Pediatric & Adolescent Bipolar

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Contact Hours: 1.5 (ANCC) and 1.8 (ABN) 1.0 (PHARM) contact hours valid June 29, 2020 – June 28, 2022

Target Audience: Registered Nurses and Licensed Practical Nurses

Purpose/Goal: Explore dynamics involved in children and adolescents with Bipolar.

Outcomes: At the conclusion of this activity the learner should be able to:

1. Describe mood and behavioral changes noted with children and adolescents with Bipolar.

2. Examine commonly used medication for the treatment of Bipolar in children and adolescents.

3. Describe the role of psychotherapy in the treatment of Bipolar.

Fees: ASNA Member - $ FREE Non-Member - $18.00

Instructions for Credit: Participants should read the purpose/goal and outcomes and then study the activity on-line or printed out. Read and complete the post-test at the end of the activity. Participants must check answers against the correct answers, refer to monograph for clarification if any items scored incorrectly, and submit the appropriate fee to receive continuing education credit. The certificate of completion will be generated upon "submitting" your evaluation and payment information, available at bit.ly/3dDNK20

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Disclosures: The author and Planning Committee have declared no conflict of interest.

Certificates: Contact Hours will be reported to the ABN within 2 weeks of completion of the activity.

Accreditation: The *Alabama State Nurses Association is an Approved Provider of Continuing Education in Nursing by the Mississippi Nurses Foundation, Inc., an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.*

Alabama Board of Nursing Provider Number ABNP0002 (*expires April 6, 2021).*

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All children and adolescents occasionally experience what could be called "normal" behavioral ups and downs with their mood, energy, and activity levels. What sets children and adolescents with Bipolar apart is their profound and unusual behavioral shifts; which sometimes are severe. But even if mild, these behavioral shifts make their activities of daily living very difficult - activities such as going to school or interacting with friends. Untreated Bipolar may result in damaged relationships at home and school, poor school performance, and even suicidal thoughts and/or actions. Normally, Bipolar develops in the late teens or early adult years; usually before 25 years of age. However, some children do develop this during childhood. It is important to note that Bipolar runs in families. A child with a first degree family member (parent or sibling) is up to six times more likely to develop Bipolar as compared to someone with a negative family history. At the same time, not all children with relatives with Bipolar will develop the disease.

According to the National Institute of Mental Health (NIMH) the diagnosis of Bipolar in children has increased 40-fold in the last 20 years and some literature sources even state that up to 2 - 3% of all adolescents have been diagnosed with Bipolar. During this same time frame the bipolar diagnosis has increased 400% in adolescents being discharged from inpatient facilities. Children and adolescents with Bipolar do not exhibit all of the symptoms outlined in the DSM-V (*Diagnostic and Statistical Manual of Mental Disorders {American Psychiatric Association standard classification of mental disorders}).* As a result there is ongoing controversy among mental health professionals regarding making a diagnosis of Bipolar. Their reasons cited are as follows:

- most children do not exhibit manic behaviors.
- most children do not have clearly defined mood shifts.
- the diagnosis Bipolar Disorder, Not Otherwise Specified (BP-NOS) is often used.
- these children are severely ill and often receive multiple diagnoses.

Irritability is a nonspecific symptom found in approximately 75% of all psychiatric disorders as established by the DSM-V (and all earlier versions of the DSM). According to NIMH chronic, severe anger and irritability was the most frequently cited reason for the diagnosis of Bipolar in children and adolescents. The NIMH funded research as a result of the increased numbers of children diagnosed with Bipolar. The diagnosed cohort of the past 20 years provided an easily identified population for research. What was identified was that these chronically irritable children, without any other symptoms of Bipolar, did not develop adult forms of Bipolar, as was expected. They continued to be ill but instead of Bipolar they exhibited symptoms of depression and anxiety. In an effort to limit the over diagnosis of Bipolar the DSM-V Children's Committee (group providing oversight for the pediatric revisions) and the division of Bipolar Spectrum Disorders at NIMH advocated for the adoption of a new diagnosis called Disruptive Mood Dysregulation Disorder (DMDD).

Clinical Profile DMDD

- onset of symptoms before age 10; but cannot be diagnosed as having DMDD before 6 or after 18
- severe and recurrent temper outburst (not temper tantrums) which are grossly out of proportion to situation or causative agent
- temper outburst must occur 3 or more times a week for at least 12 months
- most of the time the child will have an angry or persistent irritable mood
- does not go 3 or more months without anger outburst

Children diagnosed with Bipolar often have other comorbid conditions such as attention deficit/hyperactivity disorder, conduct disorder, anxiety disorder, or substance abuse. Probably, the most common is conduct disorder. About 1/2 of children and adolescents with diagnosed Bipolar have committed some type of criminal offense prior to hospitalization. Most commonly noted are larceny, domestic violence, and/or drug offences.

The clinical presentation of Pediatric/Adolescent bipolar include intense emotional states that occur in distinct periods and are named "mood episodes". The episodes are accompanied by extreme changes in activity, behavior, energy, and sleep cycles. The "mood episode" will be a distinct and drastic change from the child/adolescent's usual behavior. Often the behavior is explosive and irritable. A manic episode is representative of joyful or overexcited. A depressive episode can be described as someone who is sad or hopeless. Sometimes the mood changes include both manic and depressive episodes and in this case it is referred to as a mixed state.

Specific Symptoms include:

Mood Changes	
Mania	**Depression**
• Unusually overly silly or joyful	• Sad mood lasting long time • Extreme short tempter & unusual irritability • Feeling worthless or guilty
Behavioral Changes	
• Sleeping little & not tired • Racing thoughts & talking a lot • Trouble concentrating or paying attention, jumping from one project (thing) to next in unusual way	• Complaining about pain more often – HA, stomach aches, & muscle cramps • Eating more or less & gaining or losing weight. • Reoccurring thoughts of death and suicide

• Risky behaviors more often, seeking pleasures a lot, doing more activities than usual	

Just to emphasize, all children exhibit some of these behaviors; however, those with Bipolar do not have the normal, expected mood and energy changes that all children/adolescents experience. Bipolar symptoms are more extreme and tend to last for most of the day, nearly every day, for at least a week. The behavioral changes all come on together and if severe the child or adolescent needs hospitalization. Activities of daily living will be impaired.

Some children exhibit hypomania which is characterized by more energy than normal but without other mania symptoms. To be classified as hypomania the episode must last at least 4 concurrent days. An important aspect with hypomania is that there are noticeable behavior changes but the child's ability to function is not impaired.

Early onset Bipolar starts in childhood or early teen years. It is more severe that adult onset as evidenced by more frequent mood shifts, being sick more often, and having more mixed episodes. Those with early onset Bipolar are at a greater risk of attempting suicide as compared to adult onset. Probably 1/3 of individuals with early onset Bipolar have at least one serous suicide attempt and some of these attempts are planned carefully and others are not.

There are no blood assays or brain scans to diagnose the symptoms of Bipolar. The clinical workup may include testing for learning, thinking, speech and language. Other comorbid conditions may exist like substance abuse. The parents will be questioned as to the child's mood - especially changes, sleep patterns, activity and energy levels, relationship with others. A complete family history will be obtained including questions about others in family with Bipolar, depression, and substance abuse.

There are 4 categories of Bipolar as follows:

- Bipolar I Disorder - manic or mixed episodes lasting at least 7 days or manic episodes so severe that the person needs immediate hospitalization. Almost always the person will have depressive episodes which last up to 2 weeks.
- Bipolar II disorder - the person has a pattern of depressed episodes and hypomania, but does not have full blown mania or mixed episodes
- Bipolar Disorder Not Otherwise Specified (BP-NOS) - person has symptoms of Bipolar but does not meet diagnostic criteria of either Bipolar I or II. The symptoms are very obvious and outside of the person's normal behavior. (When children have manic symptoms lasting less than 4 days they are sometimes diagnosed with BP-NOS. The thought being that they may develop Bipolar I or II later in life.)

- Cyclothymic Disorder, or Cyclothymia - this is a mild form or Bipolar; however the person does not meet the criteria of any other type of Bipolar. The person has episodes of hypomania and mild depressive episodes for at least 2 years.

Relapses occur frequently. Although two thirds of the children stabilize within 18 months, about 1/2 of those that stabilize relapse a year or so later. Children with Bipolar I or II recover at a faster rate that children with Bipolar NOS. Also relapses are more common when a co-existing disorder such as anxiety, eating, or substance abuse is present. The relapse usually presents depressive symptoms.

Although there is no cure for Bipolar, treatment with medications and/or psychotherapy usually help children and adolescents recover and may prevent future episodes. Treatment protocols are based on the adult model as there are few studies involving this age group. Medications are given lifelong and before the initial dose a base line assessment is completed to determine physical and mental health. Included in the assessment will be medications that have proven both effective and ineffective with first degree relatives with Bipolar. It is generally believed that family members tend to respond the same way to pharmacologic agents. The adage with bipolar medications is the same as for all psychiatric /mental health medications "start low and go slow". Normally the progression to full medication efficacy will not be achieved for several months as children and adolescents need to be titrated at a slower rate as compared to adults. During the time that new medications are being given, the child/adolescent's behavior should be monitored and recorded by the family. It is essential that the health care provider is aware of all over the counter medications, including herbal supplements that the person is taking as some medication combinations may cause untoward side effects. Specific medications include the following:

- Mood stabilizers - Lithium Carbonate (Lithium) is the most common. It is only approved by the FDA for children over 12, although frequently given to younger children "off label". Lithium is specific for mania; however, it does have some antidepressant properties and it is believed to prevent suicidal thoughts. Expected side effects of Lithium include restlessness, frequent urination, dry mouth, bloating or indigestion, acne, joint or muscle pain, and brittle nails or hair. The person may have any combination of the preceding symptoms. Signs of Lithium toxicity include diarrhea, drowsiness, muscle weakness, lack of coordination, and vomiting. Individuals exhibiting any of the Lithium toxicity symptoms should be taken to the emergency room immediately. The risk of Lithium overdose/positioning is increased when the person is dehydrated - make sure the child/adolescent remains hydrated by drinking extra fluids (water and juice and not soda) when they have a fever or are engaged in active play. As long as the child/adolescent remains on Lithium regular visits to the health care provider are needed to evaluate Lithium blood levels as well in the kidney and thyroid function.

- Anticonvulsant medications - These medications were originally developed to treat seizures and are fairly often are used "off label" as mood stabilizers. They are the drugs of choice when Lithium is not effective. The most commonly used ones are divalproex sodium (Depakote) and lamotrigine (Lamictal). Commonly expected side effects include drowsiness (may need to be given at bed time), dizziness, headache, diarrhea, constipation, heartburn, mood swings, stuffed or runny nose, or other cold like symptoms. The more serious side effects needing immediate medical attention include weakness, vomiting, or abdominal pain. Any person taking this medication should be monitored for new or worsening symptoms of depression or suicidal thoughts or behaviors as well as any unusual changes in mood or behavior. The same laboratory assays are needs just as with Lithium. Depakote may increase testosterone levels in teenage girls and may cause polycystic ovarian syndrome. The symptoms include obesity, excess body hair, and irregular menstrual cycle. Most of the symptoms will disappear after stopping the medication.
- Atypical antipsychotic medications are sometimes used to treat Bipolar symptoms. The 4 that are approved by FDA to treat children are:

    - risperidone (Risperdal) - 10y/o and older
    - aripiprazole (Abilify) - 10 - 17 y/o to treat Bipolar I
    - quetiapine (Seoquel) - same as Abilify
    - olanzapine (Zyprexa) - 13 - 17 y/o
    - lurasidone (Latuda) 10-17 y/o

  Risperdal is used to treat short term mania and mixed mania. Most of the research states this is the most effective drug to treat young children. Expected side effects include blurred vision, drowsiness, dizziness with position changes, menstrual problems for girls, tachycardia, and sensitivity to sun, skin rashes, and weight gain. Almost all of the children will have weight gain with concurrent changes in metabolism. Both glucose and lipid levels must be monitored frequently for diabetes and increased cholesterol. Although rare, long term use of atypical antipsychotics may lead to tardive dyskinesia, so caution parents to be alert to the development of uncontrolled muscle movements most commonly around the mouth. If it develops they should immediately seek their health care provider. Usually the symptoms completely disappear after medication is reduced or discontinued; however, there are a few rare cases in which the tardive dyskinesia does not resolve.
- Antidepressants - Clinical results of treating Bipolar depression with antidepressants are mixed. Usually the medication is used in combination with a mood stabilizer. *(NOTE: Some adult studies have reported that adding the antidepressant is no more effective than just using the mood stabilizer alone.)* If the child/adolescent takes only a antidepressant they are at risk for developing or switching to mania or hypomania. Or they may be at risk of developing rapid cycling *(4 or more episodes of major depression, mania,*

hypomania, or mixed symptoms within a year). Antidepressants usually prescribed are fluoxetine (Prozac), paroxetine (Paxil), and sertraline (Zoloft).

The most common expected side effects of antidepressants include agitation (feeling jittery), headache, nausea, sexual problems in both sexes, and sleep problems. Children/adolescents often have more pronounced side effects compared to an adults. Untoward side effects indicating the depression is getting more pronounced include suicidal thinking or behavior, or any profound unusual changes in behavior including insomnia, agitation, or withdrawal from normal social situations. These behaviors need immediate attention from a health care provider.

The dosage of all medication is entirely dependent on the symptoms. Parents/care givers need to make sure the person is compliant with the medications. Suddenly stopping the medication, as adolescents may do, may lead to "rebound" or worsening of the Bipolar symptoms and just as important they may have uncomfortable withdrawal side effects. If the child/adolescent has 'crashed off' the medications they should be seen by a health care provider.

The issue of sexual activity and pregnancy with adolescents with Bipolar must be considered. 'Normal' adolescents may make risky choices about sexual behavior and a hallmark of teens with Bipolar is impulsive and risky choices. Teenage girls who become pregnant face additional challenges with the medications. The medications, specifically Lithium and Depakote are contraindicated in pregnancy because of harm to the fetus. The other usually prescribed medication sometimes reduce the effectiveness of birth control pills.

Psychotherapy - There are many forms of effective treatments. This can be very effective in conjunction to medications. It provides education, guidance, and support to the patient and care givers. Most of all it has shown effectiveness in helping children to continue to take their medications. Typical examples include the following:

- Cognitive Behavioral Therapy - help to change harmful or negative thoughts
- Family Focused Therapy - Helps family coping by improving communication and problem solving
- Interpersonal & Social Rhythm Therapy - helps children improve relationships and manage daily routines - regular daily routines and regular sleep schedules offer protection against manic episodes.
- Psychoeducation - also known as education 101 for patients and family to teach them about the disease, potential harm, recognizing signs of a potential relapse.

Some therapies may target special needs such as communication skills, problem - solving skills, reading or other school problems, social welfare support as needed. The children need something that they master for self confidence.

The role of nursing is complex in dealing with the disease process in Bipolar with children and adolescents. Often these children or adolescents have delayed emotional growth as well as impaired interpersonal relationships. Their demeanors are often irritable and oppositional. The nurse must be flexible. Family members need much education and support. Sometimes one of the parents has Bipolar and if they have a relapse it makes for convoluted family dynamics. Parents often require much support to carefully document all of their children's behaviors during medications changes - especially when recording the same thing observations over and over. Ongoing support is probably the nurses greatest gift to the families.

Selected Bibliography

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POST TEST:

Select the one (1) best answer

1. Normally Bipolar develops in the teens or early adulthood.

A. True B. False

2. Irritability is rarely observed in Bipolar in children.

A. True B. False

3. Disruptive Mood Dysregulation Disorder (DMDD) is a sub group of Bipolar.

A.. True B. False

4. Mood changes involving both manic and depressive episodes is referred to as a mixed state.

A. True B. False

5. Bipolar II is characterized by 'full blown' mania.

A. True B. False

6. Lithium is a drug specific for treatment of depression.

A. True B. False

7. Symptoms of Lithium toxicity include diarrhea and lack of coordination.

A. True B. False

8. Risperdal is the drug of choice for treatment of Bipolar in younger children.

A. True B. False

9. Cognitive Behavioral Therapy is useful to help children develop daily routines.

A. True B. False

10. Family Focused Therapy helps family cope by improving communications and problem solving.

A. True B. False

Evaluation/Post Test ~ Pediatric & Adolescent Bipolar

1.5 (ANCC) 1.8 (ABN) 1.0 (PHARM) contact hours **Activity #: 4-0.963**

Goal: Explore dynamics involved in children and adolescents with Bipolar.

Name, Credentials: _____ _____ Member ($FREE)

Address: _____ _____ Non Member ($18.00)

_____ ABN License#: _____

City State Zip CC Security Code: _____

Phone: _____ Email: _____

_____/_____ _____

Credit Card Number **Exp. Date** **Signature**

PLEASE PLACE ANSWERS TO POST TEST IN BOXES BELOW

1	2	3	4	5	6	7	8	9	10

ACTIVITY EVALUATION

Circle your response using this scale: 3 – *Yes* 2 – *Somewhat* 1 – *No*

Objectives & Goals were appropriate. 3 2 1

Rate your achievement of the objectives for the activity

1. Describe mood and behavioral changes noted with children and adolescents with Bipolar. 3 2 1
2. List commonly used medications for the treatment of Bipolar with children and adolescents. 3 2 1
3. Describe the role of psychotherapy in the treatment of Bipolar. 3 2 1

Program free of commercial bias. 3 2 1

On a scale of 1 – 5 / 1 (low) 5 (high) knowledge of topic before home-study 5 4 3 2 1

On a scale of 1 – 5 / 1 (low) 5 (high) knowledge of topic after home-study 5 4 3 2 1

How much time did it take you to complete the program? _____ hours _____ minutes.

ADDITIONAL COMMENTS: