inhibition.

"Medicine is something you should use with care - especially for children. I think it is enormously important to consider that some of these children may be reacting to the fact that they are disadvantaged and perhaps do poorly in school," says Wallach-Kildemoes.

In her view, the focus should be on psychosocial intervention rather than medication.

"We must also consider how the school system can support children of parents who have social challenges and cannot handle supporting their children in school," she says.

Inheritance plays a part

Two psychiatrists however, disagree somewhat with Wallach-Kildemoes's interpretations.

Niels Bilenberg, professor of Psychiatry and head of the Child and Adolescent Psychiatry Research Unit at the University of Southern Denmark, and his colleague Ib Rasmussen, Chief Psychiatrist at the North Denmark Region hospitals, were not involved in the new study, but propose an alternative explanation for why more children of deprived backgrounds are prescribed ADHD medication.

"About half of what contributes to developing ADHD is due to an error in genetic coding of the receptors that control brain function, which means that ADHD can persist in specific families. There may also be higher incidences of ADHD in less-educated families where children are perhaps less likely to perform well in school," says Bilenberg.

Rasmussen agrees with this.

"ADHD is a hereditary disease and having ADHD makes it harder to finish an education, which may be part of the explanation as to why children of poorly educated parents are prescribed more medication than those of more highly educated parents," he says.

Bilenberg suggests that a parent's level of education may also effect the child's development.

"The child's brain matures in a caring environment, and in response to meaningful challenges that you set for your child. So if you grow up in a family without so many resources, then it is likely that the brain does not develop so well," he says.

Northern Denmark medicates more than the south

In the north of the country -- northern Jutland -- almost three times as many children with poorly educated parents were started on ADHD medication compared the South.

Wallach-Kildemoes reports that in north Jutland in particular, these children were twice as likely to be prescribed with ADHD medication than children of more highly educated parents. In in the southern region,

comprising of south Jutland and the island of Funen, this difference in prescription rates was much smaller.

"The places where you medicate the most are also the places where there is the greatest social disparity. This suggests that something in the medical culture may lead GPs to be more generous in prescribing medicine in certain places. Attitudes and resources in schools may also have an impact," says Wallch-Kildemoes.

Easy access to psychiatrists leads to more ADHD diagnoses

Bilenberg agrees to some extent with Wallach-Kildemoes's explanation that cultural differences can account for the disparity in ADHD diagnoses of children.

In his opinion, part of the explanation also lies in the availability and access to psychiatric doctors specialising in children and young adults.

"Roughly speaking, you can say that easier access to psychiatrists results in more prescriptions of ADHD medicines. This could explain some of these results in the study," he says.

Rasmussen agrees with this:

"When relatively more prescriptions of ADHD drugs are printed in one part of the country, then one reason could be that more children were diagnosed there and thus received treatment -- both with medicine and through educational programs by local authorities."

An important study

Whilst Wallach-Kildemoes agrees that heritage also plays a role, she still suggests that it is important to talk about other issues related to ADHD.

"Socially disadvantaged children may be prescribed more ADHD medications either because they have inherited the syndrome from their parents, or because there is a tendency to prescribe it to children who do not fit into the school system. In Denmark, this is particularly true in regions that issue a lot of ADHD prescriptions," she says.

There is another question -- why are more boys prescribed ADHD medications than girls? Is it because more boys have ADHD, or the school system is not geared to some boys who may be more restless?

"We cannot rule out that the school and the community will medicate some children who just don't fit into the system. I think we should use this study for self-examination. Are we likely to see ADHD simply because the child come from a socially disadvantaged family? If so, then of course we need to address this," says Bilenberg.

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August 10, 2015 - 06:25

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