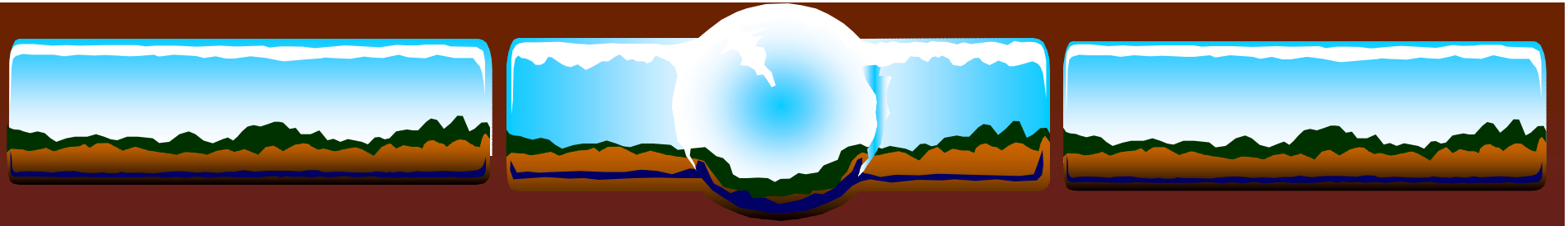
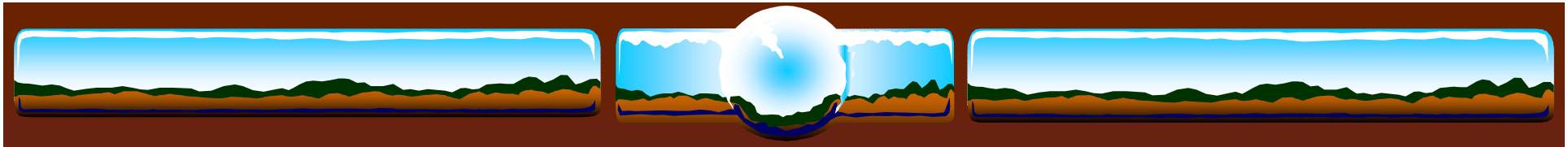


DEPRESSION

In

Children & Adolescents



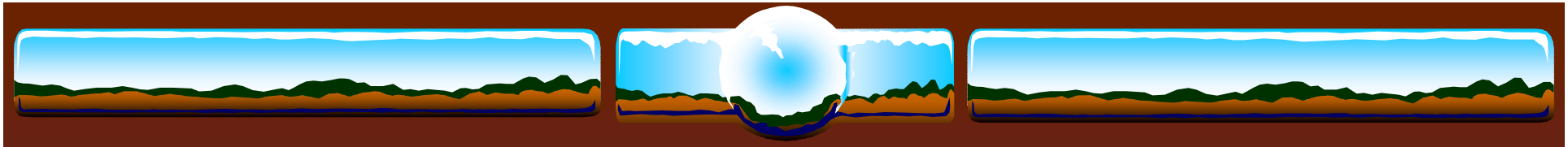
Epidemiology

MAJOR DEPRESSION

- Pre-schoolers: 0.3% (community), 0.9% (clinic)
- School age: 2% Boys>Girls
- Adolescents: 5% (community), 20-40%(Hospital)
- depressive sx 14 –62%, Duration: 26 –36 wks Girls>Boys

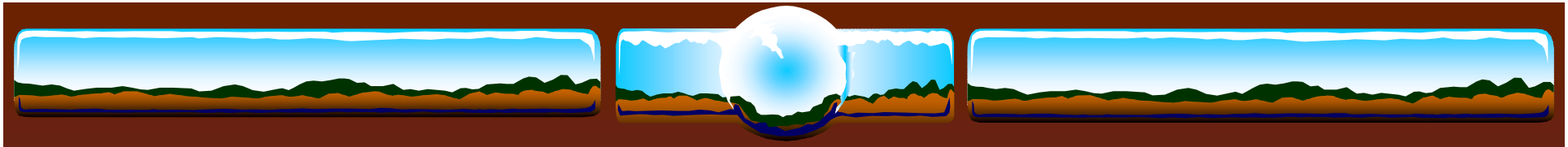
DYSTHYMIA

- School age: 2.5% Adolescents: 3.3% Boys=Girls
- Commoner in rural, poor, lack of strong religious & spiritual beliefs, disrupted parenting etc-Resnick et al, Clark,Ge.



Epidemiology-Impact

- 2nd highest disabling disorder.
- 2nd highest D.A.L.Y (Murray & Lopez)
- Suicide is 3rd leading cause of death in teens.
- 1st episode of depression sensitizes kids to future episodes
- Commonly co-morbid with anxiety disorders, substance use disorders,externalizing disorders.

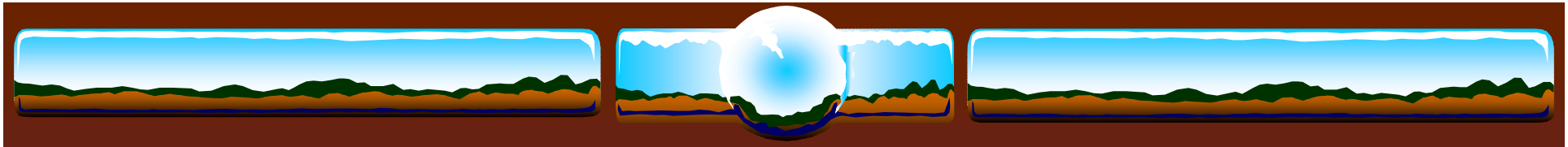


DIAGNOSIS

- May be based on symptom clusters
- May also be based on disability profile.
- DSM IV & ICD 10 are based on symptom cluster
- Need to distinguish depressed mood & depressive states from clinical major depression.
- Depressive states can occur in a number of medical illnesses & through the use of substances & medications.

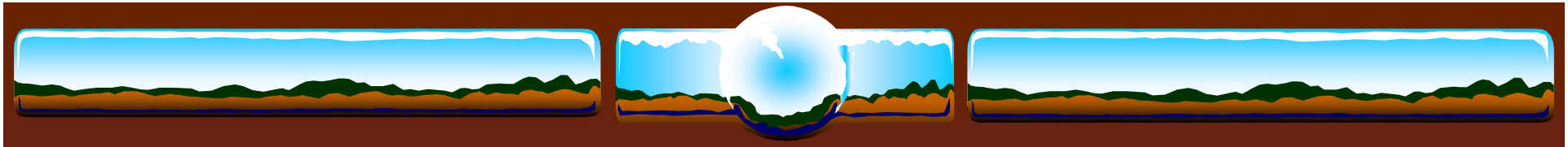
Diagnosis

- Depressive states can occur due to medical conditions such as: Neurological disorders (Parkinson's, Huntington's, PSP, CVA, Neoplasms, CNS infections, epilepsy,Wilson's disease etc) Systemic infections, Endocrine disorders, Inflammatory disorders, Vitamin deficiencies, Cancer, Cardiac, Respiratory, Renal diseases.



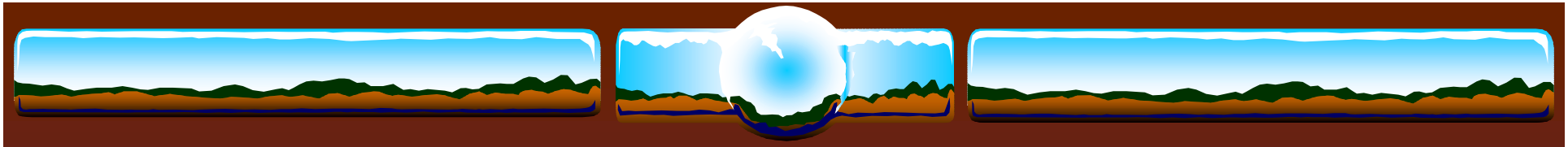
Diagnosis

- Depressive states can also occur when using: Anti-biotics, Analgesics, Anti- cancer drugs, Cardiac drugs, Sedatives, Hypnotics Stimulants, Steroids.
- It can occur in premenstrual states & begins in the last week of the luteal phase (ovulation to menses) & ends a few days after the onset of the follicular phase (onset of menses).
- Intoxication & Withdrawal states of Alcohol, THC, Opioids, Stimulants, Nicotine, Cocaine, Glue etc.



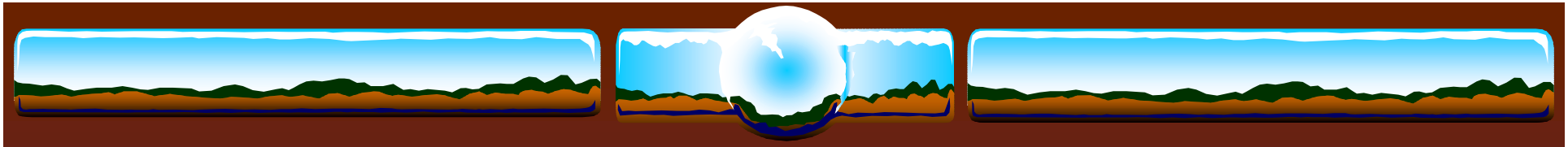
Diagnosis

- History, Parent reports, School Reports, Self Reports, Other reports, Play, Art, Groups etc.
- Unstructured interviews; Semi structured interviews- Kiddie –SADS (6-17 yrs), DISC-R (8 to17 yrs); Rating scales such as Child depression rating scale (Birleson), (Posnanski,Kovacs), HADRS, Beck's scale, Reynolds adolescent depn. scale etc.
- Observational instruments- Naturalistic (Kaminer et al or Lab measures of interactions (Hops et al)



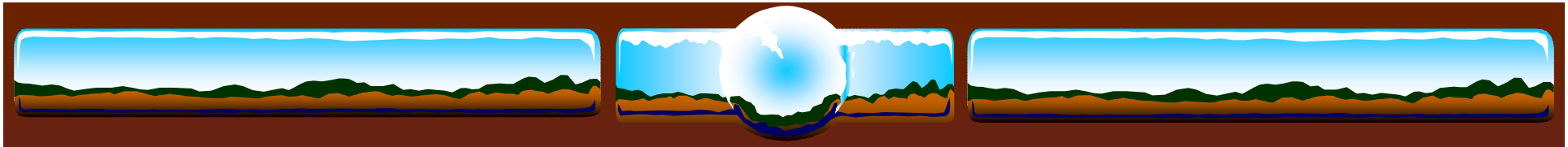
Diagnosis- Lab measures

- Emotions, Affect regulation, Problem solving, Non verbal behavior, Conflict, Cognitive content, Speech, Physical contact & Reported symptoms are studied.
- Cognitive schema: Self schema (Cole & Jordan, Prieto et al), Interpersonal schema (Supportive interaction processing tasks-Shirk et al, Social information processing interview- Quiggle et al)



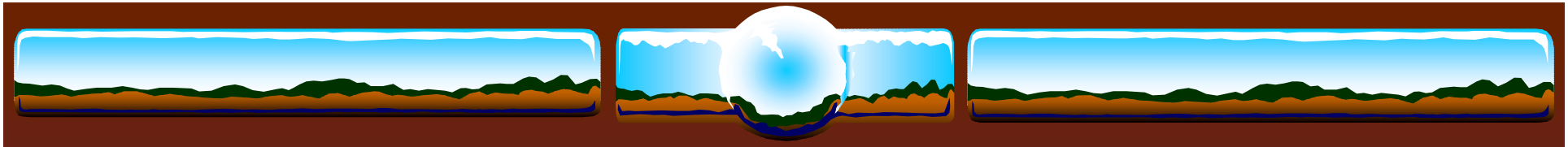
Diagnosis

- Berkeley Puppet Interview- Measelle et al (4-7 yrs)
- State dependent poorer performance in performance IQ tasks –Brumbank et al
- Sleep studies: Shorter REM latency- 70mins or less, Prolonged sleep latency.



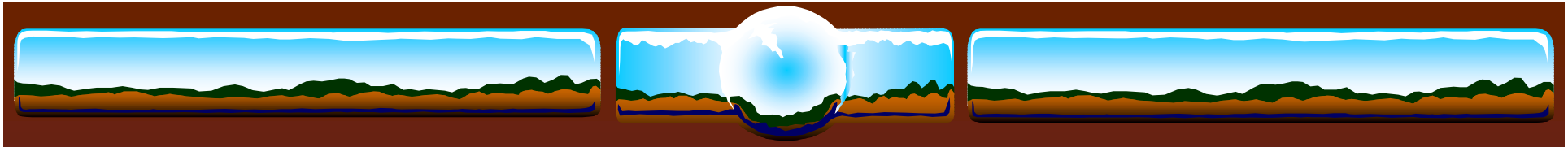
Diagnosis-Major Depression DSM IV

- Five or more of the following with at least one of them being irritability/depressed mood OR loss of interest or pleasure
- Weight loss(>5%) or failure to achieve weight.
- Insomnia or hypersomnia
- Psychomotor agitation or retardation, Fatigue, Worthlessness, Guilt, Reduced attention & concentration,Death wishes, Suicidal ideation, attempts
- Impairment in social & school functioning
- Not due to substances, medical conditions or normal bereavement. Not a mixed episode with mania



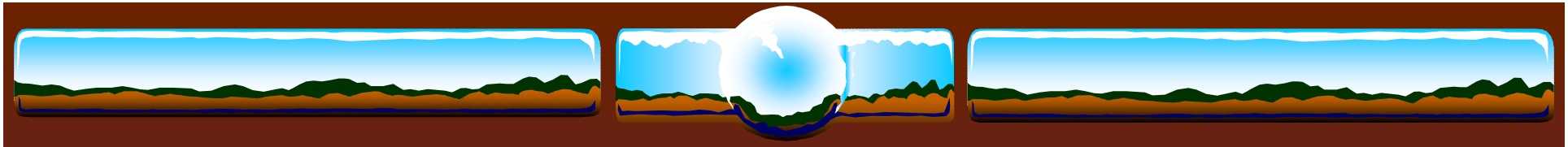
Diagnosis-Depression Contd.

- Mild, Moderate or Severe (+- Psychotic sx)
- With Catatonic sx, Melancholic sx, Atypical sx.
- With or without post partum onset.
- Seasonal pattern if any
- Course with or without inter episode recovery.



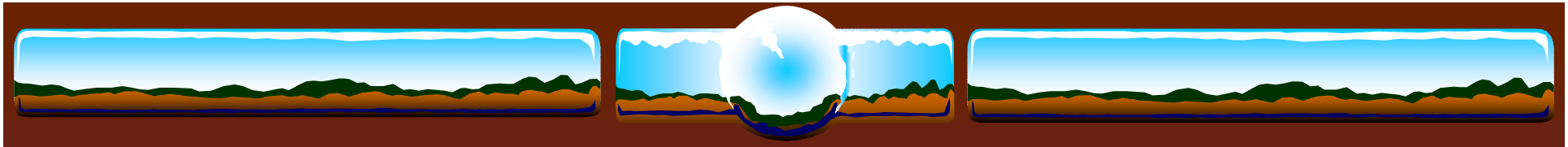
Diagnosis-Dysthymia

- Duration of 1 year of symptoms such as-Persistent irritability, Loss of appetite or over eating, Low self esteem, low concentration, low energy, insomnia or hypersomnia, Hopelessness.
- In the 1st year no Major depression (may be present after 1st year)
- Affects social & school functions
- Not due to Medical problems, substance abuse, psychosis.
- Not associated with mixed, manic, hypomanic episodes
- Early onset(<15yrs) or late onset (>15yrs of age)
- With or without atypical features



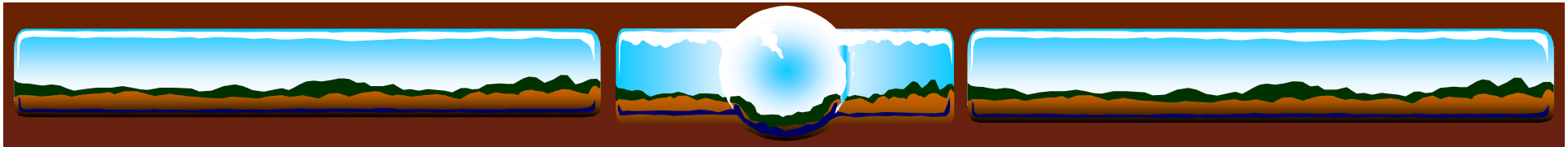
Depression

- With substance abuse
- With General medical Conditions
- Recurrent depressive episodes



Co morbidities

- ADHD: 2.4% to 40% (Angold, Costello)
- CD/ODD: 4 to 25% (Angold, Costello)
- Anxiety Disorder: 16 to 58% (Angold, Costello & Farmer)
- Substance use disorders (adolescents) 5 to 60% (Murphy, Taylor & Sharma)
- Bipolar disorder develops in 20-40% kids with depression
- Families: Depression, Alcohol, Anxiety, ASPD.



Management

Principles

Assessment, Formulation, Feedback, Therapeutic alliance & Interventions

Planning

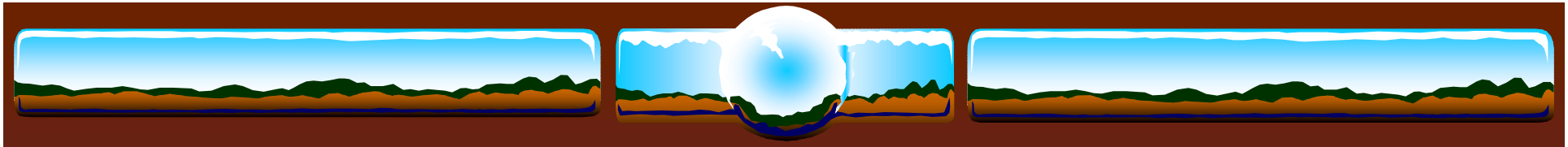
Safety & level of risk

Site of management

Goal planning (short term & long term)

Assessment (history, investigations, structured observations)

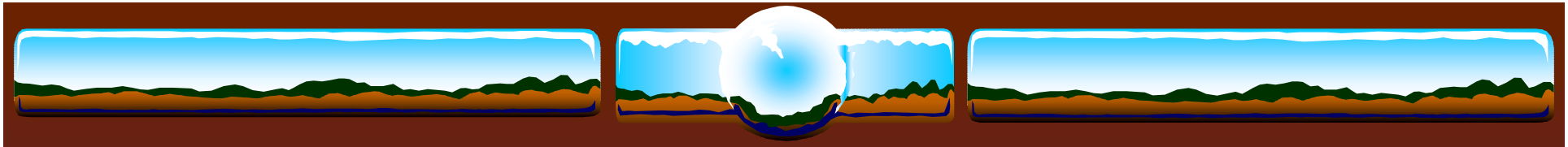
Treatment



Treatment

Pharmacological –Medications

- No consistent evidence of efficacy in mild & moderate depression in kids & adolescents. ?more risks than benefits.
- Possibly efficacious in Severe depression with psychotic sx, melancholia, atypical features, suicidality etc.
- 50% patients relapse 1-2 yrs after successful treatment & 70% 5 yrs after end of treatment.6-10% cases are protracted: young age of onset, severe 1st episode,comorbid disorders, parents with psychiatric disorders, poor compliance, negative life events, poor psychosocial functioning



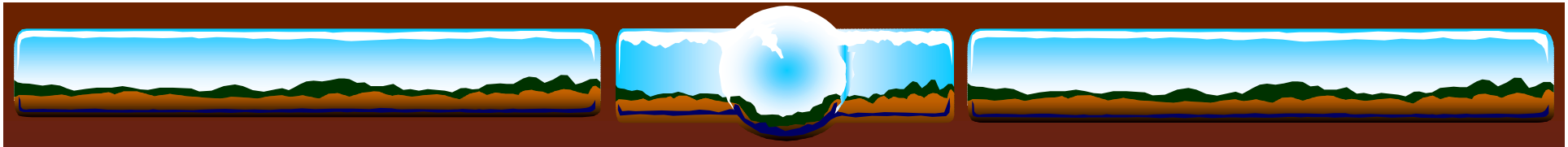
Medications

1st line

- SSRIs Specific serotonin reuptake inhibitors- Fluoxetine, Sertraline, Citalopram & Fluvoxamine

2nd line

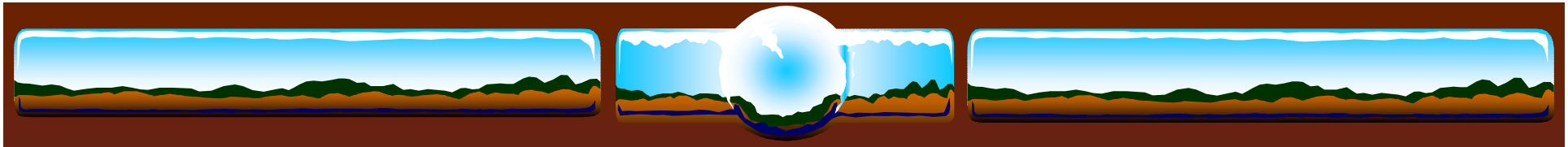
- SNRIs Serotonin Norepinephrine reuptake inhibitors- Venlafaxine-BANNED FOR KIDS IN AUSTRALIA
- Norepinephrinergic Serotonergic drugs-Mirtazapine
- Serotonin antagonist reuptake inhibitors-Nefazodone
- Norepinephrine Dopamine reuptake inhibitors-Bupropion
- Reversible inhibitor of monoamine oxidase A (RIMA)-Moclobemide



SSRIs, SNRIs

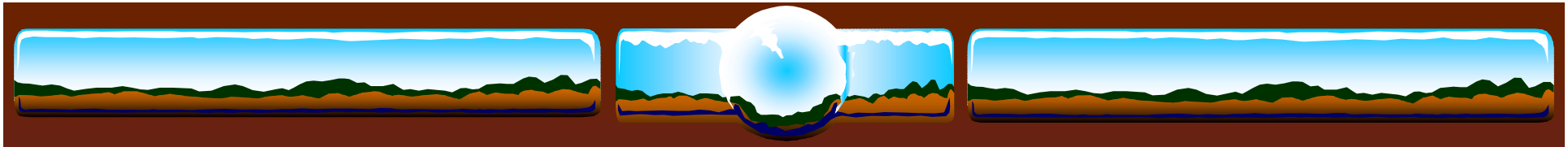
Side effects (Suicidal ideation reported with all SSRIs)

- Sertraline- loose stools, sedation/insomnia,dry mouth, erectile dysfunction.
- Paroxetine-nausea constipation, somnolence
- Fluvoxamine-nausea, headache, somnolence/insomnia, erectile dysfunction
- Fluoxetine-anxiety, nausea, erectile dysfunction, dry mouth, headache.
- Venlafaxine-nausea, dizziness, dry mouth, suicidal ideas somnolence/insomnia, high blood pressure (higher doses), ejaculatory dysfunction, constipation.



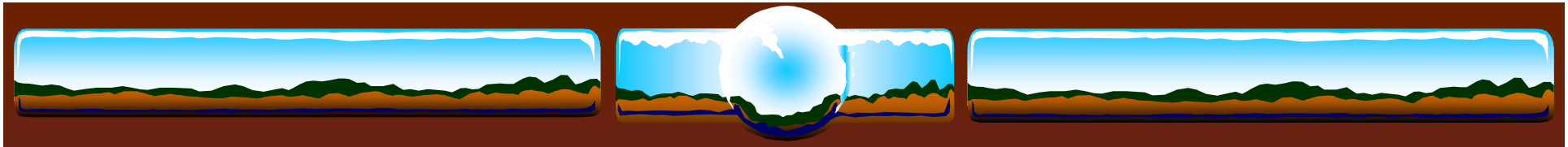
SSRIs, SNRIs-Discontinuation Syndrome

- Occurs due to rapid discontinuation of short half life drugs
- Somatic sx: ataxia, dizziness, nausea, vomiting, fatigue, lethargy,tremor, insomnia, migraine like auras.
- Psychological sx: anxiety, agitation, depersonalisation, irritability, reduced concentration, lowered mood, crying spells, confusion, memory problems etc
- Commonest in Paroxetine & Venlafaxine
- Less common- Sertraline Least commonest- Fluoxetine.
- Resolves in 2-3 weeks without treatment



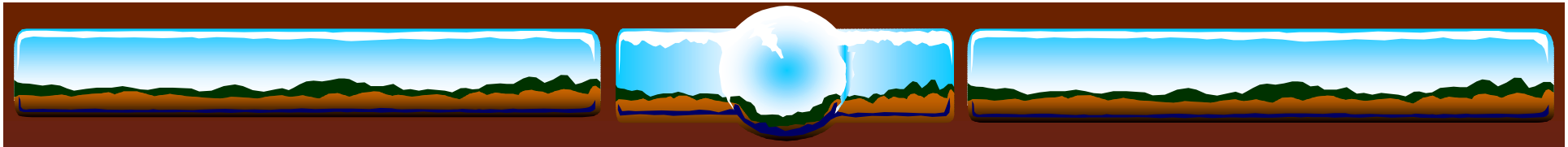
SSRIs, SNRIs-Studies of efficacy

- Fluoxetine (Emslie et al, Simeon et al)
- Venlafaxine (Mandoki et al)
- Setraline (McConville et al, Ambrosini et al)
- Paroxetine (Keller et al)



ECT

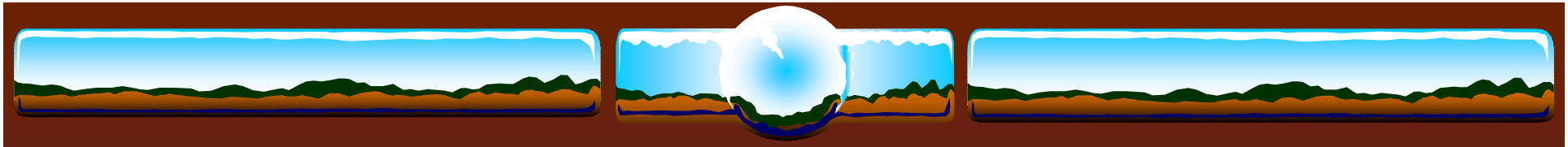
- Inadequately used, much maligned & misunderstood (Murray & Ley)
- May be indicated in: Older adolescents, Severe Depression,Bipolar depression, Psychotic & Suicidal depression where immediate response is required, Mood sx in schizophrenia or schizoaffective disorder. Also indicated when no response or severe side effects to medications occur & where adequate facilities & trained staff are available.
- Not ideal in young kids, co-morbid personality disorder, no previous trial of medications, only mild sx, inadequate facilities or trained staff.



ECT

Principles of practice

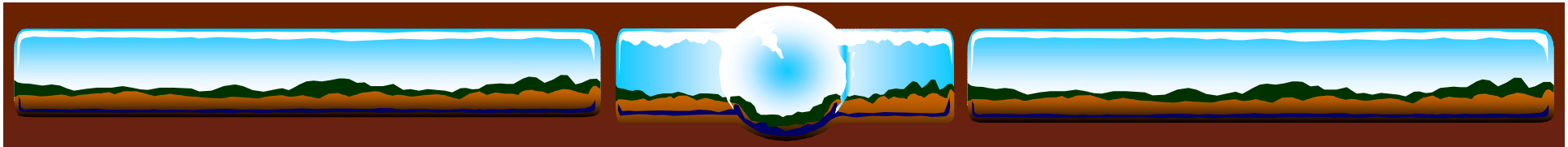
- Thorough diagnostic review to clarify diagnosis, review of past treatments to ensure adequate trial of medications
- Medical review
- Review of concurrent drug use. Stop Benzodiazepine, SSRIs, Lithium etc
- Baseline tests-bloods,CT,MRI.
- Informed consent
- Anaesthetic-Methohexitone, Thiopentone. Brief pulse.
- Stimulus dosing-Bilateral-threshold, Unilateral-suprathreshold. Bilateral =Unilateral in efficacy



Psychological therapies

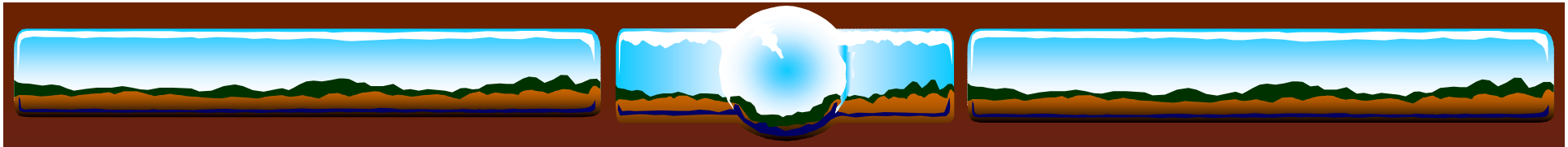
Cognitive behavioral therapy

- Many studies supporting the claims of efficacy
- Based on the assumption that interventions aimed at developing more adaptive cognitive, attributional & behavioral patterns lead to better symptom & functional outcomes (Lewinsohn, Clarke).
- Depressed kids tend to make more stable internal & global attributions that are negative, Depressed youths make more cognitive errors & have negative attributions about self, world & future.Negative attributions predispose people to future depression.



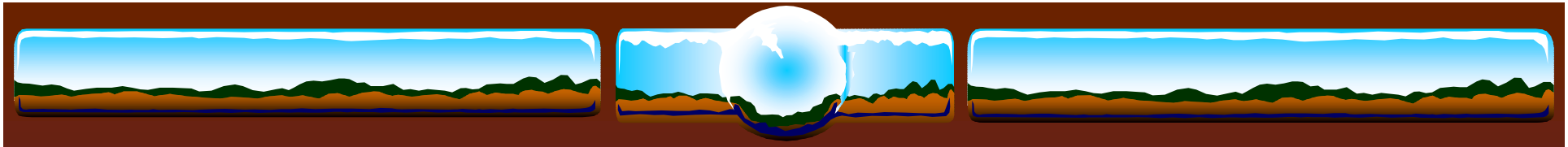
CBT

- Group CBT with (9 sessions) with 4- monthly booster sessions was effective but not added parent sessions. (Lewinsohn & Clarke)
- CBT vs Systemic & Supportive family work. Family work was superior (Brent et al)
- Fifth et al-Therapeutic support group better than Social skills training group
- Mufson, Rosello- Compared IPT with CBT & wait list control. IPT=CBT in reducing depressive sx but IPT better in social outcomes.
- In treating subsyndromal depressive sx CBT is useful.



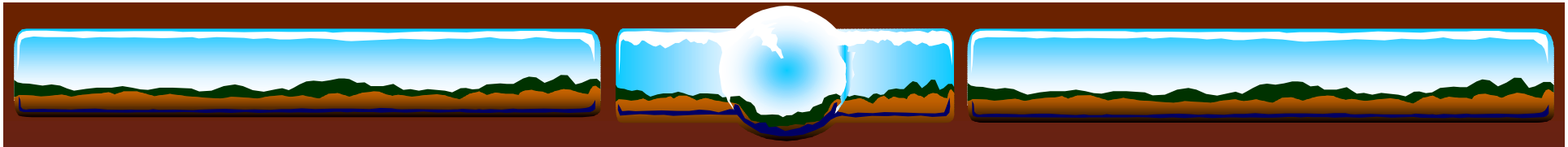
CBT &Family therapies

- CBT does not change cognitive distortions even when it is successful in reducing symptoms.
- Family work is based on an interactional model of depression in kids
- It is based on the finding that high family dysfunction is associated with a severe 1st episode (?cause or effect) (Mc Cauley et al). Also, high EE is associated with lower recovery.Family loading is substantial in child depression, family interactions are dysfunctional (?cause or effect) etc



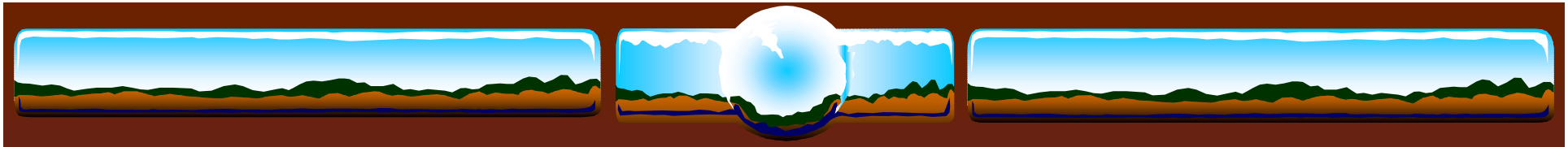
Family therapies

- Brief family psychoeducational work is beneficial (Brent et al, Asarnow et al). When combined with CBT groups for kids & youth it helps generalize positive skills training across the family & reduces relapse (Asarnow et al).
- Diamond et al- family treatment for adolescents that focuses on attachment between adolescent & parents as a base for individuation for the adolescent. Preliminary data indicate significant success.
- No support for extended family work.
- CBT + Brief family work is ? Helpful in preventing relapse. 40% relapse even after treatment (Wood et al).



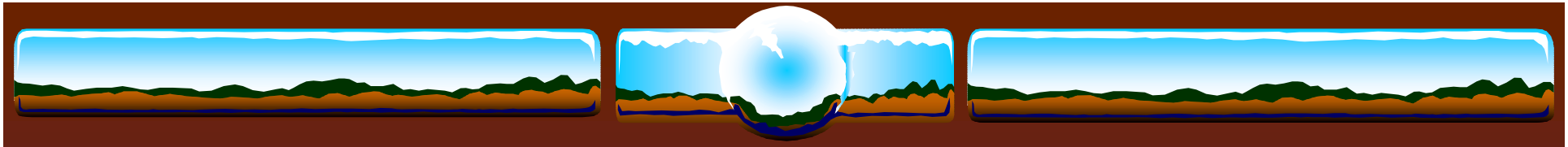
Consequences-why treat depression?

- Depression in kids & youth is increasing (Fombonne)
- It is associated with serious impairment, high risk of suicide & relapse (Kovacs)
- Higher levels of depression in adolescence is associated with adult depression (Harrington) but childhood depression is not similarly associated (Rao, Weissmann). Co-morbid conduct disorder is common with depression & is associated with higher levels of depression in adulthood. There is a higher level of adult alcohol disorders & antisocial disorders following adolescent depression + co-morbid conduct disorder.



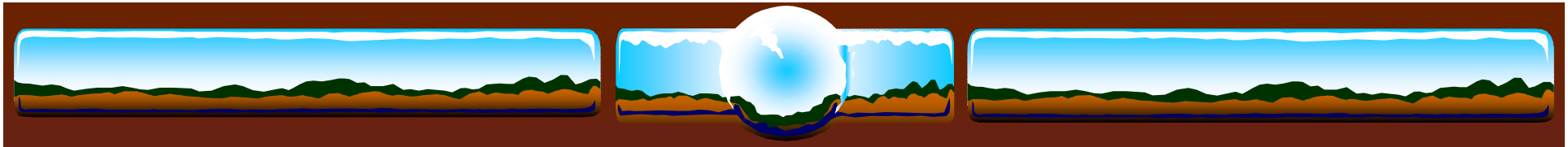
Suicide & Self harm

- Life time estimates of attempts range from 1.3 to 3.8% among males & 1.5 to 10 % in females.
- Risk of repeating suicidal behavior varies from 10 to 42%. Among suicide completers the rate of suicide attempts is 20 times that of controls.
- Rate of subsequent suicide in attempters is 1% per year.



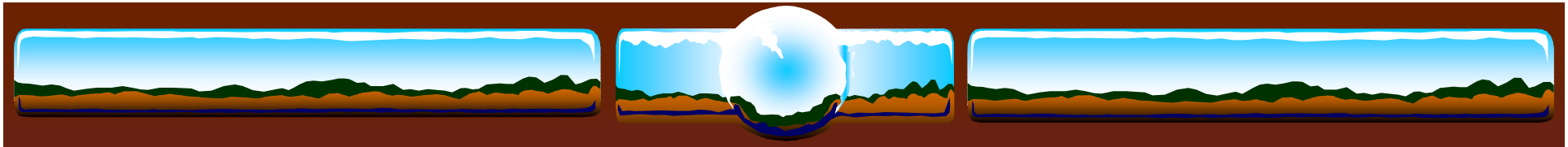
Suicide

- Commonest associated diagnosis is depression.
- Also associated are Cluster B PD, Conduct disorder, Substance abuse.
- More the co-morbidity greater the risk of suicide.
- Psychological characteristics are Hopelessness, Hostility & Impulsivity.
- Family related factors such as parental depression, suicidality, substance use, being abused, raped, hostility with family, homelessness etc are important
- Only a small percentage attend services. Severely depressed kids do not attend clinics or schools.



Suicide

- Suicidal ideation & attempts can predispose to depression (Flisher)
- In failed attempts-High intentionality, lethality & persistent death wish indicate future possible successful attempts.



Management of suicidal youngsters

- No suicide contract
- Increasing treatment compliance through assertive & flexible outreach work
- Treating co-morbid psychiatric conditions
- Remediation of specific cognitive, social, problem solving deficits
- Improving affect regulation
- Increasing family involvement