Assessing the Effectiveness of Medications

- Include how well the medications are helping the client to cope with psychiatric symptoms.
- Assess whether the medications are causing side effects.
- Observe for the subtle differences between symptoms and side effects.

Administering Medications

A careful assessment is needed to decide the right form of the medication:
- PO - by mouth (for routine use)
- Liquid form
- Quick-dissolving formulation
- PRN injection
Assess the Client’s Learning Capacity

- Cognitive abilities
- Readiness to learn
- Knowledge
- Background
- Environment

Assess the Client’s Learning Capacity - continued

- Beliefs
- Preferences
- Lifestyle
- Support systems

Assess the Client’s Cultural Perspective

- The cultural perspective influences the client’s ideas about:
  - Mental health and illness
  - Medications
  - Beliefs related to caring
When Using an Interpreter

- Be clear and descriptive
- Focus on the client’s behaviors
- Do not focus on who the client is personally or spiritually
- Avoid euphemisms
- Avoid Anglocentric health concepts

Extrapyramidal Side Effects (EPSEs)

- The first generation (conventional) antipsychotics may cause significant extrapyramidal side effects.
- EPSEs require careful assessment and management

Extrapyramidal Side Effects (EPSEs) - continued

- The five categories of EPSEs are dystonia, drug-induced parkinsonism, akathisia, tardive dyskinesia, and dopamine-acetylcholine imbalance
Dystonia

- Occurs usually within 48 hours of initiation of the medication
- Involves bizarre and severe muscle contractions
- Can be painful and frightening
- Characterized by odd posturing and strange facial expressions

Drug-induced Parkinsonism

- Usually occurs after 3 or more weeks of treatment
- Characterized by:
  - Cogwheeling rigidity
  - Tremors
  - Rhythmic oscillations of the extremities
  - Pill rolling movement of the fingers

Akathisia

- Usually occurs after 3 or more weeks of treatment
- Subjectively experienced as desire or need to move
- Described as feeling like jumping out of the skin
Akathisia - continued

- Mild: a vague feeling of apprehension or irritability
- Severe: an inability to sit still, resulting in rocking, running, or agitated dancing

Tardive Dyskinesia

- Usually occurs late in the course of long-term treatment
- Characterized by abnormal involuntary movements (lip smacking, tongue protrusion, foot tapping)
- Often irreversible

Complications of Tardive Dyskinesia

- Inability to wear dentures
- Impaired respirations
- Weight loss
- Impaired gait
- Impaired posture
Dopamine-Acetylcholine Imbalance in the Extrapyramidal System

- A rare side effect
- Characterized by hallucinations, dry mouth, blurred vision, decreased absorption of antipsychotics, decreased gastric motility, tachycardia, and urinary retention

Methods to Improve Assessment of EPSEs

- Use rating scales.
  - AIMS
  - Simpson Neurological Rating Scale
- Videotape the exam for comparison at a later date.

Positive Effects of Medications

- Alleviation of the symptoms of the disorder, often improving:
  - Ability to think logically
  - Ability to function in one’s daily life
  - Ability to function in relationships
Negative Effects of Medications

- May include side effects and their management
- Some necessitate lifestyle changes
  - MAOIs require a low-tyramine diet that includes avoiding foods that are pickled, fermented, smoked, or aged

Discontinuation Syndrome

- Many medications also have a discontinuation syndrome and must be gradually tapered to lower doses before being stopped.

Medication Adherence

- Adherence to prescribed medications by clients in psychiatric services is less than 35%
- Reasons for nonadherence:
  - Clients do not know what to expect from medications.
  - The schedule of doses or routes may be inconvenient.
  - Friends/relatives may not be supportive.
### Long-Term Medication Use

- Clients may find it difficult to take medications over the long term.
- Nurses should partner with clients to create a collaborative environment.
  - Supportive contacts with client
  - Family meetings
  - Psychoeducation regarding medications
  - An interest in how the medications are affecting the client

### Ethical Concerns

- Children and adolescents: consider the risk versus benefit
- Potential impact of pharmaceutical advertising
- Conflict of interest
- Right to refuse medications

### Common Interferences to Learning

- Clients with psychosis:
  - Cognitive difficulties
  - Lack of motivation (negative symptom)
  - Side effects
Common Interferences to Learning - continued

- Clients with mood disorders:
  - Persistent dysphoria may lead to a lack of motivation.
  - Manic behaviors may interfere with learning.
  - Unpleasant side effects may be discouraging.

Common Interferences to Learning - continued

- Clients with anxiety disorders:
  - Addiction to antianxiety medication may be an issue.
  - The medication quick action may lead to the desire to take more.
  - Effective non-medication treatment may not be readily available.

Interventions for the Major Side Effects of Antipsychotics

- A primary nursing role is to teach patients about the major side effects of psychotropic medications and how to manage them.
- Nurses must monitor for side effects and intervene when necessary.
Autonomic Nervous System Effects:
Anticholinergic Side Effects

- Dry mouth
- Blurred vision
- Constipation
- Urinary retention
- Tachycardia

Antiadrenergic Effect:
Orthostatic Hypotension

- Take the client’s blood pressure in a supine position and then in a standing position.
- Caution clients to rise slowly from a supine position.

EPSEs

- Dystonia and drug-induced parkinsonism are treated by anticholinergics.
- Akathisia may be treated with anticholinergics but is not always responsive.
- Tardive dyskinesia treatment is preventive through careful and routine assessment.
Other Central Nervous System Effects

- Sedation
- Lowering of the seizure threshold:
  - Observe clients with seizures disorders carefully when treatment is initiated.

Cardiac Effects

- Some antipsychotics may contribute to prolongation of the QTc interval and lead to arrhythmias.
  - An EKG can identify those at risk.

Agranulocytosis

- Early symptoms: beginning signs of infection
- White blood cells are routinely monitored in clients taking clozapine (Clozaril).
Endocrine Effects

- Hyperprolactinemia may cause:
  - Oligomenorrhea or amenorrhea in women
  - Galactorrhea in women and rarely in men
  - Osteoporosis if prolonged
- Impotence in males may occur.
- Diabetes
  - Monitor blood glucose levels.

Weight Gain

- Monitor weight
- Teach about diet and exercise
- Weight gain may contribute to physical as well as psychosocial stressors

Neuroleptic Malignant Syndrome

- Typically occurs in the first 2 weeks of treatment or when the dose is increased
- Hold the medication, notify the physician, and begin supportive treatments.
- Symptoms: muscle rigidity, hyperpyrexia, altered consciousness, and diaphoresis
Side Effects of TCAs

- Anticholinergic side effects
- Changes in the electrical conduction of the heart
- Cardiotoxic
- Overdosing—a medical emergency
  - Perform a suicidal assessment routinely

Issues with SSRIs

- May precipitate hypomania or mania in a susceptible client
- Serotonin syndrome: may occur if taking 2 or more medications that increase serotonin, including other SSRIs, TCAs, and MAOIs
  - Allow 1-2 weeks between an MAOI and SSRI for most SSRIs
  - For fluoxetine (Prozac), allow a 5 week gap

Serotonin Syndrome

- Symptoms: mental status changes, agitation, myoclonics, hyperreflexia, ataxia, diaphoresis, and cardiovascular, GI, and motor abnormalities
- Treatment: discontinue the suspected medication, initiate supportive treatments
SNRIs

- Anticholinergic side effects
- Dose-related elevated blood pressure with venlafaxine (Effexor)
  - Monitor blood pressure

Suicidal Risk

- Children, adolescents, and adults treated with antidepressants can experience greater suicidal ideation and behavior during the first few months of treatment
  - Monitor closely for suicidal risk

Side Effects of Mood Stabilizers

- Address activating and sedating side effects
- Common side effects of lithium: tremor, nausea, thirst, polyuria
- Monitor lithium levels: significant side effects are correlated with levels above 1.2 mEq/l
Lithium Toxicity

- Early signs: vomiting, diarrhea, lethargy, and muscle twitching
- Occurs at levels of 2 to 3 mEq/l
- May be a medical emergency
- Can be caused by restricted food and salt intake, diuretics, or overdose

Side Effects with Anxiolytics

- Problems in daytime functioning and drowsiness can lead to falls, especially in elders.
- Respiratory depression (elders, those with respiratory diseases, those taking other CNS depressants)

Acetylcholinesterase Inhibitors

- Generally safe, effective, well tolerated
Interventions with Herbal Medicines

- Assess herbal side effects and drug-drug interactions.
  - St. John’s wort is a naturally occurring MAOI and may interact with other antidepressants.
- The CAM industry is not regulated and monitored.

Resources

  The U.S. Food and Drug Administration Center for Drug Evaluation and Research is a federal agency. The website has consumer information on drugs approved by the FDA.
- http://www.mentalhelp.net
  MentalHelp is a website where consumers can find information related to medications and mental health disorders.
- http://www.nami.org
  The National Alliance on Mental Illness (NAMI) website provides current information about specific mental health disorders and medications, family support, and related links.

Resources - continued

  The Psychiatric Medication Guide is a National Institute of Mental Health brochure to educate consumers about psychiatric medications.