The Over-prescription of Ritalin for Suspected Cases of ADHD

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Résumé :

(traduction)

Le méthylphénidate (Ritalin), qui est le traitement le plus souvent prescrit pour l'hyperactivité avec déficit de l'attention (HDA), a été de plus en plus prescrit au cours des dix dernières années. Vu l'absence actuelle de fondements biologiques du diagnostic de HDA, les médecins posent leur diagnostic en fonction de symptômes comportementaux, comme l'hyperactivité du sujet et son incapacité à fixer son attention. Étant donné que n'importe qui peut faire preuve de ces comportements à un moment de sa vie, le risque qu'on diagnostique trop souvent cette maladie augmente, ce qui peut provoquer de trop nombreuses ordonnances de Ritalin. La documentation relative à la HDA indique que les critères utilisés pour diagnostiquer cette maladie ont beaucoup changé depuis qu'elle a été identifiée pour la première fois, si bien que les experts ont des opinions diverses en ce qui concerne les facteurs pouvant être considérés comme des symptômes de ces troubles. De plus, de récentes recherches ont démontré que le Ritalin pouvait améliorer les facultés cognitives des gens bien portants tout autant que des sujets atteints de HDA. Les données indiquent que des gens sains cherchant à améliorer leurs facultés cognitives risquent d'abuser du Ritalin, et, d'ailleurs, on a signalé que des étudiants l'utilisaient pour améliorer leur rendement scolaire. De plus, la sur-prescription de Ritalin pose plusieurs questions éthiques. Les enfants étant le groupe pour lequel le HDA est le plus susceptible d'être diagnostiqué, les critiques se demandent s'il est approprié de prescrire un médicament pour une maladie à diagnostic comportemental qui, selon eux, risque de nuire à l'originalité et à la créativité des enfants, et donc d'entraver leur développement personnel. Même si d'autres thérapies comportementales existent pour cette maladie, elles ont tendance à être plus onéreuses et plus longues que la simple prescription d'un médicament, ce qui peut expliquer pourquoi le Ritalin demeure le traitement le plus fréquent. L'auteur conclut qu'il faut être prudent lorsqu'on prescrit des médicaments pour la HDA, et qu'il faudrait consacrer davantage de temps et de ressources à l'élaboration de critères de diagnostic plus cohérents, ainsi que d'autres traitements potentiels que les médicaments pour cette maladie.

Mots-clés : Méthylphénidate, Ritalin, sur-ordonnancement, HDA

Abstract:

Methylphenidate (Ritalin), the current leading form of treatment for Attention Deficit Hyperactivity Disorder (ADHD), has seen a dramatic increase in prescription rate over the past ten years. No contemporary biological basis for ADHD diagnosis results in physicians making their diagnoses based on behavioural symptoms such as hyperactivity and inability to focus. Considering that these symptoms are behaviours that anyone may express at one point in their life, the risk of over-diagnosis of the disease increases. This may subsequently lead to over-prescription of Ritalin. This paper aims to evaluate and identify the causes and effects of Ritalin over-prescription. Key literature on ADHD reveals that the diagnostic criteria for ADHD has undergone various modifications since the disease was first identified; therefore, different experts may have different opinions on what are regarded as symptoms of the disorder. Furthermore, recent research has demonstrated that Ritalin can increase cognitive performance in both healthy individuals and in ADHD patients. Such data indicates that Ritalin has the potential to be abused by healthy individuals looking to increase their cognitive performance. Correspondingly, Ritalin has been reported to be used by college students to boost their academic performance. In addition, the over-prescription of Ritalin raises several ethical issues: as children are the most common age group to be diagnosed with the disease, critics question whether prescribing a drug for a behaviourally based diagnosed disease is appropriate; also it is thought that the drug may affect the originality and creativity of the children which may hinder their personal development. While alternative behavioural therapy is available for the disorder, it tends to be more expensive and time-consuming than a drug prescription; this may explain why Ritalin remains the dominant form of treatment. This paper concludes that the prescription of drugs for ADHD should be cautioned and that more time and resources should be invested on developing consistent diagnostic criteria as well as potential alternative treatments to drugs for the disorder.

Keywords:

Methylphenidate, Ritalin, over-prescription, ADHD

Introduction

The prescription of drugs for a socially determined illness is readily seen in the case of Methylphenidate (Ritalin) and Attention Deficit Hyperactivity Disorder (ADHD). "A review of prescription data for 300,000 children ages 19 and younger concluded that, for the first time in history, spending for medications for childhood behaviour problems eclipsed expenditure on any other child drug category, including antibiotics" (Sparks & Duncan, 2008, p. 2). Evidence like this raises concerns over the possibility of Ritalin over-prescription for ADHD, especially in children as the disorder is mainly seen in childhood. Controversies such as the unclear and changing definition of the disorder, the subjective and behavioural basis of diagnosis contrasted with a biological basis to treatment, the potential for abuse due to the positive effects of the drug, and possible ethical breaches such as restricting childhood liberty are related to the over-prescription of Ritalin.

Diagnosis and Treatment

ADHD was first clinically defined by William Still in 1902, with inattention and hyperactivity being the major symptoms of the disorder (Brimble, 2009). Despite attempts to increase the objectivity of diagnosis with biological measures, such as neuropsychiatric tests and laboratory measures (Volkmar, 2003), ADHD rests mainly as a clinical diagnosis through identifying behavioural symptoms of the patients. This suggests that the clinical (Volkmar, 2003) diagnosis of ADHD is primarily subjective and less certain than those of other more rigidly defined diseases such as osteoporosis and cancer. Conflicting medical expert's views and ideas regarding ADHD (Brimble, 2009) may contribute to why different versions of the 'clinical checklist' of behavioural symptoms have come out since the disorder was first described. Furthermore, diagnosis of ADHD is especially difficult in children as symptoms of ADHD are based on judgments of behaviour relative to other children and many behavioural symptoms of ADHD can be seen as normal behaviour for children (i.e., it is normal for some children to be hyperactive) (Mick, Faraone, & Biederman, 2004). These factors demonstrate the subjective nature of diagnosing ADHD which makes it difficult for the medical society to create a strict definition for the disorder.

Drug prescription, notably Ritalin, is increasing as the main form of treatment for ADHD (Dopheide, 2009). Considering that drug treatment has been shown to be successful and cost-effective in behaviour problem children since 1937 (Dopheide, 2009), it is reasonable that diagnosis of the disorder leads to the prescription of Ritalin in many cases. However, the definition of ADHD is still subjected to debate, and it has been observed that diagnosis of the disease is increasing as the diagnostic criteria changes (Brimble, 2009). This can lead to the over-diagnosis of the disorder, which can in turn result in over-prescription of the drug treatments such as Ritalin. While there is little proof available that supports ADHD being over or misdiagnosed and Ritalin being over-prescribed (Brimble, 2009), such evidence can be counteracted as symptoms are still ever-changing and diagnosis is still difficult (Brimble, 2009). It is potentially less favourable to prescribe drug treatments that act on an uncertain biological mechanism when the diagnosis is typically behaviourally rooted.

Potential for Abuse

While there is continuous debate about how ADHD should be defined and diagnosed, it has been shown that Ritalin can indeed help people diagnosed with ADHD by enhancing their cognitive ability. A recent study has indicated that children with ADHD who take Ritalin have shown significant improvement in focusing and paying attention to their surroundings (Jahromi et al., 2009). The drug is able to counter the inattention symptom of the disorder; it is also capable of improving patients' self-regulation ability (Jahromi et al., 2009), which helps to control impulsiveness caused by the disorder. Furthermore, Ritalin is known as one of the least risky treatments for ADHD in terms of side effects, with the most common side effect being mild moodiness, dry mouth, and appetite suppression (Flaskerud, 2010). These factors all contribute to Ritalin being the most sought-after treatment for ADHD.

Problems emerge when recent studies demonstrated that Ritalin's effect on cognitive performance is not exclusive to people with ADHD; it also has positive effects on normal individuals (Agay, Yechiam, Carmel, & Levkovitz, 2010). According to these studies, normal individuals who take Ritalin have been shown to perform better in some of the cognitive tests than those who do not use the drug (Agay et al., 2010). Since the drug can have positive effects on both ADHD patients and normal individuals, it may propagate misdiagnoses of the disorder. Albeit as previously stated, the diagnosis of ADHD is predominately behaviourally

based and there are limited biological methods to validate that the diagnosis is correct. For example, assume that a child is suspected of having ADHD and Ritalin is prescribed as the treatment. The improvement in cognitive ability of the child upon treatment does not necessarily confirm the correctness of the diagnosis. This is largely due to the cognitive enhancing properties of the drug which may further reinforce parents' and doctor's misconceptions that the child has ADHD. The doctor may continue to prescribe Ritalin based on the observation that the treatment has a positive effect on the patients, thereby contributing to the over-prescription of Ritalin.

As a stimulant, Ritalin is capable of activating neurons in the brain which are responsible for working memory and visual attention (Tomasi et al., 2010). With such findings, Ritalin may not only be perceived as a treatment for ADHD patients, it may also be considered as a 'smart drug' for individuals who want to improve their performance in school or at work. According to the 2002 Student Drugs Survey in the Atlantic Provinces of Canada, use of Ritalin for medical purposes was reported to be at 2.2%, while non-medical use was reported to be at 6.6% among the student population in the study (Poulin, 2007). Some of the most common reasons for student use of Ritalin include boosting memory, improving focus, and attraction to other desirable stimulant effects (Flaskerud, 2010). This phenomenon can be explained in a sociological perspective. According to Outram (2009), Ritalin is constantly associated with enhancement in cognitive performance; the assumption that Ritalin will help to achieve success in competitive environments such as school and work is a strong motivator for the use of the drug. In societies where academic performance can play a big part in future success, drugs that are perceived as 'brain-boosting pills' may be embraced by students or parents who want to gain an edge. Such benefits of the drug can increase the probability of the drug being used for non-medical purposes and further exacerbate over-prescription of the drug.

Ethical Concerns

Despite tremendous amounts of debates over the definition of ADHD and the efficacy of Ritalin on both ADHD patients and normal individuals, medical treatment for ADHD seems to be the preference in North America. This may be in part because it conforms to the Libertarian values of promoting biological intervention for the good of society (Sadler, Jotterand, Lee, & Inrig, 2009). Considering Libertarian values such as free market and minimum government interventions to promote economic growth, the medicalization of ADHD may be favourable as it opens up possibilities for investment in pharmaceuticals that treat the disorder while maintaining minimum government intervention and support from taxpayers. For example, if ADHD diagnosed individuals were seen as having special needs, similar to individuals diagnosed with autism, then the government would be required to accommodate these individual's specific needs in school. However, when ADHD is viewed as a disorder that can be controlled via Ritalin, the government is able to maintain minimum involvement, therefore increasing economic gain via the pharmaceutical industry while reducing taxpayers' economic loss (Clarke, 2008). Regardless of the economic benefits for society to medicalize ADHD and to allow pharmaceutical industries to intervene, it can be argued that it is unethical to jeopardize the quality and types of treatment available to ADHD patients for the benefits of the economy.

The treatment of a socially determined illness such as ADHD via a biological approach raises ethical concerns over the liberty of children. Singh (2007) defines the liberty of children as "including personal authenticity, autonomy, the right to self-creation, and the rights of parents to shape the capacities of their children" (p. 168). This restriction of children's liberty is shown in that parents are frequently deciding when or if the drugs should be taken as opposed to the child. Furthermore, Singh (2005) concluded that there is a difference between the mother's and father's views on Ritalin administration for ADHD. She argues that mothers see Ritalin as helpful to appease their own "struggle to satisfy cultural ideas of successful boys" (p. 43) while fathers see Ritalin dosing dilemmas as related to gender norms and masculine behaviour. For example, a boy who is otherwise unfocused and overactive may perform better in sports when taking Ritalin. Often, good performance in sports is considered a defining characteristic of masculinity and may influence dosing by parents. Therefore, decisions to diagnose children can be said to be heavily loaded with social, cultural, and contextual meanings. Moreover, Ritalin poses other ethical concerns as it can have an impact on children's cognition which can limit their future success by 'dulling' their creativity (Singh, 2005).

Behavioural therapy, including techniques such as positive reinforcement and improving social skills, has not been

used as often as it possibly should have been likely because it is more expensive and more difficult to access than drug treatments (Brimble, 2009). Resistance to the suggestion of behavioural therapy will likely arise as medical treatment of ADHD has been shown to be successful, easier to access, and cheaper than that of behavioural treatments (Brimble, 2009). Nonetheless, resistance to behavioural therapy should be re-evaluated in considering that treatment of a behaviourally-based disease via a behavioural method would coincide (Brimble, 2009). Behavioural treatment would likely minimize ethical concerns by matching a social treatment with a social diagnosis and reducing the amount of drug prescription and use for a poorly defined disease. This would reduce overall rates of Ritalin prescription which has been associated with a restriction of childhood liberty and creativity.

Conclusion

After considering both the benefits and consequences of using Ritalin as a treatment for ADHD, it is clear that it should be approached with caution. Inconsistent checklists for symptoms create uncertainty surrounding diagnosis while positive effects of Ritalin exhibited on both normal and ADHD populations' leads to increased likelihood of abuse and over-prescription. In addition, Ritalin, most often prescribed to children, creates a special case concerning the liberty of children and treatment methods that do not match diagnosis criterion. Moreover, there are many ethical issues concerning Ritalin prescription. Ritalin can be shown to be over-prescribed considering the controversies surrounding the drug as well as the uncertain, behavioural, and subjective nature in diagnosis. To avoid over-prescription, prescription of Ritalin should be done with caution or other methods of treatment for ADHD should be primarily used until a more rigid definition of the disease is determined.

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