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Why School-Aged Children with Attention Deficit/Hyperactivity Disorder Should Not be Treated with Ritalin

When I began researching this topic I knew nothing of the subject and I also did not have an opinion as to whether or not children should be treated with Ritalin. After further research I not only realized what side of the debate I was on (con of course) but was also surprised as to some of my findings. Although the medication Ritalin has undeniably helped many hyperactive children calm their disorder long enough to focus and concentrate both inside and outside the classroom, it has numerous side effects, especially on a child's health and well-being.

The five main points I plan on discussing throughout my paper will be the effects ADHD has on individuals, what exactly Ritalin is and what it does, the different types of side effects the medication has including death, pressure from different aspects of society for a child to be put on Ritalin, and the many consequences and/or benefits the medication has on an ADHD child.

Understanding ADHD

Attention Deficit/Hyperactivity Disorder (ADHD) is the most frequently diagnosed psychiatric disorder in children and adolescents, with nearly 6-12% of minors worldwide diagnosed (McGover 2007), 75% of that being boys. ADHD

is the most common behavioral disorder in children and is accompanied with hyperactivity, impulsiveness, depression and anxiety, poor motor coordination, sleep disorders and aggressive behavior problems to name a few (Kidd 2006).

Similar to many other disorders, there is no blood test, brain scan, or even standardized psychological assessment that can thoroughly determine whether a particular child is or is not affected with ADHD (Diller 2008). In order for a child to be diagnosed with ADHD, they must meet the diagnostic criteria according to the DSM-IV (The Diagnostic and Statistical Manual of psychiatric disorders) which require a few different aspects to be met. At least six, if not more, of either inattention or hyperactivity symptoms must have persisted for at least six months with the individual for them to be properly diagnosed with ADHD. Some examples of these symptoms include failing to pay attention to details, making careless mistakes in homework/work, not listening when directly spoken to, difficulties organizing tasks and activities, easily distracted and/or forgetful, fidgety, and difficulty with sitting still or being calm and quiet (Winkler 2007).

Understanding Ritalin and it's Many Forms

The number one prescribed medication for ADHD is Ritalin. Ritalin has been around for over 50 years and is prescribed more than 5 million times a year in the United States, with 70 percent of those patients being children (National Alliance 2001). Between 1991 and 2001, the number of prescriptions

for the medication increased by nearly 500 percent in the United States alone (Wasson 2001). Today, it is one of the top ten abused prescription drugs on the streets (National Alliance 2001).

Methylphenidate, the scientific term for Ritalin, is a stimulant for the central nervous system. It is more potent than caffeine with similar effects as well. The medication is known to ‘calm’ children and increase their attention span by increasing the release of dopamine, a neurotransmitter, to improve attention and focus in individuals who have dopamine signals that are too weak (NIDA 2006).

Ritalin is classified by the U.S. Drug Enforcement Administration as a Schedule II drug, which is the strictest category of most commonly abused drugs that doctors are legally allowed to provide to patients. Ritalin’s molecular structure is similar to “speed” (amphetamine), “crank” (methamphetamine) and crack cocaine (Diller 2008) with similar onset effects on the brain, only slower (Kidd 2006).

There are three different forms of Ritalin that are available in short, intermediate, and long acting varieties. Short Acting Ritalin lasts for 3 to 5 hours and can come in a chewable and liquid form (Iannelli 2005). Intermediate Acting Ritalin includes Ritalin-SR, which stands for sustained-release tablets, with 20 mg for oral administration and can have an effect on the individual for anywhere from 3 to 8 hours (Novartis 2008). Long Acting Ritalin includes Ritalin LA and comes in extended-release capsules which provide an immediate release of methylphenidate and a second delayed release

of methylphenidate which in turn can last up to 12 hours for an individual (Novartis 2008) .

Although most forms of Ritalin must be swallowed whole, some can come in liquid form and as chewable tablets. It is possible to open the capsules of medication to allow easier access to the powder inside or crush the chewable forms, allowing abusers to snort the powder (Iannelli 2005).

Mothers and fathers are feeling more pressure than ever before to medicate their children, even against their parental wishes. Much of this pressure comes from school faculty or coercion from doctors. In some elementary schools in America, 30-40% of the students are diagnosed and treated with medication to help the child conform to the demands of school life (Breggin 2001). Doctors sometimes jump to conclusions and quickly prescribe medication as a ‘cure-all’ to a ‘misbehaving, hyper’ child to satisfy a parent’s worry and frustrations that come can from both in the home and from the teachers at school (Wasson 2001).

Multiple Side Effects

Novartis, the manufacturer of Ritalin, claims that their product is the “solution” to the ADHD problem (Breggin 2001). What they aren’t specifying are the different side effects the medication has on the ADHD patient.

There are both short-term and long-term side effects of the medication that contribute to the reasoning behind why children should not be prescribed Ritalin. Short-term side effects can vary anywhere from nervousness and

dizziness to skin rashes and abdominal pain, including difficulty sleeping, loss of appetite, headaches, nausea, digestive problems, psychotic episodes, and depression (Partnership 2008).

Some long-term side effect examples are: tremors and muscle twitching, convulsions, an irregular heartbeat, anxiety, hallucinations, paranoia, and, of course, possible overdose (Partnership 2008). Other possible effects of Ritalin include: social alienation, academic failure, antisocial behavior, legal problems, and possible substance abuse later in life (Petersen 2005).

A recent study conducted in Australia found that Ritalin may stunt growth in developing children who experience nausea as one of the side effects of the medication (A.M. 2006). The stunting of growth is due to the loss of appetite and/or nausea as well drug-induced disruptions of growth hormone production which afflicts the growth of the entire body and all its organs, including the brain (Breggin 2001). In a study of 97 boys, it was found that those who felt nauseous ended up being 2.6 inches shorter, on average, than the boys who didn't experience nausea as a side effect (A.M. 2006).

Ritalin not only has an effect on the patient prescribed the medication, but on the people around them as well. Parents are the ones who have to see their children experience the many side effects, all the while wondering whether or not 'calming their child's hyperactivity' was worth it in the end for their child's sake. Ritalin can also affect parents whose children aren't even on the medication. For example, there has been an increase in the number of emergency room visits associated with Ritalin abuse in children and young

teenagers. This goes to show that there are students who are giving or selling their Ritalin to fellow students who crush the tablets and snort the powder like cocaine (Breggin 2001), which in turn proves the addiction strength and abuse potential Ritalin has on an individual.

Death

Childhood hyperactivity diminishes and typically ends at the beginning of puberty. But in the 1990's, many behavior experts and doctors started recommending taking the stimulant treatment for a longer period of time, whether it be into adolescence or for life. Before the 1990's, treatment for more than 5 years was unusual; present day, children can be on the medication for 5 years minimum (Diller 2000).

There were a reported 186 deaths from the prescription Ritalin reported to the FDA MedWatch program between the years 1990 and 2000 (National 2001) and another 51 deaths between 2000 and 2006 in the United States alone (Boseley 2006). These deaths were reported from patients taking the medication over a long period of time (longer than 5 years). Many of these deaths were caused by cardiac arrest, secondary to blockage of coronary arteries, which supply blood to the heart. In turn, children taking Ritalin could potentially be at danger for heart attacks, enlarged hearts, or even sudden death. There have even been reports of brain hemorrhaging and swelling in the brain (Boseley 2006). Children don't typically have these changes in their blood

vessels, however they are found in adults doing damage to their body from chronically abusing stimulants (Diller 2000).

Conclusion and Further Research

There are still many questions regarding Ritalin use at such an early age. Such as whether or not there are any other side effects, whether the medication can be avoided all together, and if it's really worth it for the child/patient. More time, money and research can help answer these many questions that society has regarding the medication's use on children. Any future research on the topic can either help to put at ease worried parents, patients, etc. or reinforce the negative side effects and consequences that I have laid out.

I have presented many facts and figures as to why I believe a child should not be treated with Ritalin; however, there are always two sides to a story. There is much optimistic research and feedback regarding the positive effects the medication has on a child with ADHD. The positive benefits that Ritalin has on a child's behavior and learning capabilities are remarkable. Ritalin has been shown to enhance the functioning of the brain's reticular activating system, and to focus and filter out excess stimuli as well as improve short-term learning (Goldberg 2008: 282). Therefore, as long as Ritalin is taken properly by the prescribed patient, for a short period of time, it can have positive results on the child's academic learning and psychological behavior.

Nevertheless, I do believe that society is giving children this idea that their problems can be solved with a pill, when all it is doing is controlling their hyperactivity long enough for both the parents and teachers to handle them. I believe that all children are hyper and overly-active and that a parent should not try to punish or control that with medication. In a way, those are the defining characteristics of childhood, being both hyper and active. Ritalin blunts a child's spirits while subduing their behavior (Breggin 2001).

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