



HUMANS
IN
MOTION

Kids' stuff?

ADHD can affect adults too

By Jan Schwenkenbecher

ADHD is a childhood disorder? That's not quite true. It persists into adulthood in about half of all those affected. The right dose of the right medication helps, but this is not always easy to gauge. Psychiatrist Oliver Grimm wants to help in the search.

The cocaine helped. It didn't make him fidgety or hyper like it did so many other people. The right amount calmed him down, he could concentrate better, and didn't constantly forget to send the invoice each time he'd finished a paint job on a building site. It was self-medication – no doctor prescribes cocaine – but it helped. At least for a while. “But in the long run things went awry,” says Oliver Grimm, who met the man, a professional painter, in the outpatient department at the Department of Psychiatry, Psychosomatics and Psychotherapy of University Hospital Frankfurt. “At some point, he lost his driving licence.”

Grimm is a consultant psychiatrist and head of the outpatient department. Alongside his everyday work with the patients who present there, he also conducts research. One of his main interests is attention deficit hyperactivity disorder, in short: ADHD. And it was from ADHD that the painter Grimm met at the outpatient department was suffering.

Cause of ADHD still unknown

Hold on a moment. Isn't ADHD a childhood disorder? After all, the first reported “case” is a fictional little boy called Fidgety Philip in “Struwwelpeter”, the colourfully illustrated book written by Frankfurt physician and psychiatrist Heinrich Hoffmann in 1844. Isn't ADHD

that disorder where children are given Ritalin so they can concentrate in school and take part in lessons, but which they then grow out of in their teens?

Yes and no. It's correct that the disorder frequently occurs in childhood and adolescence, affecting about five percent of all youngsters in this age group. The symptoms are inattentiveness, impulsivity and extreme restlessness. Current research suggests that ADHD is caused by a delay in the brain's maturation process due to premature birth or birth complications – the outcome of this debate is, however, still open. Nevertheless, saying that ADHD is solely a children's disorder is wrong because adults are also affected. Although the disorder always starts in childhood, symptoms persist into adulthood to a greater or lesser degree in about half of those affected.

Adult ADHD in stress situations

“Many psychiatrists and psychotherapists are also unaware of this,” says Oliver Grimm. That's why the outpatient department headed by Grimm offers a special clinic for ADHD in adulthood. “The focus is on diagnosis and not so much on treatment,” he says. Visitors to the outpatient department are examined, and then the doctors discuss with them whether they might have ADHD. If that is the case, they

Inner restlessness: even when they seem to have overcome the ADHD of their childhood, many adults still suffer from it. When things become particularly challenging – career, family, mortgage – those affected soon start to flounder.



Various symptoms: in addition to inattentiveness, hyperactivity and impulsivity, adult ADHD sufferers often experience several secondary symptoms, including depressive moods with feelings of inferiority and hopelessness.

recommend doctors who can treat them.

“People of all ages come to us. Some have just turned 18, others are already 60 or older,” Grimm says. “But most are between their late 20s and late 30s.” ADHD surfaces above all when there is particular pressure from outside. And it’s precisely at this age that lots of things come together: starting a career, buying a house, getting married, perhaps children come along. “People often come to us who were once diagnosed with ADHD as a child, but then didn’t have any problems with it for a long time. They got through it on their own, and then, in their mid-30s, they come to our outpatient department because they’re floundering,” says Grimm.

No magic pill

However, according to Grimm, the idea behind the special clinic is to look again for ADHD specifically in young adulthood. “Even at the age of 60, ADHD can still compromise a person’s life and cause problems. But by then, lots of things have already been decided. At 18, 19, 20, the

right diagnosis can still make a real difference for the rest of a person’s life.”

For many visitors to the clinic, that’s the most important thing: the right diagnosis. Some want a magic pill that will make life easier again. Others simply want an explanation as to why they find some things so difficult. Others, in turn, would even rather hear that they don’t have ADHD – for example because they were once diagnosed as a child, but no longer have any trouble with it and want to join the police. “Clarifying that – whether it’s a case of immense psychological stress or whether they just want an ‘explanation’ – is a very important task for us when we talk to them for the first time,” says Grimm.

And those looking for a magic pill? In general, Grimm has to disappoint them. Medication can indeed have a tremendous effect in some cases. It is, however, mostly rather the case that, although it indeed helps, it does not solve all the patient’s problems. And sometimes doctors have to try different drugs in different strengths until they find a remedy. The research that Oliver Grimm and his team are conducting targets pre-

Photos: Aninka Bongers/Sutherland/Shutterstock (blister), Alex Green/Pexels (person)

ABOUT OLIVER GRIMM



Oliver Grimm, born in 1975, is a consultant psychiatrist and psychotherapist. In the course of his academic career, he worked in Mannheim, Berlin and Zurich before joining the Department of Psychiatry, Psychosomatics and Psychotherapy at University Hospital Frankfurt as senior physician in 2016. He has been responsible for the hospital’s outpatient department since 2019. Alongside his work there, Grimm also conducts research into ADHD and heads the research group “Adult ADHD and Reward System Pathologies.” His research results have been published in numerous scientific journals. Alongside his work on ADHD, schizophrenia is another of his research interests.

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cisely these cases: Which treatment helps which patient best?

Genetic risk profile

One of his main research topics is genetics. ADHD tends to run in families, and experts estimate that around 70 percent of the reasons why it develops are down to genes. This has been known for some while: “Studies with twins showed a long time ago that ADHD is distinctly overrepresented in identical twins compared to non-identical twins, meaning that genetics had to play a significant role,” says Grimm. “But through genome-wide association studies we can meanwhile say which areas in the genome are involved.”

In this type of study, researchers look at different gene variants and examine what influence they have. For example, at one location in the gene, one of the base pairs might be structured differently in one third of people than in the other two thirds – referred to by scientists as different alleles. This does not necessarily matter, but it can have an influence. If available, huge databases with the genetic information of tens of thousands of people could be used to calculate whether a particular gene variant increases the probability of developing ADHD.

“But we don’t look for individual genes,” explains Oliver Grimm. “Many of these small differences can increase the likelihood of developing ADHD by a small fraction, their influence is minimal.” That’s why one idea for future ADHD research worldwide, he says, is for doctors to draw up a genetic risk profile, something that Grimm is also working on. “With that, we could possibly forecast whether this or that type of treatment is more suitable for this or that risk profile.” The score is then calculated – explained in somewhat simple terms – by adding up all the minuscule gene variants and their respective influence on the risk of developing ADHD. “Such risk profiles are already drawn up in clinical diagnostics in other fields, such as oncology,” says Grimm.

Research with artificial intelligence

At some point in time, other results could then be included in the calculation, such as fMRI brain scans. “Perhaps we’ll soon be cramming all the data into an AI model, and an algorithm will tell us in advance which treatment will benefit the patient,” says Grimm. “Or whether a patient has a high risk of ADHD – that would already be very helpful.” However, this would mean foregoing information on how and why ADHD develops and how and why which therapy helps. Although these insights are interesting for research, he says, for the therapist, and especially for the patient, it is much more important

that the treatment helps – irrespective of how and why it works. Grimm explains that it’s always important not to introduce bias into data when algorithms are involved. Otherwise, this could lead to a model which perhaps discriminates against minorities. It is conceivable, for example, that AI might be better at calculating the risk of ADHD for boys than for girls because ADHD symptoms are less visible in girls, meaning that the condition is not as noticeable and diagnosed less often, and consequently the dataset delivers more detailed information about the correlation between ADHD and the male gender. “But these are known problems in AI research that can be controlled.”

It is equally important, however, to educate people about the clinical picture. About the symptoms, about the treatment methods with which doctors can usually achieve good results and that can help with the problems of those affected. And, above all, that ADHD can affect adults too. ●



The author

Jan Schwenkenbecher, born in 1998, is a freelance science journalist and lives in the Rhine-Main region. He studied psychology in Giessen and Marburg and then learnt the art of journalism in the framework of practical training at the Süddeutsche Zeitung newspaper.

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