Developmental Disability and Psychiatric Disorders

Assessment and Intervention for Challenging Behaviors

Prevalence of Aggressive Behaviors (Crocker, et. al. 2006)
- 12-month overall prevalence of aggression in over 3000 individuals having ID: 52%
- Property damage: 24%
- Verbal aggression: 37%
- Self-injurious behavior: 24%
- Physical aggression: 24%
- Sexual aggression: 9.8%
- Majority classified as mild in severity
- 4.9% of aggressive incidents caused injury to victim

Aggression and Self-injury
- May be the final manifestation of many different factors
- Usually have multiple co-occurring causes
- Cannot be addressed until we understand, as specifically as possible, the underlying reasons for the behavior
- Our best interventions are proactive
- Medications do not “treat” aggression or self-injury: need to distinguish treatment from chemical restraint

Assessment and Strategic Intervention

Bio-Psycho-Social-Spiritual Model
**Assessment**

- What medical and constitutional factors contribute to the behavior?
- What environmental factors contribute to the behavior?
- What situational factors contribute to the behavior?
- What is the person communicating?
- What psychological and social factors contribute to the behavior?
- What factors maintain the behavior (learned behavior)?
- Is there an underlying psychiatric disorder?

**Constitutional factors: the importance of pre-natal, developmental, and family history**

- Mother’s health and well-being
- Drug and alcohol exposure
- Genetic syndromes
  - Lesch-Nyhan
  - Down Syndrome
  - Cornelia De Lange
  - Williams Syndrome
  - Autism spectrum
  - Family psychiatric history

**Medical factors that can contribute to challenging behaviors: the importance of a comprehensive medical history**

- Seizures: auras, ictal, post-ictal, inter-ictal
- Infections
- Seasonal allergies
- Thyroid disease
- Arthritis and other causes of bone pain
- GI disorders (heartburn, peptic ulcer, food allergy, constipation, hemorrhoids)

**Medical factors that can contribute to challenging behaviors: the importance of a comprehensive medical history**

- Sleep apnea or REM sleep disorders
- Hyper- or hypo-glycemia
- Migraine, sinusitis, or other headache
- Dysmenorrhea
- Dental pain
- Loss of vision or hearing
- Lack of physical exertion
- Dermatitis, eczema, dry skin
Medical factors that can contribute to challenging behaviors: adverse effects of medications

- Benzodiazepines
- Antidepressants
- Antipsychotics
- Stimulants
- Steroids (Prednisone)
- Anticonvulsants (especially Phenobarbital and myoline)
- Other substances: alcohol, illicit drugs, caffeine, nicotine

How do medications contribute to the challenging behavior?

- Sedative effect → impaired cognitive function → poor judgment and impulse control
- Increased irritability or restlessness (Keppra, akathisia from antipsychotics or SSRIs)
- Changes in mood: α agonists, β blockers, antipsychotics, Phenobarbital, phenytoin, myoline
- Uncomfortable adverse effects: dry mouth, constipation, GI pain, nausea, headache
- Lowered seizure threshold

Remember to consider mundane causes of pain and discomfort

- Poorly fitting shoes or clothing
- Dentures
- Dry skin
- Immobility
- Cuts, scratches, bruises, over-exertion
- Thirst or hunger
- “Minor medication side effects”: dry mouth, fatigue, dry eyes
- Iatrogenic sleep disturbance: bed checks, door alarms, med passes, toileting programs

Environmental and situational factors: the importance of a comprehensive history of present illness

- Severity – Mikkelson and McKenna, 1999
- Frequency
- Duration
- Distribution
- Specific situational and environmental factors: who, what, when, where, how?
Environmental factors that may influence challenging behaviors

- Noise
- Crowding
- Temperature
- Odors
- Proximity to food
- Vulnerability to peers
- Ability to choose or control the environment

Clues to a situational or environmental cause for challenging behavior

- Precipitous change in behavior without a medical cause.
- Occurrence of behavior in only one environment or context.
- Occurrence only at a specific time or in a narrow range of times.
- Occurrence only around particular individuals.

Challenging behavior and communication

- The behavior may be the communication
- May result from problems with receptive or expressive language
- Communications assessment
- Training for staff in communications

Social issues that may impact challenging behaviors

- Social and recreational opportunity: is the person bored?
- Are activities appropriate to the individual’s abilities?
- Are activities culturally sensitive?
- Do behaviors function to control the interpersonal milieu?
- Legal issues: Are legal consequences a deterrent? When are legal consequences appropriate?
Family issues that may impact challenging behaviors
- Family involvement, comparisons with peers
- Sibling relationships
- Family reaction to the behavior
- Past history of family’s interventions regarding the behavior

Spiritual and religious issues that may affect challenging behaviors
- Values and mores, moral development and capacity
- Sense of belonging, meaning
- Hopelessness vs. redemption and hope
- Giving back to others

Learned behaviors
- Avoidance
- Control
- Attention and engagement of others

Psychiatric disorders that may be associated with aggression or self-injury
- Mania
- Psychosis
- Depression
- PTSD
- Obsessive Compulsive Disorder
- Panic disorder
- Disorders associated with repetitive movements (Tourette, OCD)
- Dementia
Interventions for aggressive behaviors

- Environmental management
- Stimulation
- Temptation
- Social intervention
- Peer interactions
- Interactions with authority
- Recreation
- Family intervention

Interventions for aggressive behaviors

- Behavioral intervention
- Functional analysis of behavior
- Psychotherapeutic intervention
- Cognitive Behavioral Therapy
- Dialectical Behavior Therapy
- Spiritual interventions
- Medications

Medications in the Management of Aggressive Behaviors

- Some evidence for the use of risperidone and aripiprazole in children having autism spectrum disorder.
- Tyrer P, et al in a randomized double-blind study comparing the efficacy of placebo, haloperidol, and risperidone in treating challenging aggressive behavior in adults with ID found dramatic decline in aggression in all three groups, and concluded that there were no significant benefits to treatment with either antipsychotic agent.

A Clinical example: Alan

- 29 year old hearing-impaired Hispanic man having severe intellectual disability, autistic disorder, obsessive-compulsive disorder and bipolar disorder.
- Encephalitis in neonatal period.
- Family history significant for schizoaffective disorder in his mother and bipolar disorder in a maternal uncle.
- No history of early abuse or neglect.
- Moved to the developmental center at age 14 due to severe aggressive and self-injurious behavior including attacking others, kicking, biting, scratching self and others, head-banging and body-slamming, severely lacerating himself (arterial spray).
Bipolar disorder:
- Manic episodes characterized by insomnia, accelerated motor behavior, frenetic ordering, sorting, and moving of belongings, increased aggression.
- Depressive episodes characterized by withdrawal, flat affect, refusal of usual activities, refusal of hygiene, bathing.

Obsessive-Compulsive Disorder
- Ritualistic ordering and arranging of furniture, opening or closing of blinds and windows. Property destruction resulted if these behaviors were interrupted.
- Extreme territoriality with respect to his “space” on the residence. Aggressive if this was encroached upon.
- Rigidity with respect to his schedule, especially the arrival of nursing staff for PM medications. Needs to be first to be seen or he becomes aggressive.
- Rituals concerning bodily functions including urinating in certain (inappropriate) places, repetitive defecating and rectal probing.

Behavioral manifestations of Autism
- Self-injury, especially preoccupation with infliction of deep wounds requiring acute medical attention. Actively seeks out sharp objects, breaks objects in order to create a sharp object, disassembles things to obtain sharps.
- Lack of reciprocal interpersonal interaction.
- Minimal non-verbal communication.
- Preoccupation with odors, applying fragrant foods to his body and hair.

Treatment: Medications
- Detailed review of several years of medication history and behavioral data
- Maximum benefit achieved on Depakote ER 1250mg QHS (VPA 85), olanzapine 5mg QHS, and Celexa 20mg Q day
- Empirical determination of minimum effective dosages.
- Precipitated manic episode when Depakote reduced
- Significant increase in OC symptoms when Celexa lowered below 20mg daily
- Increased agitation, hypervigilance, and hyperkinesia when olanzapine reduced.
What does Alan like/dislike in his environment?

<table>
<thead>
<tr>
<th></th>
<th>Create his own recreation corner</th>
</tr>
</thead>
<tbody>
<tr>
<td>His own territory</td>
<td></td>
</tr>
<tr>
<td>Comfortable/loose clothing</td>
<td>Sweats, soft slippers</td>
</tr>
<tr>
<td>Odors/aromas</td>
<td>Aromatherapy program</td>
</tr>
<tr>
<td>Many activities on the residence not especially appropriate for hearing impaired individuals</td>
<td>Incorporate visual and tactile experiences to include him in activities</td>
</tr>
<tr>
<td>Sharp objects</td>
<td>Removed from environment</td>
</tr>
</tbody>
</table>

What does Alan enjoy to do (situational)?

<table>
<thead>
<tr>
<th></th>
<th>Regular schedule of ADLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A predictable routine</td>
<td>Expanded activities</td>
</tr>
<tr>
<td>Video games, puzzles, walks, going to the park, being outside</td>
<td></td>
</tr>
<tr>
<td>Household chores such as folding towels, stacking items</td>
<td>Increased involvement in household chores</td>
</tr>
<tr>
<td>Warm baths</td>
<td>Incorporated into daily afternoon routine</td>
</tr>
<tr>
<td>Attention from the nurses</td>
<td>Salving program</td>
</tr>
</tbody>
</table>

What might the social context be for the behavior?

<table>
<thead>
<tr>
<th></th>
<th>Salving program</th>
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</thead>
<tbody>
<tr>
<td>Contact with others through restraint and medical care</td>
<td></td>
</tr>
<tr>
<td>Repel or intimidate intrusive peers</td>
<td>Own space in living room area</td>
</tr>
<tr>
<td>Decreased contact with mother due to her illness</td>
<td>Supported family to visit; increased close range activity with staff.</td>
</tr>
<tr>
<td>Appeared to be more aggressive with a particular staff member.</td>
<td>Staffing change.</td>
</tr>
</tbody>
</table>

What might the behavior communicate?

<table>
<thead>
<tr>
<th></th>
<th>Increased activity with peers and staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness</td>
<td>Increased variety of activities</td>
</tr>
<tr>
<td>Boredom</td>
<td></td>
</tr>
<tr>
<td>Irritation with others</td>
<td>Own space, individual attention from staff.</td>
</tr>
</tbody>
</table>
What maintains the aggressive behaviors?

<table>
<thead>
<tr>
<th>Attention from staff</th>
<th>Increased activities, Salving program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defining his space</td>
<td>Recreation corner</td>
</tr>
<tr>
<td>Controlling his environment</td>
<td>Recreation corner</td>
</tr>
</tbody>
</table>

Are there psychodynamic issues?

<table>
<thead>
<tr>
<th>Competition with peers for staff attention, space</th>
<th>Increased individual attention, is given medications first, recreation corner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alienation/exclusion due to his hearing impairment</td>
<td>Increased inclusion through use of visual and tactile stimuli</td>
</tr>
<tr>
<td>Grieving due to separation from family</td>
<td>Staff attention, activities with others</td>
</tr>
</tbody>
</table>

Behavioral Data Jan10-Jan12

- Aggression
- Restraint
- Staff attention