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THE INCREASE OF BIPOLAR DISORDER IN CHILDREN AND
ADOLESCENTS

A project based upon an independent investigation, submitted in
partial fulfillment of the requirement for the degree of
Bachelor of Arts in Social Work.

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ABSTRACT

This cluster study investigates the different possibilities that may have caused an increase in the diagnosis of Bipolar Disorder in children and adolescents, including comparison to diagnosis in other countries. The same criteria for diagnosis of Bipolar Disorder for adults are used for children and adolescents, which may be misdiagnosed due to other disorders having the same characteristics, such as Attention Deficit Hyperactivity Disorder (ADHD). In the cluster study, current and past students' files at an alternative school were analyzed to determine whether the diagnosis had increased within the setting. Main findings were that Bipolar Disorder did increase over the course of the past nine years that the school has been open. From 1999-2004 there were four students who had been diagnosis with Bipolar Disorder and from 2005-2008 there had been 12 students. The data was statistically significant with $p < .05$ ($p = .034$). There has also been a steady increase in the prescribing of medications for all disorders within the study. From 1999-2004 there were 36 students on medication and 23 who were not and from 2005- 2008 there were 49 students on medication and 12 who were not. The data was statistically significant with $p < .05$ (.016). In the explanation of the increase in the diagnosis over the past decade, the results were inconclusive. While some signs point to the pharmaceutical companies there was no direct correlation between the two and the different editions of the DSM proved also to be inconclusive.

I. INTRODUCTION

A. Problem Formulation

- 1) Bipolar Disorder is defined as a mood disorder that is characterized by episodes of manic and depressive states that occur in a cycle.
- 2) Diagnosis of Bipolar Disorder has significantly increased over the past 10 years. The researchers calculated the number of visits in which doctors recorded diagnoses of bipolar disorder and found that they increased, from 20,000 in 1994 to 800,000 in 2003, about 1 percent of the population under age 20.
- 3) More and more children ages 5- 16 are being diagnosed with Bipolar Disorder but are still given the same treatments and medications that adults receive who are 18-40.
- 4) There has been very little research on the different treatment options for children and whether the treatment regimen used currently is helping or hurting adolescents and children.

B. Problem Justification

- 1) The very little research being done on the diagnosis and treatment of children's Bipolar Disorder needs to be more adequate and plentiful to help aid children.
- 2) The significant increase in the diagnosis of Bipolar Disorder in children and adolescents over the past decade.
- 3) Children put on adult medication and adult dosages of medication may not be safe for the developing child.
- 4) The increase in the diagnosis of children with bipolar disorder and the fact that there is a possibility of medication and other treatments being ineffective and even dangerous to their growth.

II. MAIN POINTS

A. Criteria for diagnosing a child or adolescent with Bipolar Disorder

- 1.) Obstacles in identifying and diagnosing this disorder in children and adolescents include the low base rate of the disorder, the diversity in clinical presentation within and across episodes, the symptomatic overlap of mania with other disorders commonly found in childhood, such as attention-deficit hyperactivity disorder (ADHD), and the constraints placed upon symptom expression due to the developmental stage of the child (Cogan, p1.)

- 2.) Diagnosis may be more challenging in children because the symptoms are related to behaviors that may occur when a child is growing up.
- 3.) When manic, children and adolescents, in contrast to adults, are more likely to be irritable and prone to destructive outbursts than to be elated or euphoric.
- 4.) In children when depressed, there may be many physical complaints such as headaches, muscle aches, stomachaches or tiredness, frequent absences from school or poor performance in school, talk of or efforts to run away from home, irritability, complaining, unexplained crying, social isolation, poor communication, and extreme sensitivity to rejection or failure.
- 5.) The DSM IV criteria is based on adult behaviors and diagnosis which differ from children's behaviors.

C. Treatment options for children and adolescents

- 1.) Drugs for an episode of mania
- 2.) Antidepressants
- 3.) Psychological treatments
- 4.) Long term treatment to stabilize mood and prevent episodes.
- 5.) Mood-stabilizers, either lithium, carbamazepine, or divalproex / valproic acid.
- 6.) Once the diagnosis of bipolar disorder is made, the treatment of children and adolescents is based mainly on experience with adults, since as yet there is very limited data on the efficacy and safety of mood stabilizing medications in youth.
- 7.) Research on the effectiveness and safety of these and other medications in children and adolescents with bipolar disorder is ongoing but has yet to be concluded.
- 8.) Studies are investigating various forms of psychotherapy, including cognitive-behavioral therapy, to complement medication treatment for this illness in young people.

D. Need more research and studies on Bipolar disorder in children

- 1.) With the rise of diagnosis of Bipolar Disorder in children there needs to be more research done to ensure proper diagnosis and treatment.
- 2.) Several organizations are attempting to do safe and affective research on children and adolescents to ensure correct diagnosis in the future.

- 3.) Given the same treatment as adults and may not necessarily be correcting the problem in children.
- E. Diagnosis of Bipolar Disorder in children in other countries
- 1.) The number of diagnosis in other countries, specifically European, of children with bipolar disorder.
 - 2.) The types of treatment they use for children and adolescents, if it correlates with the same treatment in the United States.
 - 3.) The countries views on the increasing number of diagnosis in children in adolescents in the United States and throughout the world.

III. OPPOSING POINTS

- F. Over diagnosis of Bipolar Disorder.
- 1) Thousands more people are being diagnosed with the disorder and this is a significant raise just over the past 5 years.
 - 2) Errors may occur when applying the DSM IV too strictly or too loosely.
 - 3) Many of the symptoms that are congruent with Bipolar Disorder may be in fact part of another disorder.
- G. Misdiagnosis of Bipolar Disorder
- 1) Many of the symptoms of Bipolar may be “normal” in a teenager or adolescent’s younger years.
 - 2) ADHD, schizophrenia, and other conduct disorders have some of the same qualities and are seen in many instances especially in children.
 - 3) The diagnosis of bipolar disorder in youth is often quite difficult, because the symptoms typically do not follow the symptoms and course of adult bipolar disorder, which is the definition that they use in DSM IV.
 - 4) Major contributors to misdiagnosis include incomplete history and lack of patient insight as well as presence of psychiatric comorbidity, such as anxiety or substance use disorders.
 - 5) Along with misdiagnosing people with Bipolar Disorder, A number of studies also suggest that patients with bipolar disorder are frequently misdiagnosed with other disorders (Perlis).
- H. Consequences of misdiagnosis of Bipolar Disorder
- 1.) Surveys suggest that patients with bipolar disorder are often misdiagnosed on initial presentation, most often with major depressive disorder.

- 2.) These patients may receive ineffective treatment, which, in some cases, actually worsens outcome, either by inducing manic or mixed states or by increasing mood cycling (Perlis, 2005, 271).
- 3.) Insufficient medical treatment and more medical bills to be paid for by the client.
- 4.) Recurrent mood issues can affect patient's daily life and medication will not help solve this problem.

I. Reasons for misdiagnosis or over diagnosis

- 1.) Patients may provide poor or uneven history
- 2.) Patients in a depressive state may claim they always feel that way and have never had a better or more elated time in their life.
- 3.) Mildly elevated patients may fail to report important symptoms (such as racing thoughts or a decreased need for sleep).
- 4.) Patients may be afraid to be stigmatized or labeled.
- 5.) In some cases, patients may experience depressive episodes without a manic episode for 5 years or more thereafter for the first few years of their illness, they are therefore "misdiagnosed" with recurrent major depressive disorder.

J. Consequences of over diagnosis of Bipolar Disorder

- 1.) Risks include over exposure to a greater medication burden, in some cases requiring additional monitoring.
- 2.) Lesser likelihood of clinical improvement.
- 3.) Possible medical consequences, for example weight gain, diabetes, etc.

IV. HYPOTHESIS

What has caused the increase in Bipolar Disorder in children and adolescents?

V. METHODOLOGY

This part includes the:

- K. Sample: 135 students in sample. Convenience sample, files from school from 1999-present.
- L. Data Gathering: Examined files of students from past and present. Specifically looked at diagnosis and medications they are currently prescribed.
- M. Data Analysis: Researcher analyzed different independent (diagnosis) and dependent (medications).
- N. Findings: Seventeen students had bipolar diagnosis but more than 50% of students were prescribed medication commonly used to treat Bipolar Disorder.

VI. CONCLUSION

This part includes two parts:

- O. Reiterate increase in Bipolar Disorder diagnosis and how it is affecting children and adolescents.
- P. Social work profession needs to do more research on topic.

Preface

Bipolar Disorder, as described in the DSM-IV TR, is a mood disorder that is characterized by episodes of manic and depressive cycles of moods. Unfortunately, there has not been a lot of research of Bipolar Disorder in children and adolescents. Therefore, children are being diagnosed with Bipolar Disorder under the same criteria, as listed in the DSM-IV TR, as an adult would. The diagnosis of Bipolar Disorder in adolescents and children has increased over the past decade due to the possibility of over diagnosis and misdiagnosis. Children and adolescents may be diagnosed with Bipolar Disorder when they exhibit symptoms that are similar to “normal” teenage development, or similar to Attention Deficit Hyperactivity Disorder.

Introduction

Each year more children and adolescents are being diagnosed with Bipolar Disorder. The significant increase in diagnosis of children and adolescents with Bipolar Disorder has occurred within the past decade. “Between 1994 and 2003, the number of visits to a doctor's office that resulted in a diagnosis of bipolar disorder in children and adolescents has increased by 40 times , from 20,000 in 1994 to 800,000 in 2003, approximately 1 percent of the population under age 20 (National Institute of Mental Health, 2007)”. There are currently no forms of treatment specifically created for the population of children and adolescents aged seven to nineteen.

Bipolar Disorder is classified as a mood disorder that is characterized by the occurrence of one or more manic episodes or mixed episodes (DSM-IV, p.382). A manic episode is defined by a distinct period during which there is an abnormally and persistently elevated, expansive, or irritable mood (DSM-IV, p.357). Often individuals

have also had one or more major depressive episodes. Major depressive episodes consist of a period of at least two weeks during which there is either depressed mood or loss of interest or pleasure in nearly all activities (DSM-IV, p.382). A mixed episode is characterized by a period of time, lasting at least one week, in which both manic episodes and major depressive episodes are present.

The disorder was once thought to be rare—according to a 1997 estimate, occurring in only one out of 20,000 children (Carey, 2007, p.1). In 2007, it is believed that at least a third of the time, the symptoms of bipolar disorder appear first in childhood or adolescence (Harvard Mental Health, p. 1). The United States standard for clinical diagnoses of Bipolar disorder in children and youth may need further assessment for reliability and accuracy because the number of diagnoses has increased significantly over the past decade (Ofison, 2007, p. 5). Research on medication specifically for children with bipolar disorder remains lacking, demonstrating a need for more research on the treatment options (Chang & Shah, p.96).

Not only are more children and adolescents being diagnosed with the disorder, they are also prescribed adult dosages of medication used to treat the disorder in adults. Bipolar disorder in adults are treated with mood stabilizers such as carbamazepine, divalproex, and valproic acid, frequently several drugs in combination, and the same drugs are now increasingly prescribed for children (Harvard Mental Health, p. 3). The most common drug being used for treatment of the disorder in children is lithium and thus far, little is known about the side effects in children on this drug. Using adult treatment in therapeutic interventions and medication of children with Bipolar Disorder is the norm but it may be ineffective and possibly even dangerous.

Diagnosing psychiatric disorders in children and adolescents has always been difficult. There is a need to learn more about the long-term risks and benefits of drugs and drug combinations, especially their influence on emotional and social development (Smith, p. 6). Many of the symptoms of Bipolar Disorder may also be commonalities of growing up and going through adolescence such as mood swings or increased irritability and impulsivity.

In other countries outside the United States, primarily in Europe, they are rather skeptical about the increasing diagnosis of Bipolar Disorder in children and adolescents in the United States. The United Kingdom, Denmark, Germany, Spain, Sweden, Ireland, Italy and Holland focus more on adult Bipolar Disorder as opposed to the disorder in children. “A survey by the Depression and Bipolar Support Alliance (DBSA; previously the NMDA) of members in the United States found that up to 59% of members with BD had signs of the illness prior to the age of 20, the first episode in adolescence was generally depressive, and 13% had been hospitalized by age 20 (Soutullo et al, 2005, p. 497)”. In a survey across 12 national patient organizations in 12 European countries (Finland, Spain, Portugal, Austria, Italy, France, Sweden, UK, Hungary, Russia and the Netherlands), 33.1% patients with BD aged 18–83 reported an onset prior to age 20 (Soutullo et al., 2005, p.498). While many Europeans have reported symptoms of Bipolar Disorder during adolescence, little was done prior to the age of twenty.

This disorder affects hundreds of thousands of people in the United States alone and more children and adolescents are being diagnosed with the disorder each year. With such few studies done thus far on effective treatment for this growing population, it needs to be done in order to treat the patient sufficiently. Bipolar Disorder is a very serious

disorder and if diagnosed earlier in life, treatment options may fair better in the future but with the increase of diagnoses it makes the field of social work question whether these children actually have the disorder. There needs to be more studies on different treatment options for children due to insufficient results from the adult interventions that these adolescents and children are currently receiving.

Diagnosing Bipolar Disorder in Children and Adolescents

The diagnosis of Bipolar Disorder in children and adolescents can be challenging, several of the symptoms that are classified by the disorder may also just be a part of growing up. Diagnosis at a younger age may also help to treat the disorder and prevent it from becoming worse later in life therefore it is important to diagnose the disorder early. Manic episodes followed by a major depressive episode can look like mood swings in adolescents. The criterion used to diagnose Bipolar Disorder was originally used for adults and therefore the symptoms and behaviors in adults may be different than those in children. Obstacles in identifying and diagnosing this disorder in children and adolescents include the low base rate of the disorder, the diversity in clinical presentation within and across episodes, the symptomatic overlap of mania with other disorders commonly found in childhood, such as attention-deficit hyperactivity disorder (ADHD), and the constraints placed upon symptom expression due to the developmental stage of the child (Cogan, p.1).

Existing evidence indicates that Bipolar Disorder beginning in childhood or early adolescence may be a different, possibly more severe form of the disorder than older adolescent- and adult-onset Bipolar Disorder (National Institute of Mental Health, p. 2). There are distinct differences in the disorder between children and adults, when

diagnosing a child or adolescent with Bipolar Disorder this needs to be kept in mind. Children, especially young children, usually do not show the adult cycle of distinct mood swings including mania to depression lasting for several months, with intervals of normal mood in between (Harvard Mental Health, p.1). Children and some adolescents display a much greater percentage of mixed symptoms, expressing both depressive and manic behaviors at the same time or in rapidly fluctuating moods. For example, children may feel irritable and hopeless and yet exhibit increased recklessness and agitated thoughts and behavior at the same time (Schlozman, p. 89).

When manic, children and adolescents, in contrast to adults, are more likely to be irritable and prone to destructive outbursts than to be elated or euphoric. Children may also have more classic and unmistakable manic symptoms, which include racing thoughts, compulsive volubility, decreased need for sleep, unwanted sexual touching, and inappropriate giddiness (Harvard Mental Health, p .2). Mania may alternate with depressive states in which the child is listless, withdrawn, unable to enjoy life, and plagued by physical complaints and morbid thoughts (Smith, 2007, p.4).

Untreated, the consequences of major depression and Bipolar Disorder in children and adolescents can be devastating for both the child and for his or her family. While the most serious consequence of untreated depression may be suicide, there are other serious developmental, personal, and social consequences that may result. These consequences can affect relationships with family members, peers, school success, work productivity, and adult development. Clearly recognition, identification, and treatment of Bipolar Disorder in children and adolescents can have profound effects on the life course (Smith, p.4).

Children and adolescents who are in a depressive episode may display loss of interest in activities once enjoyed, significant change in appetite or body weight, difficulty sleeping or oversleeping, physical agitation or slowing, or loss of energy (National Institute of Mental Health, p.1). These physical complaints may consist of headaches, muscle aches, stomachaches or tiredness, frequent absences from school or poor performance in school, talk of or efforts to run away from home, irritability, complaining, unexplained crying, social isolation, poor communication, and extreme sensitivity to rejection or failure (Harvard Mental Health, p.3). Many children and adolescents complain of physical ailments and have several of these symptoms described in Bipolar Disorder, it is struggle to determine where to draw the line between psychotic disorder and normal development. There are other symptoms in children who are depressed that are harder to detect including many physical complaints.

Treatment of Bipolar Disorder

Treatment of Bipolar Disorder in children and adolescents is currently a topic of controversy. With the heavy increase of children being diagnosed with the disorder the question remains on what treatment options there are for children and whether the same medications approved for treating bipolar disorder in adults should be used in children and adolescents (McClellan, p.1462). Up until the past few years, treatment of the disorder has been targeted towards adults. The treatment of the disorder currently consists of psychological treatments, long term treatment to stabilize mood and prevent episodes, and mood-stabilizers, such as lithium, carbamazepine, or divalproex valproic acid.

Clinicians have used medications, such as lithium, tegretol, and depakote, with some success to help child sufferers with their mood fluctuations. Children using these medications, however, require frequent blood tests to monitor the medications' levels and their effects on such organs as the liver, kidneys, and bone marrow system (Schlozman, p.89). Clinicians may also prescribe antidepressants to combat the depressive episodes, although antidepressant treatment in the absence of a mood stabilizer may generate manic behavior in both children and adults with bipolar illness (Silva et al, p.440).

While there have been little or no studies on other medications, there has been one double-blind trial of lithium in adolescents. In general, open label trials show response rates of around 65% with lithium. Despite evidence of short term efficacy, maintenance treatment with lithium has been reported to result in relapse in 37.5% of adolescents (Silva et al., p.443). Common adverse effects to lithium in children are similar to those experienced by adults and include bodyweight gain, tiredness, tremor, ataxia, dystonia, polyuria, polydipsia, nausea and vomiting (Silva et al., p.444). Ataxia consists of loss of muscular coordination that may be related to dystonia which is abnormal tonicity of muscle characterized by prolonged, repetitive muscle contractions that may cause twisting or jerking movements of the body or a body part (Medical Dictionary). Polyuria is the excessive passage of urine and polydipsia consists of excessive thirst all the time (Medicine Dictionary). Thus far, lithium is considered the first line drug for Bipolar Disorder in children, since it has been the most rigorously studied agent.

Olanzapine is a new antipsychotic medication that is currently being tested because it is targeted towards children and adolescent Bipolar Disorder (McClellan, p. 1462). In the research done thus far the drug, it appears as though the medication helps

to lessen the mania episodes in adolescents and children. However, the safety data are concerning and raise questions as to whether Olanzapine should be used as a first-line agent in juveniles (McClellan, p. 1463). There has been a significant weight gain in patients who have used the medication in studies. In the long run, they are afraid that the child may become obese and have other ailments due to Olanzapine. Research on the effectiveness and safety of these and other medications in children and adolescents with bipolar disorder is ongoing but has yet to be concluded.

Current thinking about the relapse–remission course of bipolar disorder emphasizes a biopsychosocial model that incorporates the interactive roles of genetic vulnerability, biological predispositions, family or life events stress, and psychological vulnerability (Miklowitz, p. 192). Family stress has been operationalized as whether or not the patient resides with relatives characterized by high expressed emotion (EE) attitudes. High EE refers to high levels of criticism, hostility, and/or emotional over involvement from a caregiving relative (typically a parent or spouse) during or immediately following a patient’s acute episode of illness (Miklowitz, p. 194). Patients with schizophrenia, bipolar disorder, or recurrent major depressive disorder who return home to high-EE families following an acute episode are two to three times more likely to relapse in the subsequent 9 months than are patients who return to low-EE families (Miklowitz, p. 194).

There is increasing evidence that family psychoeducational treatments are effective in relapse prevention and symptom control when combined with standard drug treatment (Miklowitz, p.195). Family interventions for bipolar disorder are psychoeducational in orientation, meaning that families (spouses, parents) and patients

are taught to recognize the signs and symptoms of bipolar disorder, develop strategies for intervening early with new episodes, and assure consistency with medication regimens and to reduce expressed emotion (Feeny et al., p. 514). In addition to providing prescriptive information, clinicians address the patients' and family members' affective reactions to the illness, its prognosis, and its expected treatments. Then the clinicians assist them in developing coping strategies relevant to their individual situation (Miklowitz, p. 194). Episodes of bipolar disorder are strongly associated with family discord, criticism, and conflict.

Children and adolescents with Bipolar Disorder may benefit from counseling and behavioral therapy in both individual and group settings. Individually delivered cognitive-behavioral therapy (CBT), as an adjunct to pharmacological treatment, is feasible and associated with symptom improvement in adolescents with bipolar disorders (Feeny et al., p.513). Both manic and depressive symptoms were substantially reduced following treatment. Although medication has typically been the standard and most effective treatment for both adults and youth with Bipolar Disorder, research indicates that adolescents who are already stable on mood stabilizing medications can still benefit from psychosocial interventions (Feeny et. Al, p. 513). Specifically, the treatment in the study included skill based training in problem-solving, goal-setting, medication compliance, communication and social skills, coping, relaxation, and relapse prevention. While the study showed positive results this has been the only study conducted in the psychosocial aspect of the disorder, other studies have focused on the psychoeducation (Feeny et al., p. 514). More studies are currently investigating various forms of

psychotherapy, including cognitive-behavioral therapy, to complement medication treatment for this disorder in young people.

Diagnosis of Bipolar Disorder in Other Countries

In the United States more children and adolescents are being diagnosed with Bipolar Disorder than any other country. Among adults and adolescents, bipolar disorder (BD) has a similar prevalence in the US and in the Netherlands. However, among pre-pubertal children, Bipolar Disorder is frequently diagnosed in the United States and seldomly in the Netherlands. This suggests that, among children, the prevalence of Bipolar Disorder is lower in the Netherlands than in the United States, indicating an earlier onset of Bipolar Disorder in the United States than in the Netherlands. It is hypothesized that this may be related to the greater use of antidepressants and stimulants for depression or attention deficit disorder with hyperactivity by United States children (Reichart, p.81). There are important and frequently overlooked differences in the definition of BD between the International Classification of Diseases 10th edition (ICD-10) and DSM-IV, and methodological differences in epidemiological studies that may partially explain international differences in prevalence of pediatric BD (Soutollo et al, p. 497). The prevalence of bipolar spectrum disorder in young adults in Switzerland is 11%. In Holland the 6-month prevalence of mania in adolescents was 1.9% and of hypomania 0.9%. Only 1.2% of hospitalized youth (<15 years) in Denmark and 1.7% of adolescents in Finland had BD (Soutollo et al., p. 501). In conclusion of this study, there was a relative lack of data, ICD-10 and DSM-IV differences in diagnostic criteria, different levels of recognition of Child and Adolescent Psychiatry as a true specialty in Europe,

clinician bias against BD, an overdiagnosis of the disorder in USA and or a true higher prevalence of pediatric BD in USA may explain these results. United States–International differences may be a methodological artifact and research is needed in this field (Soutollo et al, p. 504). Research on child and adolescent BD in Europe and countries, other than the USA is scarce. Despite extensive research on adult BD in Europe, there is lack of information about the international prevalence and phenomenology of pediatric BD (Soutollo et al.,p. 504). While it may seem as though the United States over diagnoses children and adolescents, there is a lack of research and information on the disorder in European countries making it even tougher for diagnosis of a child with the disorder.

Misdiagnosis and Over Diagnosis of Bipolar Disorder

While the United States has such a high occurrence of Bipolar Disorder in children and adolescents, it seems as though other countries outside of the United States may be ignoring the disorder. It may also be that the United States is diagnosing too many children, adolescents, and adults with the disorder, running the risk of misdiagnosis and over diagnosis. There is a significant difference between the United States and other countries though no reason to suspect a greater occurrence rate in America (Smith, p. 2).

As previously stated, children and adolescents are given the same treatment regimen as adults for Bipolar Disorder. The degrees of the disorder may be different in children and adults therefore using the same treatment methods may not be helpful and may even affect the child's safety. Obesity, diabetes, and other ailments have been of great concern for those researching the disorder. The different medications can affect energy levels, metabolism, appetite, and even thyroid. According to researchers, although the medication may help to reduce the occurrence of bipolar episodes, it is

physically harming the child or adolescent's health. There is more research currently being conducted to create a medication specifically for Bipolar Disorder in children and adolescents.

Another issue at hand is the criterion for diagnosis of the disorder in children and adolescents. The high rates of diagnosis have been said to be due to the culture of the United States and the prevalence of other disorders in the country, such as depression, Attention Deficit Hyperactivity Disorder, and anxiety. Millions of people are diagnosed with these disorders each year and are put on regimens of medication and psychotherapy. It raises several questions for researchers, clinicians, psychiatrists, social workers, and others working in the social science field.

The high diagnosis rate appears to be an ethical dilemma that as of right now does not have a right or a wrong answer. While it does not seem necessarily ethical to be diagnosing hundreds of thousands of children with Bipolar Disorder, it also does not seem ethical to ignore the potential signs and symptoms of the disorder. It has been concluded that early diagnosis of the disorder and treatment can allow for less episodes of mania or major depression while helping the possible severity of the disorder. If left untreated then the disorder may worsen and it has already been said that the disorder in children is usually more volatile and harmful than in adults.

Mental health professionals are truly challenged when they attempt to diagnose and treat bipolar disorder in children and adolescents (Fritz, p. 8). The symptoms of Bipolar Disorder in children and adolescents typically do not follow the symptoms and course of adult bipolar disorder, which is the definition that they use in DSM- IV. Compared with adults, children and adolescents are more difficult to diagnose because

they are less likely to have discrete episodes of mania, and instead present symptoms of severe irritability, rapid cycling, or mixed mania. In addition, symptoms progress and evolve as children and adolescents grow (Masi et. al, p. 374). Comorbid disorders such as ADHD, oppositional defiant disorder, conduct disorder, and learning disorders are common in this population, further complicating diagnosis (Masi et al, p. 374). With the difficulty of diagnosing Bipolar Disorder and so much diagnostic uncertainty, it seems as though over diagnosis may be a prevalent occurrence in children and adolescents.

Some clinicians believe that children and adolescents are being over diagnosed and even misdiagnosed with Bipolar Disorder explaining the significant increase in the past decade (Smith, p.2). Since there is no blood test or x-ray finding that constitutes the “gold standard” for the diagnosis of Bipolar Disorder, symptoms of mood, behavior or cognitive disturbance are of central importance. The latest edition of the DSM still does not distinguish the symptoms of mania as seen in adults (racing thoughts, pressured speech, grandiosity, decreased need for sleep, etc.) from the way mania presents in childhood, but clinical and some research reports that do so are available (Fritz, p. 8).

While under diagnosis may have been a problem in the past, over diagnosis is now more prevalent and is exacerbated by the lack of agreement on diagnostic criteria (Wilens et al., p. 1). “In diagnosing many children, symptoms are stitched together from different events and settings in a “crazy quilt” manner, rather than occurring all together at the same time in something you could pin down as a true manic episode (Smith, 2007, p. 2).”

In 1998, according to "The Bipolar Child," nearly four million children were given Ritalin or other stimulants for hyperactivity; of that number, the authors contended,

more than a million would eventually receive a bipolar diagnosis (Groopman, p. 29). Errors may also occur when applying the DSM-IV too strictly or too loosely to the child's symptoms. When diagnosing a child with the disorder, applying the symptoms to the child too strictly may result in a diagnosis of Bipolar Disorder thus the same for applying the symptoms too loosely. Decreasing the rate of under diagnosis generally entails some increase in the rate of false-positives—in this case, patients with major depressive disorder treated for Bipolar Disorder (Perlis, p. 271).

Under diagnosis of Bipolar Disorder

There is also the possibility that Bipolar Disorder was once under diagnosed and now it is being diagnosed properly. In 1996, it was thought that the disorder was under diagnosed and clinicians put emphasis on diagnosing the disorder at an earlier age (Weller et al., p. 384). Because of the stigma still attached to Bipolar Disorder (and to many other mental diseases), patients are frequently reluctant to acknowledge that anything is amiss, and doctors often fail to recognize the disorder (Groopman, p. 30). Under-diagnosis of manic-depressive illness or Bipolar Disorder can be as important as over diagnosis of the disorder. This could mean a child or adolescent going without treatment of the disorder leading to the possibility of a more severe degree of the disorder.

Under diagnosing may have represented a true crisis that would have demanded action, diagnosing a child at a younger age may help the child with further complications that otherwise may occur without the proper diagnosis (Smith, p.4). Without the proper treatment the child symptoms and degree of disorder may worsen as the child grows and develops. The problem lies in a gray zone of child mood functioning in which there is

significant irritability, mood volatility, or severe explosiveness, but DSM IV criteria for mania may not be met, or symptom duration or cycling patterns may not fit.

Misdiagnosis of Bipolar Disorder may be seen as another factor as to why the population with the disorder is increasing so rapidly. Many disorders have the same diagnostic criteria as Bipolar Disorder and can lead to an improper diagnosis. In late adolescence the most common mistaken diagnoses are schizophrenia and conduct disorder (Wilens et. al, p. 2). Attention Deficit Hyperactivity Disorder has been the main differential problem in prepubertal and early adolescent patients (Lansford, p.3). The difficulty in distinguishing these two disorders is due to the high prevalence of coexisting ADHD among childhood onset bipolar patients and from the overlap of certain DSM-IV criteria for mania and ADHD, the symptoms including hyperactivity, distractibility, aggression, and impulsivity (Lansford, p. 3).

There are disorders that are apparent near neighbors of bipolar by sharing outward symptoms, but the similarities may be misleading. It is important to recognize that children with ADHD may also experience irritability or dysphoria due to demoralization and decreased self-esteem, making the differential diagnosis with bipolar disorder difficult. Furthermore, Bipolar Disorder may be superimposed on ADHD. In these cases one would expect to see an increase in the intensity or severity of symptoms (Cogan, p. 3). Like Bipolar Disorder, conduct disorder frequently emerges during adolescence. Children with conduct disorders usually engage in high-risk behaviors with the potential for painful consequences seen in mania (Cogan, p.2). Clinicians and psychiatrists have to carefully distinguish them because the route to improvement might be very different (Smith, p. 4).

Misdiagnosis may also occur due to the similarities between the disorder's symptoms and the stages of development in adolescents. Mood swings, which are typical of adolescents, may look like episodes of mania and depression. Other commonalities of adolescent development are low self-esteem, sadness, fatigue, oversleeping, and decreased amount of sleep, all of these may be considered symptoms of Bipolar Disorder (Masi et al, p. 378). Developmental factors may confound the presentation of symptoms; for example, normal behavior in children may sometimes resemble hypomanic activity (Cogan, p 2). Therefore, if not viewed within the context of normal behavior, psychopathology may not be recognized when researching behaviors congruent with Bipolar Disorder (Cogan, p.2). Excluding the idea that the child is exhibiting normal behavior in their development may result in a child that is medicated and treated for the disorder when they are actually just experiencing growth and development.

Major contributors to misdiagnosis include incomplete history and lack of patient insight as well as presence of psychiatric comorbidity, such as anxiety or substance use disorders (Silva, p. 439). Another reason the diagnosis process may lead to misdiagnosis are the patient may provide poor or uneven history, without sufficient history of family and health creating the risk of misdiagnosis of the disorder. Patients in a depressive state may claim they always feel that way and have never had a better or more elated time in their life. Mildly elevated patients, those who may be in a manic state, may fail to report important symptoms such as racing thoughts, a decreased need for sleep or impulsiveness, a reckless pursuit of gratification (Delbello et al, p. 481). Therefore without the patient's history and misunderstanding of different feelings, the risk of misdiagnosis is much higher.

Environmental factors, parent child attachment and fit, child temperament, and cognitive limitations (in parents and kids), can all team up to help some children appear bipolar when they are not (Smith, p. 5). An additional source of diagnostic complexity is psychiatric comorbidity, which is the norm rather than the exception among patients with Bipolar Disorder (Perlis, p. 272). More than 50% experience at least one comorbid anxiety disorder, including generalized anxiety or panic disorder. Some of the features of anxiety and depression or hypomania/mania may overlap—for example, impaired concentration can be associated with all three, as can sleep disruption (Perlis, p.271). Anxious patients, as well as manic patients, may report racing thoughts (Perlis, p. 271). Alcohol and stimulants can produce symptoms that mimic mood episodes; for patients with ongoing substance use, it can therefore be difficult to discern the presence of an underlying mood disorder such as Bipolar Disorder (Perlis, p.273).

Another issue of Bipolar Disorder is the patient may be afraid to be stigmatized or labeled. An unfortunate reality is that Bipolar Disorder, manic depression, and other mental illnesses are often stigmatized. Many people fail to seek help because they fear being labeled as crazy, dangerous, unreliable, or even contagious (Delbello et. al, p.481). This is particularly alarming because persistent stigma and ignorance toward Bipolar Disorder means many people are not getting proper treatment. Child development is so fluid, clinicians worry that diagnosing this disorder and other mental illness in children can give kids problematic labels that are hard to shake off (Smith, p. 4). Once diagnosis is made, the child may be stigmatized by peers and their future relationships may be severely affected. Proper diagnosis is beneficial in treating the disorder in its earlier stages, but with the lack of knowledge by many Americans on the disorder it may lead to

a crippling stigma on the child. Therefore, misdiagnosis of the disorder can lead to an improper label of a child that could affect their lives in the present and future significantly.

Finally, some misdiagnosis likely arises from the delay between episodes. Patients may experience more subtle mood elevation, such as hypomania, between or overlapping with depressive episodes (Perlis, p.272). In some cases, patients may experience depressive episodes without a manic episode for 5 years or more thereafter for the first few years of their illness, they are therefore “misdiagnosed” with recurrent major depressive disorder (Perlis, p. 273,). These patients may receive ineffective treatment, which, in some cases, actually worsens outcome, either by inducing manic or mixed states or by increasing mood cycling.

The consequences of misdiagnosis of Bipolar Disorder can be profound. In the absence of effective treatment, patients may experience a greater number of recurrences or more long-term episodes (Perlis, p.273). Not only does the treatment affect the patient’s functioning or health, it can also be rather expensive. This insufficient medical treatment causes more medical bills to be paid for by the client. The family must now spend more money trying to figure out what their child actually has, whether it is an environmental stressor or a different type of disorder, while still having to already pay for the previous medical bills. Therefore, there is more stress on the family and child to figure out the actual diagnosis the child is supposed to have in order to receive proper treatment. It can be time consuming and demanding on the patient and their family.

Recurrent mood episodes can substantially impair patients' ability to maintain relationships as well as education and employment (Fritz, p. 8). Without the effective

treatment, the patient's daily life can be more of a struggle and the current treatment they are using will not help the patient. Moreover, even after recovery, the episodes may have enduring and cumulative consequences—for example, a patient who loses their job because depression makes it impossible to get to work on time, or because manic episodes lead to conflict with coworkers or even legal involvement, may find it increasingly difficult to find employment in the future (Perlis, p. 273). Although the link between effective treatment and reduction in suicide risk is difficult to establish definitively, by depriving patients of an effective treatment, an opportunity to decrease suicide risk may be missed (Perlis, p.273). Therefore, without the proper diagnosis it can affect a person's entire outcome in life. Effective treatment methods may eventually help the patient but could have already affected their life significantly in ways that may not be able to be fixed.

There are risks involved with giving an improper diagnosis to a child who does not have Bipolar Disorder. The treatment regime, specifically bipolar medication, maybe trigger side effects making the child's episodes worsen but it may also have physical affects on the body. The risks of medications include weight gain and are sometimes associated with metabolic syndrome, sedation, a theoretical but unknown risk of tardive dyskinesia, and the risk of polycystic ovary syndrome (PCOS) with valproate (Brown University). Other possible risks include possible medical consequences including diabetes and weight gain (Perlis, p. 273). These risks could overexpose a child to several types of medication and in some cases requiring additional monitoring as well as lesser likelihood of clinical improvement (Perlis, p. 274). Therefore, health risks by different types of medication may trigger different types of physical ailments without actually helping the child's mental health and behavior.

Thorough evaluation and treatment are essential in the reduction of the possible misdiagnosis and over diagnosis. While under diagnosis may have seemed to be a factor in the past, in the present and future it appears that the climbing numbers may be due to the over diagnosis of the disorder. While adolescents are treated with the same pharmacologic agents as adults, it appears as though children and adolescents are more likely to suffer physical side effects when the medication is not properly prescribed. Although several diagnostic instruments exist, none can replace careful diagnostic evaluation (Perlis, p. 274). Therefore, using caution in the diagnosis of the disorder may prevent physical side effects from medication and may help to explain the increase in diagnosis.

The apparent possibility that misdiagnosis and over diagnosis may be on the rise is receiving attention. The accurate discrimination of Bipolar Disorder from major depressive disorder, with which it is most often confused, is receiving increasing attention as its clinical and economic consequences are recognized (Perlis, p. 274). Ultimately, the use of biological markers— brain imaging or genetic tests, for example— may facilitate early and accurate diagnosis. While such markers are developed, careful clinical evaluation remains the most useful tool for recognizing Bipolar Disorder (Perlis, p. 274). While these factors of misdiagnosis and over diagnosis may hinder the patient's treatment options, clinicians and researchers are currently attempting to research the problem in order to lessen its prevalence.

Hypothesis

Children and adolescents' diagnosis of Bipolar Disorder has increased significantly over the past decade. There was once reason to believe that Bipolar

Disorder was a disorder that only affected adults aged eighteen and older but in the present time, hundreds of thousands of children have been diagnosed with the disorder. Due to the fact that the diagnostic criteria of the disorder are based on adult behaviors and symptoms, it may lead to misdiagnosis of Bipolar Disorder in children. There are several other disorders that have similar symptoms which may also contribute to confusion in diagnosis. Another possibility though may be that once the disorder was under diagnosed in children and adolescents. While it is clear that the number of diagnoses is on the rise it is unclear whether the diagnoses are correct or a product of over diagnosis.

The increased diagnosis of Bipolar Disorders poses the question as to what has caused the significant increase in the diagnosis of Bipolar Disorder in children and adolescents. Pharmaceutical companies over the past few years have released advertisements that inform the general public of disorders, such as Bipolar Disorder, through internet, magazines, and television. The Bipolar symptoms are listed not only in the DSM but also in these advertisements in magazines and internet websites. The list of symptoms has appeared to increase over the past decade. One may consider themselves with the symptoms that characterize the disorder and listen to the slogan in various advertisements, "Ask your doctor if this medication may be right for you." Therefore, the different diagnostic criteria that have been released in the DSM-III, DSM-IV, and DSM-IV TR for Bipolar Disorder combined with the prevalence of the disorder in daily activities has led to the increase in Bipolar Disorder in children and adolescents.

Methodology

Sample

The sample used in this study most resembles a cluster study and a sample of convenience. The participants consist of students at a school for children with emotional and behavioral disorders in Woonsocket, Rhode Island. The students in the study are from cities in Northern Rhode Island. They are from Woonsocket, Central Falls, North Providence, North Smithfield, Smithfield, Cumberland, Burriville, and Lincoln. Although students were from Northern Rhode Island there was one student who previously attended the school that was from East Providence. There were 135 participants total in the study. The school is a predominantly male school; there are 91 males and 44 females within the study. The students participating are either currently enrolled in the school or were enrolled in the past decade, specifically 1999 until the present time. The children in this particular school setting were removed from their original school system and placed here due to specific behavioral or emotional issues.

Data Gathering

The method of data gathering includes examining current and past students' records and files. The files include psych evaluations, observations of the student in their past educational setting prior coming to this school, and other medical information specifying the symptoms as well as those exhibited. The records include the medication and dosage for specific mental health disorder. The specific areas examined in the students file were age, gender, residence, school year they attended, the grade they were in, diagnosis, and if they are on a medication for treatment. The independent variable would be the actual diagnosis and the dependent variable would be the medication used to treat the disorder.

Findings

Many students in the study had more than one diagnosis, the most in this particular examination being three diagnoses. Therefore, many students who were diagnosed with ADHD were also diagnosed with disorders such as Oppositional Defiant Disorder. There were 16 students who had a diagnosis of Bipolar Disorder in the school representing 12% of the participants. The data had shown that there was an increase in the diagnosis of Bipolar Disorder from 1999, when the school began, until the current school year. There were more students who had a diagnosis of ADHD, that number being 62 students with a much higher percentage of 46%. Oppositional Defiant Disorder had 33 students diagnosed with the disorder, approximately 24%, and 32 students had Major Depression Disorder, Dysthymia, or Depression NOS, approximately 24%. Fifteen students had no diagnosis or medication, 11% of participants, and 23 students had a diagnosis but were not on any type of medication, 17%. Twenty five students who attended Viola Berard School between 1999 and 2003 either did not have a diagnosis or had a diagnosis but was not taking any medication for treatment.

While many more students had diagnoses of ADHD, Oppositional Defiant Disorder, Major Depressive Disorder, Depression NOS, or Dysthymia the medication used to treat them were commonly used for Bipolar Disorder. These medications include Lithium, Abilify, Paxil, Seroquel, Depakote, Risperdal, and Topamax. Sixty eight of the students in the study were on at least one of these medications but did not necessarily have a Bipolar Disorder diagnosis. Fifty percent of the students in this study were taking one or more medication commonly used for Bipolar Disorder. This shows that while the child or adolescent may not have a diagnosis of Bipolar Disorder, they are using medication that may treat some of the bipolar symptoms they may be exhibiting. There

were no diagnoses of Bipolar Disorder in 1999 and there was only one diagnosis of the disorder in 2000. Many of the diagnoses in the school occur from 2003 until the present time. Five of the students who are currently enrolled in the school have a diagnosis of Bipolar Disorder and there are 21 students in the school total at the present time. Therefore, 24% of the students at the school currently have a diagnosis of Bipolar Disorder.

The findings show that in this school Bipolar Disorder may not be the most prevalent disorder but the number of diagnoses had increased from 1999-2004 until 2005-2008. In 1999-2004, there were four students with a diagnosis of Bipolar Disorder and in 2005-2008 there were 12 students. It is statistically significant with a $p < .05$. Also, the study found that many more of the students were on a medication in 2005-2008 opposed to 1999-2004. This was also statistically significant. Many of those children who were on medication were on a medication that was commonly used to treat Bipolar Disorder. This may be because children and adolescents may exhibit a certain symptom of Bipolar Disorder and the specific medication may be beneficial. Another reason may be due to the similar symptoms that Bipolar Disorder has with other disorders, such as ADHD, therefore making the medication helpful. One problem in the research was that different parts of files appeared to be missing and therefore may have hindered some of the results. Another problem occurred in the tables, the way the data was presented there were 15 students that were omitted in the calculation of the tables due to the attendance of the school in 2004-2005.

The diagnostic criteria in the DSM-III states that in Bipolar Disorder the initial episode is often manic. Both the manic and the major depressive episodes are more

frequent and shorter than the major depressive episodes in Major Depression (DSM-III, p. 216). In the DSM-IV TR, there appears to be no difference whether the episode is initially manic or depressive. There appears to be a more developed definition of Bipolar Disorder in the current DSM opposed to this version which was released in 1980. This issue of the DSM gives definitions of Bipolar Disorder Mixed, Manic, and Depressed.

The diagnostic criteria in the DSM-IV for Bipolar Disorder are very similar to that of the DSM-IV TR. The essential feature of Bipolar Disorder is a clinical course that is characterized by the occurrence of one or more Manic Episodes or Mixed Episodes. Often individuals have also had one or more Major Depressive Episodes (DSM-IV, p. 336). Approximately 10% - 15% of adolescents with recurrent Major Depressive Episodes will go on to develop Bipolar Disorder; Mixed Episodes appear to be more likely in adolescents and young adults than in older adults (DSM-IV, p. 334). The DSM-IV gives more instances of symptoms for diagnosis than the DSM-III. When full criteria is met for Manic, Mixed, or Major Depressive Episode there are other specifiers that may be used to describe the current clinical status of the episode such as mild, moderate, severe with psychotic features, and severe without psychotic features (DSM-IV, p. 340). There was not a significant difference between the DSM-IV and the DSM-IV TR.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
schoolyrGroups * Bipolar	120	88.9%	15	11.1%	135	100.0%

schoolyrGroups * Bipolar Crosstabulation

Count		
	Bipolar	Total

		No Bipolar Dx	Bipolar DX	
schoolyrGroups	1999-2004	55	4	59
	2005-2008	49	12	61
Total		104	16	120

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.314(b)	1	.038		
Continuity Correction(a)	3.270	1	.071		
Likelihood Ratio	4.499	1	.034		
Fisher's Exact Test				.058	.034
Linear-by-Linear Association	4.278	1	.039		
N of Valid Cases	120				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.87.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
schoolyrGroups * medatall	120	88.9%	15	11.1%	135	100.0%

schoolyrGroups * medatall Crosstabulation

Count

		medatall		Total
		No med	Meds	
schoolyrGroups	1999-2004	23	36	59
	2005-2008	12	49	61
Total		35	85	120

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.414(b)	1	.020		
Continuity Correction(a)	4.519	1	.034		
Likelihood Ratio	5.479	1	.019		
Fisher's Exact Test				.027	.016
Linear-by-Linear Association	5.368	1	.021		
N of Valid Cases	120				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 17.21.

Conclusion

The diagnosis of Bipolar Disorder has significantly increased in children and adolescents in the past decade. Currently the treatment regimen consists of that which adults use. This normally involves medication and sometimes psychotherapy. There has been debate as to why the diagnosis in children and adolescents has increased so rapidly in the past decade. Many look towards pharmaceutical companies promoting medications and listing common symptoms of Bipolar Disorder in advertisements. There has also been question as to doctor's misdiagnosis and over diagnosis because the criteria for Bipolar Disorder may appear similar to normal development and other disorders such as ADHD. The study conducted looked at different aspects of Bipolar Disorder. It examined students in a school system and their diagnoses along with medication regime. It also looked at the characterized symptoms and definition in the DSM-III, DSM-IV, and DSM-IV TR. It also looked into the different medications being promoted for Bipolar Disorder and the statistics of usage by children and adolescents.

The study showed that Bipolar Disorder was not the highest diagnosed disorder, in fact ADHD was, but that many of the students were taking medications normally prescribed for Bipolar Disorder. Many students also had diagnoses of Major Depressive

Disorder, Dysthymia, Mood Disorder NOS, and Depression NOS which have been said to be possibly linked to Bipolar Disorder later in life. The most commonly used medications for Bipolar Disorder in 2006 consisted of Seroquel, Risperdal, Topamax, Lamictal, Zyprexa, Depakote, Abilify, Paxil CR, Lithium, and Geodon (Top Bipolar Medications, 2008). Sixty eight students out of the 135 in the study were on at least one medication used for Bipolar Disorder even though they may not have had a BD diagnosis. That is approximately 50% of the students in the study.

In 2006, according to Medicaid, Risperdal, Abilify, Seroquel, Depakote, and Zyprexa were the highest grossing medications in children and adolescents (Edelman et. al, p.5). Each of these medications can be used to treat Bipolar Disorder. In 2006, the state of New York's Medicaid program paid \$23.1 million for Risperdal, \$17 million for Abilify, \$12.2 million for Seroquel, \$5.7 million for Depakote, and \$5.1 million for Zyprexa (Edelman et. al, p.5). Several states are investigating whether pharmaceutical companies are illegally promoting the drugs to doctors "off label" for uses not FDA approved (Edelman et. al, p.5). With the increasing number of children receiving diagnoses and being prescribed medication, it's hard not to point the finger at pharmaceutical companies. The advertisements in magazines, television, and newspaper periodicals have created a society of diagnosis. This may be another reason that the increase in diagnosis of Bipolar Disorder in children has occurred but there was no concrete evidence to find correlation between the two variables.

The diagnostic criteria in the DSM-IV for Bipolar Disorder are very similar to that of the DSM-IV TR. The DSM-III gave a general definition of Bipolar Disorder and the other two versions of the text furthered the definition and criteria for the disorder.

The different text versions of the DSM were inconclusive and did not provide any details as to the increase in the disorder. There has been a more refined definition of the disorder in the latest edition but it does not provide sufficient information to the increase in children and adolescents.

It is apparent that there needs to be more research on Bipolar Disorder in children and adolescents. With such a rapidly growing disorder in children, adolescents, and also adults there needs to be more research and practice in the different areas of treatment. Implications for practice policy would consist of diagnosis and early intervention within those with Bipolar Disorder but practice policy and research both work together hand in hand. Early intervention is important to treat the disorder normally having better outcomes but with the risk of misdiagnosis there needs to be research done within the individual's symptoms and behaviors. While early intervening and researching the behaviors may contradict one another, it is important that social workers and other professionals working with this population thoroughly investigate the child's background and behavior before intervening and diagnosing them with the disorder. As stated before the treatments used may have dangerous side effects for children and adolescents therefore making an extensive investigation into the child's background, psychosocial behaviors, and symptomology is extremely important.

While more research needs to be done in the area of treatment for Bipolar Disorder in children, there also needs to be more research completed in the actual symptomology of the disorder. The symptoms and criteria currently used for diagnosis of Bipolar Disorder are based on adults. There needs to be more research done on the different behaviors and symptoms that a child may display when having a manic or

depressive episode within the disorder. It has been said that children and adolescents tend to be more irritable or aggressive during manic and depressive episodes, whereas adults exemplify euphoric or suicidal behaviors when going through different episodes. Once further research has been sufficiently completed, practice policy may be able to offer more treatment solutions that are strictly targeted toward children and adolescents, opposed to using the same treatments as adults.

Bipolar Disorder in children and adolescents needs to be furthered researched. There have only been a few studies and thus far the results have been inconclusive. Many experts fear that children are at risk for being misdiagnosed, overmedicated, and in danger of health issues. The medications being prescribed for these children are not studied thoroughly on children and adolescents (Edelman et. al, p.5). More children are being diagnosed with disorder and others that are related. These children and adolescents are being given a medication regime most of the time that social workers know so little about. In order to successfully diagnose and treat Bipolar Disorder in children and adolescents there needs to be a sufficient amount of research on this increasing issue.

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