

Reporting of depression symptoms in children with ADHD: do parents know best?

By Annie Fraser

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Attention-deficit/hyperactivity disorder (ADHD) is a common neurodevelopmental disorder characterised by hyperactive-impulsiveness and inattention. ADHD often co-occurs with emotional disorders such as depression and anxiety. Depression in particular is prominent among adolescents with ADHD, and can be difficult to identify as it can have similar features both to ADHD itself (e.g. poor concentration, restlessness) and to some of the side effects of ADHD medication (e.g. insomnia and weight loss). It is very important to promptly and correctly identify depression in those with ADHD so that it can be appropriately managed, as additional depression can lead to worse outcomes than ADHD alone.

One way of identifying low mood in young people is to use standardised questionnaires. These are often

completed by both children and their parents, as information from both informants can add different yet equally valuable perspectives. The extent to which parents and children agree on these symptoms in children with ADHD is not clear.

Therefore our research focused on a) examining the types of depression symptoms experienced by children with ADHD, as compared to those without ADHD, and b) comparing the way in which depression symptoms are reported by parents and children, both in an ADHD sample and a population sample.

We sent out a depression screen, the Mood and Feelings questionnaire, to a sample of children with ADHD who had previously taken part in a Cardiff University ADHD study. These questionnaires asked children whether they were currently experiencing

any of the symptoms of depression, such as low mood, negative thoughts, and physical symptoms such as tiredness or loss of appetite. The parents also completed questionnaires asking the same questions about their children. We also looked at parent- and child-rated depression symptoms in a population sample, the Cardiff Study of All Wales and North West of England Twin register, which used the same depression questionnaire. We used these two samples to firstly, compare the depression symptoms experienced in those with and without ADHD and secondly, to compare how parents and children report depression symptoms, both in those with ADHD and in the general population.

The findings showed that the ADHD sample displayed significantly higher rates of depression symptoms than the population sample, with the parent-report questionnaire in particular showing over half of the ADHD sample scoring above the validated clinical cut off for depression. This is compared to just 10% of children falling above this cut-off in the population sample. The most common depression symptoms found in the ADHD sample included difficulty concentrating, restlessness and feeling grumpy with their parents. These symptoms overlap with those of ADHD so it is unsurprising that they were common in this sample. This could suggest that depression scores in this sample are artificially elevated by symptoms which overlap with ADHD symptoms. However, these symptoms were also the most common symptoms experienced in the population sample. With this in mind, we concluded that in those with ADHD it may be important to focus on a change in, or a worsening of, these symptoms as an indicator of depression, rather than interpreting a score at a single time-point.

Differences in the types of depression symptoms reported by the two study samples were minor. The symptoms "I thought I could never be as good as the other kids", "I thought there was nothing good for me in the future" and "I felt I was no good anymore" were more common in the ADHD group than in the control group. This is also consistent with previous research, and suggests that children and adolescents with ADHD have low self-esteem.

We also found that suicidal thoughts were present in 20-25% of the ADHD sample, according to both parent-report and child-report, compared to 2-7% of the population sample. This identifies this ADHD sample as being at a greater risk of high severity depression than the population sample.

In terms of the agreement between parent and child reports of depression symptoms, we found that, in general, parents and children were reporting the same symptoms. We also found that in the ADHD sample parents reported much higher levels of depression symptoms than the children, whereas in the population sample it was the children who were reporting the higher levels. This could suggest that children with ADHD are either poor at reporting, or under-report the severity of, their own symptoms of depression. This finding is of particular importance, as it questions the utility of relying only on child-report questionnaires for identifying depression amongst children and adolescents with ADHD. The possibility that children with ADHD under-estimate the severity of their conditions should be taken into account when using depression screening tools in young people with ADHD.

In summary, these findings provide evidence for the high co-occurrence of depression symptoms with ADHD. Furthermore, they indicate that the symptoms of depression most commonly seen in ADHD are similar to those seen in the general population. Findings also suggest that children with ADHD may under-report their depression symptoms when compared to those in a general population sample. This should be taken into account when screening children with ADHD for depression in a clinical setting.

Key points:

- Depression symptoms are common in children and adolescents with ADHD.
- The profile of depression symptoms in ADHD is similar to that in the general population.
- Children with ADHD report lower levels of depression symptoms than their parents, the opposite pattern to the general population.
- Children with ADHD may under-report the severity of their own symptoms of depression meaning key risk indicators may be missed if relying on child reports alone.

