# WHY DO THEY ACT THAT WAY?

Understanding the Mystery Ray Cordry, D.O.

- To add understanding of personality and biology of behavior in select group of sometimes difficult patients in primary care
- > PTSD
- Borderline Personality Disorder
- Bipolar Disorder
- Their likeness and their differences and how the correct diagnosis as always makes the treatment more reasonable if not easier

#### DISCUSSION OVERVIEW

- 33 y/o female presenting with "mood disorder" mood swings and depressed on and off but can be "manic" for 2-3 days
- No drugs and alcohol and ACE test (score 6)
- Multiple treatments have had little success
- Father was distant emotionally and professional advancement she felt was most important
- Interpersonal relationships consisted of rocky start- intense then seem to begin to mistrust due to being fearful of abandonment
- Patient has been in psychiatric treatment since age 17



- After high school she tried college but despite good grades, on impulse left due to problem with roommate and one of the professors
- She has had multiple internships and entry level jobs but has quit always because the "bosses are idiots"
- She has issues with anger and feels both superior and inadequate about herself
- Her feelings were fragile as she viewed the interviewer looking at the clock indicated he didn't like her and wanted to get rid of her



- Her mood swings do not conform to the criteria for Bipolar I or II due to their length of involvement of the continuous symptoms
- She can usually relate a situation to the cause of the "mood swings" causing them to occur quickly
- Patients can be depressed, or other disorders and have Borderline personality
- Her relationships consisted of younger men and she did not allow them to get close to her emotionally (fear of abandonment)
- There is a history of childhood sexual abuse

#### CASE

- 1-2 % of population 2;1 female / male ratio
- 8- 10% mortality to suicide
- Pervasive course
- Abrupt changes in mood (due to a situation in the environment)(cognitive distortions)
- SI/SA in the context of stressors
- Non suicidal self injury (self mutilations, i.e., cutting for example)
- Transient psychotic symptoms usually in context of stress (i.e., dissociation
- Chaotic interpersonal relationships
- Significant history of trauma (ACE score elevated)

Borderline personality disorder with a usual presentation

- "The medications don't work"
- Patients can have depression but usually for 2-3 days then great for 2-3 days

Anger will manifest in many ways until she find a better method Her medication is a help but will not fix the emotional trauma

- In your practice they can be demanding, seductive, manipulating staff, splitting staff and all at once decide everyone is wonderful on your staff or awful
- Boundaries empathetic but firm (part of the treatment)
- Is it becoming easier to tell bipolar from borderline (stay tuned)

#### DISCUSSION

#### Pervasive pattern of instability of interpersonal relationships self image and affects and marked impulsivity beginning by early adulthood and presents it self in many ways

There are 9 symptoms in the criteria and to meet the criteria there needs to be five or more of the 9 listed

- I. Frantic efforts to avoid real or imagined abandonment (not to include suicidal or self mutilating behavior (cutting))
- 2. A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation
- (someone or some job may be great today then later possibly in the same day job or person is awful due to some circumstance)
- 3. Identity disturbance markedly and persistently unstable self image or sense of self
- 4. impulsivity in at least two areas that are potentially self damaging (spending, sex, substance abuse, reckless driving, binge eating)

- ▶ 5. Recurrent suicidal behavior, gestures, or threats, self mutilating behavior
- 6. Affective instability due to a marked reactivity of mood (intense episodic dysphoria, irritability, or anxiety usually lasting a FEW hours and only rarely more than a FEW days)
- (Bipolar longer than a week continuous for Bipolar I and at least 4 days for Bipolar II with continuous symptoms)
- 7. Chronic feeling of emptiness (felling hollow sometimes reason to cut to feel)
- 8. Inappropriate, intense anger or difficulty controlling anger (frequent displays of temper, constant anger, recurrent physical fights)
- > 9. Transient, stress related paranoid ideation or severe dissociative symptoms

- Over riding concern of these patients is abandonment depression (fear of abandonment, they constantly test relationships producing issues as a test for the partner)
- The ability to see the "gray" in issues is difficult as "black and white" (wonderful vs. awful) thinking dominates (many times carry over from prior traumatic environments when the fight. flight or freeze thought process was dominant)
- This is one of the reasons cognitive therapies are helpful to these patients

#### > Treatments:

- First line : psychosocial / behavioral interventions (therapy)
- Adjunctive: pharmacotherapy

- 56 y/o married war veteran chief complaint "short fuse"
- The symptoms started about 3 decades earlier when he left Viet Nam
- He was field radio operator and never sought help as he felt the need to be independent
- > Symptoms include:
- Uncontrollable rage when unexpectedly startled
- Recurrent thoughts and memories of death-related experiences
- Weekly vivid nightmares of combat operations that led to nighttime fright and insomnia isolation
- Vigilance and anxiety, loss of interest in hobbies that involve people and excessive distractibility

#### EASILY TRIGGERED

- He kept a handgun for self protection but after any type altercation he would have remorse and did not want to hurt anyone
- When someone touches him if asleep it triggers a cue of a time he was on guard duty and dosed off then a mortar round awakened him into action thus promoting the reflex reaction now and frightening people around him
- He had a loving family growing up , they struggled financially as Midwestern farmers then at 20 he was drafted in to the Army and sent to Viet Nam
- This is where he realized his main goal was to get him and his best friend home alive even if it meant killing others.

#### EASILY TRIGGERED

- Upon return he obtained a college degree and a graduate business degree (MBA)
- He chose to work as self employed plumber due to his need to stay isolated
- No substance abuse in long time , in his youth he tried marijuana and alcohol but not current problem
- > His mental status was unremarkable for suicide issues, no psychotic issues
- He was articulate and no pressured speech with good insight and average / above average intelligence
- He did state his personality changed after the war as he transformed from a happy farm boy to a terrified, overprotective soldier
- PTSD would be the obvious scenario

#### EASILY TRIGGERED

- > PTSD as in this case
- > The rule out list below:
- Schizophrenia (schizophrenia criteria for review below)
- Two or more of the following each present for a significant portion of time during a 1-month period and at least one must be from (1), (2), or (3) for longer than 6 months to be schizophrenia (if less than 6 month schizophreniform)
- ► 1. Delusions
- > 2.Hallucinations
- > 3. Disorganized speech (e.g., frequent derailment or incoherence)
- > 4. Grossly disorganized or catatonic behavior
- > 5. Negative symptoms (i.e., diminished emotional expression)
- Schizophrenia not the best choice in this example case

#### TAKE AWAY

- PTSD is common in the general population and can occur at any age, even young children
- The syndrome used to be called "shell shock" "war neurosis"
- Acute Stress Disorder symptoms compatible with PTSD but onsets immediately after the trauma and lasts 3 days up to a month to meet this criteria then it either clears or evolves into PTSD
- PTSD may involve civilian trauma such as car wrecks, tornadoes
- Treatment for Oklahoma tornadoes is a different challenge from Middle East War but just as severe
- Untreated childhood trauma is very emotionally deregulatory, mood instability producer in adults (ACE issues)

#### POST TRAUMATIC STRESS

- (A)Exposure to actual or threatened death, serious injury or sexual violence in one ( or more ) of the following ways:
- > 1. Directly experiencing the traumatic event
- > 2. Witnessing in person the event as it occurred to others
- 3. Learning that the traumatic event (s) occurred to a close family member or friend In cases of actual or threatened death of a family member or friend the event must be violent or accidental
- 4. Experiencing repeated or exposure to extreme adverse details of the traumatic event (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse

PTSD

- (B)Presence of one of more of the following intrusion symptoms associated with the traumatic event beginning after the traumatic event occurred:
- I. Recurrent, involuntary, and intrusive distressing memories of the traumatic event
- 2. Recurrent distressing dreams in which the content and / or affect of the dreams are related to the traumatic event
- S. Dissociative reactions (E.G., flashbacks) in which the individual feels or acts as if the traumatic events were re-occurring
- 4. intense or prolonged psychological distress at exposure to the internal or external cues that symbolize or resemble an aspect of the traumatic event
- 5. Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event

#### PTSD CRITERIA (SECTION B)

(C) Persistent avoidance of efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event

- 1. Avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event
- 2. Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event

#### PTSD CRITERIA (SECTION C)

- (D) Negative alterations in cognitions and mood associated with the traumatic events beginning or worsening after the traumatic events occurred as evidence by two (or more) of the following:
- Inability to remember an important aspect of the traumatic (typically due to dissociative amnesia and not to other factors such as head injury, alcohol or drugs)
- 2. persistent and exaggerated negative beliefs or expectations about one self others or the world (" I am bad", "No body can trusted" "The world is completely dangerous "My whole nervous system is damaged")
- 3. Persistent distorted cognitions about the cause or consequences of the traumatic event that lead the individual to blame himself / herself or others

#### PTSD CRITERIA (SECTION D)

- (D) 4. Persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame)
- 5. Markedly diminished interest or participation in significant activities
- 6. Feelings of detachment or estrangement from others
- 7. Persistent inability to experience positive emotions (e.g., in ability to experience happiness, satisfaction or loving feelings)

## PTSD CRITERIA (SECTION D)

- (E) Marked alterations in arousal and reactivity associated with the traumatic event beginning or worsening after the traumatic event occurred as evidenced by two (or more) of the following :
- I. Irritable behavior angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects
- > 2. Reckless or self destructive behavior
- 3. Hypervigilance exaggerated startle response, problems with concentration
- 5. Sleep disturbance ( difficulty falling or staying asleep or restless sleep )

### PTSD CRITERIA (SECTION E)

- (F) Duration of the disturbance (more than a month)
- The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of function
- The disturbance is not attributable to the physiological effects of a substance
- > ACUTE STRESS DISORDER
- Same symptoms ' but' limited time 3 days to 1 month after the traumatic event

PTSD CRITERIA (SECTION F (DURATION OF THE DISTURBANCE (CRITERIA B, C, D, & E)IS MORE THAN A MONTH

- > Adverse Childhood Experience Questionnaire (ACE)
- We give this to everyone once in the medication clinic and have given last count 4533 tests and 2483 had score above 4 with 727 above 7
- Above 4 increased the risk of lung disease, heart disease and increase of suicidal thoughts at sometime about average 300% more than someone with a 0 score
- It leads to damaged cognitions (the way they perceive the world around them) They lack "resiliency"

#### WHAT NOW?

- Same time as ACE being develop research on kid's brains found toxic stress physically damages a child's developing brain
- When children are overloaded with stress hormone their fight / flight / or freeze mode is constant
- This constant stress produces poor learning in school, difficulty trusting adults or developing healthy relationships with peers at school
- These children can become "loners" to relieve stress, anxiety, depression, guilt, shame and or inability to focus they turn to readily available biochemical solutions ("loners" then more likely to join a gang to belong for the first time)
- Research proves that chronic / severe stress leads to bodily system production of inflammatory response that leads to disease

# ACE RESULTS (WHY DO THEY ACT THIS WAY?)

- ► ACE
- I. Did a parent or other adult in the household swear at you, insult you, put you down or humiliate you?
- 2.Did a parent of adult in house often push, grab, slap, or throw something at you?
- 3.Did an adult or person at least 5 years older ever touch or fondle you or have you touch them in a sexual way or try to or actually have oral, anal, or vaginal sex with you?
- 4. Did you feel no one in your family loved you or thought you were important or special- did your family not look out for one another , feel close to each other support each other?
- 5. Did you feel often you didn't have enough to eat, had to wear dirty clothes, and no one would protect you or were your parents too drunk or high to take care of you or take you to the doctor if you needed it ?

#### RESULTS OF CHILDHOOD CHAOS

- 6. Were your parents ever separated or divorced ?
- 7. Was your mother or stepmother often pushed, grabbed, slapped, or had something thrown at her or sometimes often kicked, bitten, hit with fist, or hit with something hard or repeatedly hit over at least a few minutes or threatened with a gun or knife?
- 8. Did you live with anyone who was a problem drinker or alcoholic or used street drugs?
- 9. Was a household member depressed or mentally ill or did a household member attempt suicide?
- > 10. Did a household member go to prison?

ACE

- This test does not cover all subjects but some core issues but things like bullying etc. are not directly addressed
- The test is easy to give to patients to fill out yes or no while they wait in any type office (it scores itself)
- A threat puts the mechanism in place to react quickly and diverts their ability to make calm more rational decisions to the area for immediate danger and reactions



- The combat veteran or the abused child or domestic terror victim or the tornado victim share common ground
- They are ill prepared to interact with friends, classmates or society
- There is a reason some people act the way they do or complain "no medicine works"
- Dr. Rutter's study displayed that children who lost a parent to death compared to a child that stays in a home with chaos -the child that lost a parent is more stable in the end
- It was not going to daycare or pre-school (the separation) but whether there was chaos in the home while growing to adulthood
- Mom & Dad can have a job as long as when everyone comes home it will not be WW-III or the child being totally ignored because everyone works and is always "too tired". Consistency is the greatest enemy of chaos !

#### ACE / TRAUMA

- 10 steps to help with resiliency
- > 1. Visualize success
- > 2. Boost self esteem
- > 3. Enhance efficacy, take control
- > 4. Become more optimistic
- ► 5. Manage stress
- 6. Improve decision making
- > 7. Ask for help
- > 8. Deal with conflict
- ⊳ 9. Learn
- ► 10. Be yourself

### ITS NOT ROCKET SCIENCE

- It sound simple, put yourself in shoes of a child (before 18) that has a high ACE component- all 10 of those simple suggestions are no where in reach
- Remember the average ACE score in 2500 of our 4500 ACE tests was above 4 ! Oklahoma has a child / parenting / violence that has got to trend the other way for production of healthy adults both mentally and very much so physically
- Lung /smoke/ relieve tension , Stress / hypertension/ CV disorders
- Obesity / comfort food / cholesterol / joint problems to name a few

#### RESILIENCY

- The children that grow to adulthood without constant chaos, danger or various types of abuse consistently develop resiliency
- As example 10 areas that help ensure resiliency rather than constant emotional terror of the chaos from the home environment

#### RESILIENCY

- A man in his 30's (African American) presents to ER with police. There was a referral form indicating he has schizophrenia and "emotionally disturbed person" the note stated
- One of the police officers said he offered to pay them for sex on the way to the ER and stated he was the "New Jesus" and upon arrival he would not sit but ran throughout the ER which ended in a restraint and an injection
- In restraints he remained giddy agitated, talking about receiving messages from God. When ask about sleep he stated he did not need to sleep anymore as he was "touched by Heaven"
- He had rapid disorganized and difficult to understand speech
- He required some lorazepam in addition to the prior injection but did not sleep but calmed down
- It was noted about 2 years ago he had another "spell" like this one

#### WHAT'S MY DISORDER

- It was established he did not nor had recently used drugs
- He denied any other hallucinations other than "God talking to him" He did go into great detail regarding any question even such subjects as the date
- He remembered the names of the police officers that brought him to the ER He refused to take cognitive screening test but there were no localizing neurological symptoms.
- He just finished teaching a semester and was a middle school math teacher Family stated few weeks earlier the family noted he was more argumentative and would start to talk of the "Gifts" he was receiving
- His lab was all normal to include toxicology

#### DISORDER?

- Clearly some type of psychosis and no substance abuse history
- Cluster of symptoms: irritable mood, expansive, grandiosity, diminished need for sleep, pressured speech, racing thoughts distractibility, agitation and sexually inappropriate behavior. He has blisters on his feet from constant walking
- He met the criteria for bipolar so the psychotic symptoms were impressive but they would be part of the bipolar
- 34 year old math teacher that just finished his teaching semester.
  People with schizophrenia very rarely are able to maintain a highly demanding job like teaching
- Bipolar illness people are often quite functional between episodes

#### DISCUSSION
- This patient was psychotic in relation to the grandiosity, he was energetic, no loss of emotion, his speech is understandable
- He functions at a high level of stress employment
- > He is 34 and the disorder has not presented in this way in 2 years
- The medication can stabilize the mood and eliminate almost all the symptoms
- This current spell came on gradually but is episodic (schizophrenia and borderline are continuous)
- Bipolar is a biological disorder in the sense that usually medication is the mainstay for stabilizing the mood and mood stabilizers are treatment of choice

#### TAKE AWAY

- Important changes in the criteria in the DSM-5 that make clarification of Bipolar disorder much more organized
- Symptoms of mania must be present for at LEAST a week most of the day nearly everyday and at least 4 days for hypomanic
- This should help make explicit the requirement that these hallmark symptoms of Bipolar I or II Disorder needs to be present for the diagnosis to be made!
- Another change is if mania or hypomania emerges during antidepressant or ECT treatment but persists at full syndrome level beyond the physiological effect of treatment it can be considered sufficient evidence for a diagnosis of Bipolar Disorder

## BIPOLAR DISORDER

- > 2.1 % of the population- 1:1.1 female to male ratio
- > 10% to 20% MORTALITY DUE TO SUICIDE
- Episodic course
- Gradual changes in mood (days to weeks)
- SI/SA less common
- Psychotic symptoms only in the presence of mood symptoms
- Family history of mood disorders
- Interpersonal relationships usually preserved

# BIPOLAR DISORDER

- Distinct period of abnormally and persistently elevated expansive or irritable mood and abnormally and persistently increased goal – directed activity or energy lasting at LEAST 1 week and present most of the day nearly every day (or any duration if hospitalized)
- During the period of mood disturbance and increased energy or activity three (or more) of the following symptoms (four if the mood only irritable) are present to a significant degree and represent a noticeable change from usual behavior:
- > 1. Inflated self- esteem or grandiosity
- 2. Decreased need for sleep (e.g., feels rested after only 3 hours of sleep)

#### MANIC SYMPTOMS

- > 3. More talkative than usual or pressure to keep talking
- 4. Flight of ideas or subjective experience that thoughts are racing
- 5. Distractibility (i.e., attention to easily drawn to unimportant or irrelevant external stimuli) as reported or observed
- 6. Increased in goal directed activity (either socially at work or school or sexually)
- 7. Excessive involvement in activities that have a potential for painful consequences (e.g., engaging in unrestrained buying sprees, sexual indiscretions or foolish business investments)
- Remember 3 or more or 4 or more if just irritable mood!

#### MANIC

- C. The mood disturbance is sufficiently severe to cause marked impairment in social or occupational functioning or to necessitate hospitalization to prevent harm to self or to others or there are psychotic features
- D. The episode is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication, other treatment)
- HYPOMANIC same as manic but symptoms last at least 4 consecutive days and present most of the day nearly every day

#### MANIC

- The one disorder of the three that is only biologically driven is Bipolar disorder I & II
- Usually a family history of a mood disorder (e.g., depression)
- The emergence of a manic first episode in and individual older than 35 years should raise the level of suspicion for an underlying medical issue



Neurological disorders

Infectious disorders

Neoplastic disorders

Endocrine disorders

Inflammatory disorders

#### CONDITIONS THAT MAY CAUSE MANIA

- Alcohol
- > Amphetamines
- Cocaine
- Methylphenidate
- Pseudoephedrine
- > Amantadine
- > Antidepressants
- Baclofen
- Bromocriptine
- Anabolic steroids
- > Theophylline
- This not every medication but a representative example

# SUBSTANCES AND MEDICATIONS THAT MAY CAUSE MANIA

- 5 or more of the following : (continuous 2 weeks showing change from previous function)
- 1. Depressed mood most of the day nearly everyday by the report ( e.g., feel sad, empty, or hopeless) (tearful) or observed by others
- 2. Marked diminished interest or pleasure in all or almost all activities most of day nearly everyday (anhedonia)
- > 3. Significant weight loss or decrease appetite everyday
- > 4. Insomnia or hypersomnia
- 5. Psychomotor agitation or retardation nearly everyday observable by others

# MAJOR DEPRESSION (BOTH ENDS OF THE BIPOLAR)

- 6. Fatigue or loss of energy nearly every day
- 7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self reproach or guilt about being sick)
- 8. Diminished ability to think or concentrate or indecisiveness, nearly every day (either subjective account or observed by others)
- 9. Recurrent thoughts of death (not just fear of dying) recurrent suicidal ideation without a specific plan or a suicidal attempt or a specific plan for committing suicide
- These symptoms cause clinically significant distress or impairment in social, occupation or other important areas of functioning

## MAJOR DEPRESSION

- With mood congruent psychotic features the content of all delusions and hallucinations is consistent with the typical depressive themes of personal inadequacy, guilt, disease, death, nihilism, or deserved punishment
- This type of depression is seen somewhat often in geriatric patients and sometimes it is a signal that at some later date dementia may occur more than with other geriatric patients
- In order to treat adequately an antipsychotic must be combined with an antidepressant for the syndrome to resolve- when the psychosis has subsided the antipsychotic can be weaned and continue the antidepressant

# MAJOR DEPRESSION WITH PSYCHOTIC FEATURES

#### The goal is to stabilize the mood rather than increase or decrease it

There appears to be considerable inter-individual variation in the efficacy and tolerability of various combinations in bipolar disorder making their use potentially beneficial for some and problematic for others

# BIPOLAR DISORDER TREATMENTS

- Traditional mood stabilizers vary in their antidepressant (vs. antimanic) effects
- Lithium has been superior to placebo in bipolar depression its stronger influence is with mania treatment and divalproex has the same profile
- Lamotrigine seems more helpful for bipolar depression than mania ( usually used for maintenance due to time required to obtain therapeutic level)
- A combination of medications to stabilize and maintain is necessary using atypical antipsychotic mood stabilizer and either lithium or an anti-seizure medication

# MANIC MEDICATIONS

#### Think pervasive vs. episodic (Bipolar vs. Borderline or PTSD)

Mood swings – how quick do they occur, what kind of situations "cause" the swings (a) relationship or work issues (b) when I am startled if asleep I become very angry all at once (c) Over the past few weeks or maybe it's been a month my wife says I am more irritable and seem to act toward them as if I am much smarter about everything and most of the time I am between you and me

#### COMBINING & SEPARATING DISORDERS

- My mood is awful and no one has been able to help me none of the antidepressants work. One or two worked the first week then stopped my therapist I have seen twice said to ask if I am bipolar?
- Questions important regarding this issue:
- How long due the mood swings last and is there usually a situation that causes your mood to swing?
- What was the ACE score?
- Substance abuse?
- Relationship status?

Then if sounds more BPD aske the questions from the list for BPD and the recommended treatment for BPD is therapy with ancillary medications to try and help with base line mood stability but will not fix it. The patient needs to know this about BPD.

#### SEPARATING

- PTSD always be vigorous about identifying the trauma not just a generality explanation but a good history and understanding of severity
- > PTSD traits versus, BPD as result of trauma but not to level of PTSD
- PTSD with mild TBI (many patients do not tell about their TBI without asking)
- PTSD patients usually have at least one symptoms from all the categories listed in the DSM-V
- Patients can have BPD, PTSD and bipolar (might want to refer those to psychiatry)
- > A PTSD with a high ACE has worse prognosis than a lower ACE score

#### SEPARATING

- PTSD is the development of characteristic symptoms following exposure to one or more traumatic events. Emotional reactions to the traumatic event (fear, helplessness, horror) are no longer a part of Criterion A. The clinical presentation varies.
- In some individuals, fear based re-experiencing, emotional, and behavioral symptoms may predominate. In others, an hedonic or dysphoric mood states and negative cognitions may be most distressing. In some arousal and reactive-externalizing symptoms are prominent and other dissociative symptoms predominate and some have combinations
- Directly experienced traumatic events in Criterion A include, but not limited to exposure to war as a combatant or civilian, threatened or actual physical assault, threatened or actual sexual violence, being kidnaped, being taken hostage, terrorist attack, torture, incarceration as a prisoner of war natural or manmade disasters and severe motor vehicle accidents

#### PTSD SUMMARY

- To try and decrease a little more confusion schizoaffective is an uninterrupted period of illness during which there is a major mood episode concurrent with criterion A of schizophrenia
- Delusions or hallucinations for 2 or more weeks in the absence of a major mood episode during the lifetime duration of the illness
- Symptoms that meet criteria for a major mood episode are present for the majority of the total duration of the active and residual portions of the illness

# SCHIZOAFFECTIVE