ADHD: Is It Over-Pathologized and Over-Diagnosed? Understanding Potential Reasons for the Over-Diagnosis of ADHD and How Different Theoretical Lenses May Explain ADHD and Its Rising Prevalence Rates

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Abstract

ADHD is a complex neuro-developmental disorder characterized by difficulty staying focused, decision-making processes, and general organization skills. In recent years, ADHD rates have been on a steady incline, raising fear that ADHD may be over-diagnosed or over-pathologized. The goal of this paper is to explore the potential reasons why ADHD prevalence rates are increasing, and come to a closer understanding of whether or not ADHD is over-diagnosed or not. Furthermore, we will discuss possible theoretical lenses and potential perspectives on the idea of ADHD being overdiagnosed, specifically psychoanalytic, socio-cultural, and evolutionary.

Keywords: ADHD, over-diagnosis, DSM, diagnostic criteria,

Attention Deficit Hyperactivity Disorder (or ADHD for short) is a psychological disorder characterized by displaying trouble staying focused and organized, thinking before acting, and making realistic plans (American Psychiatric Association, [APA], 2022). The Diagnostic Statistical Manual of Mental Disorders (DSM) classifies ADHD as a neurodevelopmental disorder that typically appears early in childhood and can impact the development of personal, social, and academic skills (American Psychiatric Association, [APA], 2022). For a diagnosis of ADHD, the DSM-V-TR requires a "persistent pattern of inattention, and/or hyperactivity-impulsivity that interferes with functioning or development," (American Psychiatric Association, [APA], 2022), and symptoms must persist for at least 6 months. Symptoms are typically broken down into two dimensions: inattention or hyperactivity and impulsivity. These symptoms can range from either end of the spectrum of hyperactivity and inattention. Some examples of inattention symptoms are "often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities", "Often does not seem to listen when spoken to directly", and "often has difficulty sustaining attention in tasks or play activities" (American Psychiatric Association, [APA], 2022). Some symptoms of "hyperactivity and impulsivity" are "often fidgets or taps hands or feet or squirms in their seat", "often runs about or climbs in situations where it is inappropriate", and "Often unable to play or engage in leisure activities" (American Psychiatric Association. [APA], 2022).

ADHD diagnoses have become relatively common in recent years and have been on a steady increase from its initial inclusion in the DSM throughout the years. For example, there was a 33% increase in ADHD diagnoses from 1997 to 2008

(Xu, 2018) and in the United States alone, 10.2% of adolescents are diagnosed with ADHD. Furthermore, the worldwide prevalence rate of ADHD, as of 2021, is ~5% (Beheshti et. al., 2021). There is also a general trend of ADHD being diagnosed more in males than in females. Population studies have found a male-to-female ratio of ADHD diagnoses as 3:1 (Barkley, 2006). Furthermore, clinical samples have found a 5:1 male-to-female ratio (Gershon, 2002). This continuous incline in ADHD cases raises an important question, why are ADHD diagnosis rates continuing to go up? Further, why is the ADHD diagnosis more common in males than in females? The contents of this literature review aim to uncover why ADHD is thought to be over-diagnosed, as well as gender differences and socioeconomic differences that impact the ADHD diagnosis, and possible theoretical lens' rationale as to why ADHD has increased in diagnosis.

Different psychological paradigms often have different ideas on how or why different disorders exist, and how to treat them. For example, Evolutionary Psychology sees most psychological disorders as a "mismatch" with our modern society, with the general idea that we have not cognitively evolved to deal with modern society (Geher, 2014). It is important to understand how different branches of psychology conceptualize ADHD and what causes it to get a better understanding of the disorder in general, while also potentially shining light on why or why not ADHD may be over diagnosed. Thus, the last section of this paper will go over how different theoretical lenses conceptualize ADHD, and how they may view the over diagnosis of it.

ADHD and the DSM

Before delving into why ADHD has become over-diagnosed and over-pathologized, we must ask, is ADHD over diagnosed at all? First and foremost, ADHD is one of the most diagnosed childhood psychological disorders (Barkley, 2005). According to prevalence rates cited by the DSM-V-TR, three to seven percent of school-age children will meet the diagnostic criteria for an ADHD diagnosis (American Psychiatric Association, [APA], 2022). As previously discussed, the worldwide prevalence rate, as of 2021, of ADHD is around 5%, thus falling in line with the DSM's estimates of prevalence rates. However, worldwide prevalence rates tend to vary, depending on the methodology used to collect said prevalence data (Sciutto, Eisenburg 2007). For example, when studies use random sampling and larger sample sizes, prevalence rates of ADHD tend to be within the three to seven percent prevalence rate, while studies using nonrandom samples, and or screening measures had prevalence rates significantly higher than the three to seven percent prevalence rate. Thus, it is implausible to conclude on whether ADHD is over-diagnosed through prevalence studies alone.

The next thing to look at is the frequency of false positives. Are more and more children being diagnosed with ADHD that should not be? While there is no direct source that states whether false positive rates significantly exceed the number of false-negatives, there is a plethora of research that documents different factors that could cause false-positives in ADHD diagnosis. Some of these factors include (but are not limited to) co-morbidity with other psychological disorders, diagnostic inaccuracy and bias among clinicians, changes in diagnostic criteria, and gender differences.

Seventy-five percent of children with an ADHD diagnosis also meet the criteria for another psychological diagnosis (Barkley, 2005). DSM diagnostic criteria for ADHD are relatively vague and thus has overlap with many other diagnostic criteria for other psychological disorders. For example, ADHD symptoms can often be confused with the symptoms of oppositional defiant disorder (Sciutto, Eisenberg 2007). One of the main features associated with ADHD is noncompliance, which can also fall in line with oppositional defiant disorder, so deciding between a diagnosis may be tricky considering the similarities between diagnostic criteria. For example, a child may ignore a teacher or authority figures, as well as not follow through on completing school or homework consistently, while taking toys from the other children without their permission, even though the other children do not like this, thus causing consistent fights between them. This could be seen as the DSM's criteria of ADHD as "Often does not seem to listen when spoken to directly", "often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace, and "Often interrupts or intrudes on others" (American Psychiatric Association, [APA], 2022), or, this could be seen as the DSM's criteria of oppositional defiant disorder as "often actively defies or refuses to comply with requests from authority figures or with rules" and "often deliberately annoys others".

An example of this can be found in a report from Carolee Malen, a therapist working at Saint Aemilian-Lakeside, a treatment center in Milwaukee, in the Milwaukee Journal Sentinel. Malen states her patient was a boy who would stare out of a window for hours during class and become aggravated or agitated during a popular lesson on cowboys (Kissinger, 1998). Due to his problems focusing in class as well as his agitation, he was initially diagnosed with ADHD, but symptoms persisted despite treatment. Later, it was revealed that the boy had been sexually assaulted by his mother's boyfriend as an infant, and the boyfriend had consistently worn cowboy boots, thus the sight of cowboy boots triggered agitation in the boy (Kissinger, 1998). Because of ADHD's relatively vague diagnostic criteria, this child was misdiagnosed with ADHD originally, rather than the more accurate diagnosis of post-traumatic stress syndrome. To further illustrate this point, a study was done by Joshua D. Tapia et. al. that aimed to understand ADHD's diagnostic accuracy better in community mental health centers, and the gender, racial,

and ethnic disparities that may exist. Results of the study showed that African American youth were often misdiagnosed with conduct disorder, rather than ADHD, which is what they had in reality (Tapia et. al., 2024).

Conduct disorder is another psychological disorder that has diagnostic criteria similar to the criteria of ADHD and is typically correlated with misdiagnosis between the two disorders. Diagnostic criteria for conduct disorder include things like "has stolen while confronting a victim", "Has been physically cruel to people", "often lies to obtain goods or favors to avoid obligations" and "the disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning" (American Psychiatric Association [APA], 2022). Depending on the context surrounding a child with ADHD, as well as the understanding of their parents and how they report said issues to a psychiatrist, ADHD symptoms may be confused for conduct disorder. For example, referring to the theoretical child mentioned previously, taking other children's toys and getting in fights may be seen as "has stolen while confronting a victim" or "has been physically cruel to people" (American Psychiatric Association, [APA], 2022), rather than "often interrupts and intrudes on others", and thus the child may be incorrectly diagnosed with conduct disorder rather than ADHD.

There is evidence that changes in the DSM's diagnostic criteria (specifically from DSM-III to the DSM-IV) could've led to an increase in ADHD diagnosis rates (Sciutto, Eisenburg, 2007). As in changes from the DSM-IV to the DSM-V, changes to the ADHD diagnosis were slim, adding examples to many of the pre-existing criteria rather than changing or adding new criteria. However, changes from the DSM-III-R to the DSM-IV were said to potentially cause an increase in ADHD diagnoses (Wolraich Et al., 1996). For example, a study done by Wolraich and his colleagues compared the diagnostic criteria for ADHD using a county-wide sample and found that DSM-IV criteria led to an increase in the number of children diagnosed with ADHD, when compared to the DDSM-III-R criteria. (Wolraich Et Al., 1996). The main cause of this may be the addition of subtypes to the DSM-IV, which was then carried over into the most recent, DSM-V-TR. That being said, it is impossible to determine whether this change in diagnostic criteria reasonably resulted in more false positives, as it could've also caused an increase in valid cases of ADHD that potentially may have been missed under previous criteria (Sciutto, Eisenburg, 2007). Nevertheless, it is a potential cause of ADHD over-diagnosis.

Clinicians Bias

One major theory for the overdiagnosis of ADHD is that therapists and clinicians do not entirely adhere to the DSM-V-TR's criteria, and instead, rely on their conceptualization of a stereotypical child with ADHD (Bruchmuller, 2012). It is possible that the representative heuristic plays a role in the decision of whether or not to diagnose a child with ADHD, and clinicians may base their judgements on principles of similarity in conjunction with the DSM-V-TR criteria (Bruchmuller, 2012). If this is true, it could also be a possible explanation for why males are diagnosed with ADHD more so than females. Girls with ADHD are typically seen as less likely to show problems in school and exhibit lower levels of disruptive behavior (Biederman Et Al., 2002), while male symptoms of ADHD tend to be more pronounced and obvious. Therefore, if clinicians are basing their diagnosis on a representative bias, it would make sense that males tend to be over-diagnosed while females tend to be under-diagnosed.

In a study done by Katrin Bruchmuller at the University of Basel, she tested this hypothesis by sending four hundred and seventy-three psychotherapists specializing in children case vignettes and asking them whether or not they would diagnose this case with ADHD. The vignettes were based on DSM-IV and ICD-10 criteria of ADHD, and included a vignette describing a young person with ADHD (ADHD fulfilled), a vignetted where the child did not have ADHD, as two diagnostic criteria were missing, a vignette where the child did not have ADHD, as three diagnostic criteria were missing, and a vignette with no ADHD, but was instead generalized anxiety disorder with ADHD symptom overlap. All four vignettes had a boy and girl version, where all the information was the same except for the gender of the patient. Results supported their hypothesis, 41% of responses to vignette two were false diagnoses of ADHD, 29% of responses to vignette two were false diagnoses of ADHD, and 31% of responses to vignette four were false ADHD diagnoses. Furthermore, in every false diagnosis vignette, boys were more likely to be falsely diagnosed with ADHD than girls. There were also overall significantly more false positive than false negative diagnoses in only the boy vignettes. The results of this study shed light on the fact that ADHD diagnoses may be influenced by internal representative heuristics rather than whether a child meets the DSM-V-TR or ICD-11 criteria for a diagnosis. It also further explains the difference in ADHD diagnoses between males and females. Since ADHD symptoms in boys tends to be more pronounced, they are more likely to be falsely identified with ADHD than girls, and since females' symptoms tend to be less pronounced, they tend to be underdiagnosed.

Another possible reason as to why ADHD is over-diagnosed is that therapists and clinicians may not consider all the diagnostic criteria as equal (Bruchmuller, 2012). Instead, they weigh diagnostic criteria in accordance with their own subjective beliefs or assumptions about ADHD (Bruchmuller, 2012). Research shows that clinicians are prone to diagnose a patient that shows more causal and obvious symptoms rather than less obvious or peripheral symptoms (Schmidt Et. Al., 2004). This

assumption ties back into the idea of gender differences among male and female ADHD diagnosis rates, as young boys tend to act in ways that could be seen as causal and obvious ADHD symptoms, leading to overdiagnosis, while young girls tend to show symptoms in a less obvious or peripheral way, thus leading to underdiagnosis. Proof of this phenomenon can be found in a study done by Norman B. Schmidt et. al., in which researchers aimed to examine the effect of DSM criteria on diagnostic decision-making of agoraphobia (Schmidt et. al., 2004). Researchers took psychologists and students in clinical psychology programs and asked them to report on one of three different vignettes developed to emphasize a specific criterion that was sufficient for a diagnosis of agoraphobia, avoidance of companions, or endurance of situations with distress. Results showed that, when presented with only one diagnostic criterion, participants were more likely to diagnose using the most common diagnostic criteria for diagnosing agoraphobia, that being avoidance (Schmidt et. al., 2004). In another study done by Nancy S. Kim, she theorized that despite the fact that the DSM is a set of "atheoretical guidelines" for diagnosing psychological disorders, clinicians will often impose their own set of theoretical rationale when diagnosing patients and will thus hold some diagnostic criteria to a higher standard than other (Kim, 2002). The study consisted of three major experiments, all with different tasks throughout to test whether clinicians had a bias towards causal theoretical diagnostic criteria or more peripheral less-causal criteria. Results of the study showed that patients who appeared to have more casually central symptoms had a higher chance of being diagnosed, were also seen to be more "typical" of those with the target disorder and were seen as more important in the participants idea of said disorder (Kim, 2002). While there are no specific studies done in this nature that have to do with ADHD diagnostic criteria, results from multiple studies centering around other psychological disorders show that clinicians do have some kind of bias toward more "causal" symptoms, and hone in on specific diagnostic criteria even though the DSM is written without theory or causal nature in mind. This bias towards casual diagnostic criteria could then lead to an overdiagnosis, and misdiagnosis of children acting more "in-line" with more causal symptoms of ADHD, even if they do not meet the diagnostic criteria listed within the DSM.

While clinicians may be biased internally, bias can also come from external sources. Typically, children are referred to psychiatrists or therapists by their parents because their parents express some kind of presenting issue with the child. Parent reports of children, as well as if parents exacerbate symptoms, may cause bias in the clinicians' decision-making when it comes to diagnosing a child. This is especially true when most clinicians do not spend a significant amount of time around a child during their home life and school life, when symptoms of ADHD may be more apparent, and instead must rely on reports from parents and teachers that may or may not be biased. For example, there are a plethora of studies that show the perception of a child can vary due to maternal or paternal psychopathology (Bruchmuller, 2012). Furthermore, other than parents giving biased reports, parents suffering from depression or other psychological disorders tend to have adverse effects on child behavior and emotions (Dave, Nazareth, Sherr, & Senior, 2005). Thus, children may show symptoms that may look like ADHD diagnostic criteria but, in reality, are a response to their parents' psychopathology rather than an underlying neuro-developmental disorder. Parents suffering from psychological disorders also tend to over-report or exacerbate complications with their children, and this phenomenon has been dubbed the "depression distortion bias" (Murray & Cooper, 1997). This phenomenon can be found in a study done by Sherya Dave et. Al., in which they aimed to estimate the relationship between paternal mood and infant temperament. The study consisted of 98 fathers, who were initially screened for depressed mood (using a hospital anxiety and depression scale, as well as the Edinburgh postnatal depression scale), and then, six months later, screened again for parental mood and infant temperament. Results of the study showed that there was a strong correlation between higher negative paternal mood reported and difficult infant temperament (Dave, Nazareth, Sherr, & Senior, 2005). Results of this study show that parents' mood-state and psychological well-being can have a significant impact on the emotional state of their children and cause them to, in turn, act out. Further evidence can be found in a meta-analysis on the impact of early maternal depression on infant attachment by Carla Martins, who found that "infants of depressed mothers were less likely to show secure attachment, and more likely to show avoidant or disorganized form of attachment than infants of control mothers" (Martins, 2000). These attachment styles can persist in young adulthood and manifest themselves in ways that could be seen as symptoms of ADHD, potentially causing a misdiagnosis.

Socioeconomic status and race also play an important factor in whether someone will be misdiagnosed with ADHD or not. The general trend for an ADHD diagnosis in terms of racial disparities tends to be an overdiagnosis in white children, and an underdiagnosis in black and Latinx children, even if presenting with similar symptoms (Tam. Taechameekietichai & Allen, 2024). This trend is even more pronounced in the United States in comparison with other countries (E.g., Brazil) (Tam, Taechameektietichai, & Allen, 2024). One potential explanation for this is that much of the early psychological research that serves as the basis for many psychological disorders, ADHD included, was primarily done on white children. Therefore, diagnostic criteria may miss how children from minority groups express ADHD. Further illustrating this point, is how Tapia Et. Al. found evidence for African American adolescents commonly being misdiagnosed with conduct disorder, when they instead had ADHD (Tapia et. Al.,). This could be caused by DSM diagnostic criteria not having enough culturally based

criterion which accounts for different ethnicities reacting to psychological disorders differently. Another potential cause for this discrepancy is that mental health clinicians unfortunately possess unconscious biases that cause them to believe that disruptive behavior is attributed to a conduct disorder, rather than ADHD (Fadus, 2019). This may not be to the fault of the clinician being outwardly racist and intending to cause harm with their diagnoses; rather, many biases are unconscious that are shaped by past experiences and constant and repeated exposure and are thus not actively noticed by the individual experiencing them (Greenwald, 1995). This goes both ways when it comes to the diagnosis of ADHD in children, as white male children are unconsciously seen to be more prone to an ADHD diagnosis, while minority children (as well as white females) are less likely to be seen as prone to an ADHD diagnosis in modern media.

One of the main arguments against the idea that ADHD is over-diagnosed is that prevalence rates are in line with what the DSM states they should be. But as previously discussed, prevalence rates can't paint a full picture of whether or not ADHD is over diagnosed or not. Furthermore, an incorrect diagnosis of ADHD can only be found through a psychiatric assessment of the patients record and rigorous interviews with the patient post-diagnosis. The reality of most ADHD diagnoses is that once they are diagnosed, they are medicated and sent on their way. If symptoms do not continue or worsen, many people will stick with an ADHD diagnosis even if they were falsely diagnosed. Therefore, prevalence rates are not an accurate measure of proving ADHD is not over diagnosed. Another argument against ADHD being over diagnosed is that females, and minority groups tend to be underdiagnosed, therefore it is impossible for ADHD to be over-diagnosed. While this may be true, under-diagnosis and over-diagnosis is a two-way street. The reason why many minority groups may be underdiagnosed in minority groups is because white male children are so overrepresented in ADHD diagnoses. Thus, as previously discussed, clinicians may have an underlying bias that white boys may be more prone to an ADHD diagnosis than a minority male or female suffering from similar symptoms. This bias may also appear in parents when they bring their child to clinicians. Parents may over-report or under-report as a function of internal bias, incorrectly believing that male white children are more prone to ADHD than minority children, incorrectly relaying to the clinician how the child may act. Furthermore, psychological care and access to said care may act as a barrier to identification and treatment (Sciutto, 2008). More than fifty percent of children with mental health needs do not actually receive the treatment or diagnosis they should (Kataoka, Zhang, & Wells, 2002). The groups that typically suffer from this barrier to entry are typically people from a minority population. Therefore, minority groups underrepresentation in ADHD diagnoses may not be a function of vague diagnostic criteria or internal clinician bias, but rather due to a lack of access to the resources needed to get an ADHD diagnosis.

Possible Explanations Through Theoretical Lenses

Evolutionary Psychology

Evolutionary Psychology states that ADHD had a previous psychological benefit to our early ancestors, but because modern society does not line up with the environment we evolved in, ADHD now causes adverse effects as it is no longer adaptive (Arildskov, 2021). For example, hyperactive traits may be adaptive in the context of early humans' nomadic lifestyle may have proved adaptive as they allowed early humans to rapidly adapt to resource-depleted environments, as well as spot new opportunities and engage in effective foraging behaviors (Arildskov, 2021). Impulsivity can also be seen as a quicker fight or flight reaction, allowing for quick decision making in time-critical situations (E.g., a predator closing in) (Arildskov, 2021). Furthermore, Inattention could be seen as hypervigilant behavior, which is likely to be adaptive in novel environments as a more efficient and effective way to monitor threats or possible oncoming danger (Arildskov, 2021). Evolutionary psychology also posits that people with ADHD are "hyper curious", which can be defined as a heightened and impulsive desire to seek knowledge (Le Cunff, 2024). In line with other beliefs about ADHD traits, evolutionary psychologists believe that hyper curiosity is adaptive in environments that are characterized by scarce resources and a general unpredictability (Le Cunff, 2024). Evolutionary lenses see ADHD as a formerly adaptive condition that helped in the survival of ancient humans and was thus selected through natural selection to survive and be passed down from generation to generation. In modern society though, ADHD is seen as a product of evolutionary mismatch. Evolutionary mismatch is the idea that the environment that a species currently exists within, is different from its original environment of evolutionary adaptiveness (The environment in which they originally evolved in), so much so that a previously advantageous trait becomes maladaptive. Thus, ADHD's maladaptive psychological processes are due to a mismatch between our evolutionary environment of adaptedness and our modernized world. Evolutionary Psychologists also claim that mismatch theory could be the potential cause of ADHD diagnosis increases. One cause of this is how our school systems could be evolutionary mismatch. In our Environment of Evolutionary Adaptedness (E.E.A), children typically learned from those who were a generation older than them, from other children, rather than from an adult. Furthermore, learning didn't happen in a classroom, rather it was intertwined with work and play, and happened throughout the day rather than in a strict schedule (Geher, 2014).Our modern schooling system of children being in a structured

classroom all day learning from one adult could be seen as an evolutionary mismatch and thus could be the cause of rising rates of over-pathologizing normal responses to a mismatched environment (Geher, 2014)Young boys that are displaying ADHD diagnostic criteria may not be suffering from an underlying neurodevelopmental disorder, it is instead a result of our modern society betraying the environment we had originally evolved in, thus causing ADHD-esque symptoms.

Psychoanalysis

Psychoanalytic theory focuses their explanations on ADHD on disturbances in early childhood (Peter, 2021). Practitioners of the psychoanalytic theory believe that the causes of ADHD appear in early interactions between a parent and a child, where disturbing events between the two could potentially cause damage to the ego, which in turn hinders the development of self-regulation, self-observation, self-reflection, and morality. (Peter, 2021). In psychoanalysis, the mind is broken down into three distinct elements known as the id, the ego, and the superego. The id is the most basic part and is instinctual in nature and contains sexual and aggressive drives, as well as repressed or hidden memories. The super-ego contains internalized morals and ideals that children acquire from their parents and the general society surrounding them. The ego is the mediator between the Id's instinct-driven impulses, with real-world constraints found within the superego. Thus, ADHD is caused by an imbalance within the mediation of the ego with the Id, resulting in more struggles repressing that impulsive instinctual behavior. Thus, symptoms of ADHD are not caused specifically and only by biological undertones; rather, they are limitations in self-regulation that are caused by neglectful early parent or caregiver interactions that impede the ego (Peter, 2021). However, newer psychoanalytic approaches also highlight the underlying biological connections as well, specifically in attachment and how emotional exchanges develop the experience-dependent parts of the human brain (Peter, 2021). Thus, modern psychoanalytic approaches focus on how early parent-child interactions can influence the development of different psychological disorders, specifically when it comes to ADHD, how poor early interactions can impair the ego, as well as impede development in certain areas of the brain, which hinder how self-regulation, self-observation, and morality develop in the brain. As for the increasing rates of ADHD, clinicians, and psychologists following the psychoanalytic lens may see it as a decline in positive caregiver-child interactions and an increase in poor interactions. Psychoanalysts may not see it as an over-diagnosis issue, but rather an issue within society and trends in caregiver interactions with their child producing more negative early interactions, causing more and more children to have difficulties developing their ego, resulting in more ADHD diagnoses.

Socio-cultural theory

Socio-cultural perspectives focus on how different cultural and social facts can influence psychopathology and psychological functioning. When it comes to ADHD, they acknowledge the fact that it may stem from a biological root, but how symptoms are presented and dealt with change depending on the culture and societal factors surrounding a person. Thus, when it comes to understanding rising ADHD rates and under or overdiagnosis, sociocultural theorists may theorize that it may be due to a shift in society's view on ADHD symptoms, and that things that may not have been seen as reasonable for an ADHD diagnosis now are. A Social Justice perspective may view ADHD-like symptoms as a product of social inequalities and unfairness. For example, an African child acting out in class may not be a product of a "sickness" or underlying developmental issues; rather, it is a response to injustice and racism within the world. A multicultural perspective may see overdiagnosis as a shift in cultural values, beliefs, and practices. Multicultural perspectives believe that psychopathology may only be seen within the context of culturally embedded views and practices; thus, raising rates of ADHD has to do with a shift in cultural beliefs about what ADHD looks like.

Implications

If ADHD is truly being over diagnosed, there could be disastrous consequences. People diagnosed with ADHD are typically prescribed some kind of stimulant (Whether it be Adderall or Ritalin), and while those are helpful for those with ADHD, prescribing them to someone who doesn't need them makes them prone to suffering the side effects without any of the benefit. For example, some side effects of Ritalin could include heart problems (Such as increased heart rate or heart palpitations), an increase in blood pressure, headache's, insomnia, et. Cetera. Stimulants prescribed for ADHD can also be addictive, thus if people with an incorrect ADHD diagnosis get prescribed for them, it could lead to a lifelong battle against addiction to a drug they're not receiving the benefits of. It could also lead to diagnostic changes in the DSM. Previously we discussed how ADHD could be misinterpreted for other disorders (E.g., conduct disorder) because of the DSM's vague criteria for diagnosis. So, if there is a over diagnosis epidemic, this may cause the American Psychiatric Association to make changes to make ADHD diagnostic criteria more specific and less generalizable, to try and avoid false positives. Further, it could shed light on potential clinician bias, and institutions may implement more trainings to help clinicians understand their cognitive biases and how to address them, that way they do not rely on their own interpretation of what ADHD should look like, rather on what the diagnostic criteria is and whether or not their patients truly do have ADHD. Overall, if someone were to find solid evidence

that ADHD is truly over diagnosed, it could lead to worldwide reform on ADHD criteria, and cause clinicians to take more care when diagnosing patients with ADHD.

Conclusion

Even though ADHD rates are on a consistent rise, it is impossible to definitively say whether it is over-diagnosed, however, there is strong evidence for it. DSM diagnostic criteria are relatively vague in nature, which leads to potential false negatives in ADHD diagnosis. A child may be exhibiting signs of ADHD, but since diagnostic criteria are relatively vague, there may or may not be any underlying psychological conditions whatsoever. Furthermore, ADHD diagnostic criteria are incredibly similar to diagnostic criteria of other disorders, namely conduct disorder or operational defiant disorder, which may lead to ADHD being diagnosed when it should've been something else, or vice versa. There is also a plethora of subjective bias that goes into an ADHD diagnosis. There's evidence that shows clinicians do not entirely adhere to the DSM's guidelines for an ADHD diagnosis and instead rely on stereotypical beliefs of how ADHD should look (Bruchmiller, 2012). Furthermore, clinicians may not weigh all diagnostic criteria equally, resulting in clinicians focusing on more "causal" symptoms rather than peripheral, resulting in a potential over-pathologization of typical young male activities and a false positive ADHD diagnosis. Bias can also come from external sources, as most ADHD diagnoses stem from parents approaching clinicians with a presenting problem, which eventually may end up as an ADHD diagnosis. Parents can be biased in their reporting of symptoms to clinicians, either exaggerating or underplaying symptoms. Parent psychopathology may also play a role in the diagnosis of ADHD, as studies have shown parents' suffering from depression or other psychological disorders may directly impact a child's emotional state (Dave, Nazareth, Sherr, & Senior, 2005). ADHD-like symptoms may be a result of a child acting out because of their parent's emotional state, rather than because of an underlying psychological disorder. Race, gender, and socioeconomic status also play a role in whether a child gets diagnosed with ADHD. White male children tend to be over-diagnosed in ADHD samples, while Latinx, African American, and female minority groups tend to be underrepresented in ADHD samples (Tam. Taechameekietichai, & Allen, 2024). Overall, there are a plethora of reasons as to why a child may be falsely diagnosed with ADHD, and as ADHD diagnosis rates continuously increase, these problems become more and more pronounced.

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