

# SUBSTANCE RELATED DISORDERS

# Definitions

- ❑ Substance: a drug of abuse. A medication or a toxin.
- ❑ Substance abuse: maladaptive pattern of drug use leading to impairment or distress, as manifested by one or more of the following occurring within a 12-month period.
  - ❑ Failure to fulfil major roles
  - ❑ Use in hazardous situations
  - ❑ Recurring related legal problems.
  - ❑ Continued use despite social or interpersonal problems

- ❑ Substance intoxication: a reversible drug intoxication syndrome caused by recent ingestion of, or exposure to, a substance resulting in maladaptive behavior or psychologic changes from effect of CNS.
- ❑ Substance withdrawal: development of a substance- specific syndrome resulting from cessation or reduction in substance use that has been heavy or prolonged.
  - ❑ Impairment in role functioning
  - ❑ Symptoms are not from another mental disorder

- Substance tolerance: the need for greatly increased amounts of the substance to achieve the desired effects, or a markedly diminished effect with the continued use of the same amount of substance.
- Polysubstance abuse: abuse of two or more drugs or of alcohol and drugs.
- Potentiation: two or more substances interact in the body to produce an effect greater than the sum of the effects of each substance taken alone.

- Substance dependence: the continued use of a substance despite significant related problems in cognitive, physiologic, and behavioural components; spending more time in getting, taking, and recovering from the substance; continuous abuse despite knowledge of physical or psychological problems or awareness of complications resulting from continued use.

# ALCOHOL ABUSE

# Etiologic factors

- Depressant of major brain functions (mood cognition, attention, concentration, insight. Judgment, memory, affect) resulting in diminished emotional rapport with others.
- Alcohol is a CNS depressant that is dose dependent and ranges from lethargy, unconsciousness, coma, resp

- ❑ Causation theories range from genetic, stress, environmental to interpersonal factors; none fully explains causation.
- ❑ Neurobiologic perspective:
  - ❑ The biologic or genetic theory continues to be researched.
  - ❑ Some research has identified subtypes of alcoholism; one type is associated with early onset, inability to abstain, and an antisocial personality; another is a later onset, after age 25, inability to stop drinking once started and a passive-dependent personality; this latter type seems to be influenced by the environment.

- Some researches subscribe to the single genetic transmission; others believe that complex genetic factors are involved in alcoholism.
- Biologic differences in the response to alcohol may influence susceptibility.
- Further research is necessary before conclusive results are

# Behavioural/ clinical findings

- Intoxication: state in which coordination or speech is impaired and behavior is altered.
- Episodic excessive drinking: becoming intoxicated as infrequently as four times a year; episodes may vary in length from hours to days or weeks.
- Habitual excessive drinking: becoming intoxicated more than 12 times a year or being recognizably under the influence of alcohol more than once a week even though not considered intoxicated.

- Alcohol addiction: direct or strong presumptive evidence of dependence on alcohol; demonstrated by withdrawal (nausea, hypertension, anorexia) or by the inability to go for a day without drinking; when there is a history of heavy drinking for 3 or more months; the individual is considered addicted to alcohol.
- Early symptoms of alcoholism: frequent drinking sprees, increased intake, drinking alone or in the early morning, occurrence of blackout.

# Therapeutic interventions:

- Should be multifaceted social and medical involves psychotherapy (group, family and individual functioning).
- Self- help group such as Alcoholics Anonymous
- Negative conditioning with disulfiram (Antabuse) appears to help; never given without the knowledge, understanding and

- Naltrexone hcl (Trexan, ReVia) to help overcome the craving for alcohol.
- Clients can be assisted only when they admit they need help.
- Relaxation therapy.
- Physical needs must be met because dietary needs have been often ignored for long periods.

# Nursing care

# Assessment

- History of alcohol use/ abuse from client or family; screen using the CAGE questionnaire
- Blood alcohol level (BAL)
- Data collection pertaining to substance and psychiatric impairment
- Client's perception of the problem.
- Physical and emotional status in relation to needs associated with nutrition, fluid and electrolyte status, and safety.
- Why client is seeking treatment at this time

# Nursing diagnosis

- Anxiety
- Impaired verbal communication
- Acute confusion
- Chronic confusion
- Defensive coping
- Dysfunctional family processes
- Ineffective health maintenance
- Defensive coping

- Risk for injury
- Risk for loneliness
- Impaired memory
- Noncompliance with abstinence and supportive therapy
- Imbalanced nutrition: less than body requirements
- Chronic low self-esteem
- Risk for self- mutilation
- Disturbed sensory perceptions (visual, kinesthetic, tactile)
- Risk for violence: self- directed or directed at others

# Planning/ Implementation

- Provide a well- controlled, alcohol-free environment; explain all unit routines.
- Plan a full program of activities but provide for adequate rest; environment should be well lit and quiet.
- Support the client without criticism of judgement.
- Expect and accept lapses as client is changing a long-term habit; assist with ADL as necessary.

- Avoid attempting to talk client out of problem or making client feel guilty.
- Accept the smooth facade that the client may present while approaching the lonely and fearful individual behind it.
- Monitor visitors because they may supply the client with alcohol.
- Accept failures without judgment or punishment.
- Recognize that the development of PTs and hallucinations are frightening; stay with and support client.

- Accept hostility without criticism or retaliation.
- Recognize ambivalence and limit the need for decision making.
- Maintain the client's interest in a therapy program.
- Refer to an appropriate 12- step group such as AA.

# DRUG ABUSE

# Etiologic Factors

- Misuse of drugs, usually by self-administration, in such a way as to bring about physical, emotional, or behavioural changes and blurring of reality.
- Stressors: premorbid personality, utilizing compensatory mechanisms of the addictive patterns of behavior.

# Commonly abused drugs

# Barbiturates

- Antianxiety drugs, hypnotics.
- Reduction in anxiety, escape from stress.
- Irritability, weight loss, changes in mood or motor coordination.
- Keep person awake and moving to prevent coma; maintain airway.

# Opioids/ Narcotics

- Heroin, morphine, meperedine, methadon e.
- Euphoria, dysphoria, and or/apathy
- Pinpoint pupils, mental clouding, lethargy, impaired memory and judgment, evidence of needle tracks, inflamed nasal mucosa if drug is snorted.
- Provide emergency support of vital functions.
- In withdrawal, administer methadone or

# Stimulant

- Cocaine/ crack
- Increased self-esteem, energy, sexual desire, euphoria; decreased anxiety.
- Increased VS, headache, chest pain, depression and/or paranoia, inflamed nasal passages if snorted.
- Emergency support of vital functions, reduce CNS stimulation.

# Amphetamines

- Amphetamine, dextroamphetamine, methamphetamine.
- Depressed appetite; increased activity, awareness, sense of well-being.
- Same as cocaine, plus suicidal ideation.
- Same as cocaine, plus suicide precautions.

# Phencyclidine (PCP)

- Euphoria, psychomotor agitation, emotional lability.
- Vomiting, hallucinations, paranoid ideation, agitation.
- Monitor VS.
- Observe for suicidal or assaultive behavior.
- Provide nonthreatening environment, reality orientation, support.

# Hallucinogens

- LSD, mescaline
- Disordered perceptions, depersonalization.
- “bad trip,” high anxiety to panic; hallucinations may occur long after the drug has been metabolized; flashbacks may produce long-lasting psychotic disorders.
- Same as PCP, plus talk client down.

# Cannabis

- Marijuana, hashish, THC
- Euphoria, intense perceptions, relaxation, lethargy.
- Increased pulse rate and appetite; impaired judgement and coordination.
- In panic, talk down.
- In severe depression, institute suicide precautions.

# Nicotine

- Nicotine is one of the most highly addictive and heavily used drugs in the United States and around the world. It causes lung cancer, emphysema, and cardiovascular disease and secondhand smoke is associated with lung cancer in adults and respiratory illness in children.
- Death is the primary adverse effect of cigarette smoking.

- Behaviorally, the stimulatory effects of nicotine produce improved attention, learning, reaction time, and problem-solving ability.
- In low doses the signs and symptoms of nicotine toxicity include nausea, vomiting, salivation, pallor (caused by peripheral vasoconstriction), weakness, abdominal pain (caused by increased peristalsis), diarrhea, dizziness, headache, increased blood pressure, tachycardia, tremor, and cold sweats.
- Toxicity is also associated with an inability to concentrate, confusion, and sensory

- Psychiatrists should advise all patients to quit smoking.
- Behavior therapy is the most widely accepted and well-proved psychological therapy for smoking.
- Skills training and relapse prevention identify high-risk situations and plan and practice behavioral or cognitive coping skills for those situations in which smoking occurs.
- Aversive therapy has smokers smoke repeatedly and rapidly to the point of nausea that associates smoking with unpleasant, rather than

# Behavioral/ clinical findings

- Needle marks on limbs , or between toes, can lead to infections (e.g., endocarditis, hepatitis, or HIV)
- Addicted individuals may tend to wear long-sleeved shirts, even in warmer weathers.
- Yawning, lacrimation, rhinorrhea, and perspiration appear 10 to 15 hours after the last opiate injection; unrealistic high; pronounced depression.

- Severe abdominal cramps if too much time has elapsed between opiate injections or inhalation.
- Physical examination may reveal an underweight, malnourished individual with multiple dental carries and depressed CNS functioning.
- Job or academic failure; marital conflicts; poor reality testing; personality change.
- History of violent acting out with total disregard for human life or suffering.

- ❑ History of stealing to support habit.
- ❑ Cocaine snorting leads to nasal septum destruction, hoarseness, and throat infections.
- ❑ Inability to maintain activities of daily living or fulfil role obligations.
- ❑ Marked tolerance with a progressive need for higher doses to achieve desired effects.
- ❑ Marked letdown with progression to severe depression after cocaine use.
- ❑ Hallucinations, hypervigilance, increased sexual activity, and paranoid ideation with

- ❑ Techno drugs: ecstasy (MDMA, methylene dioxymetamphetamine) and ketamine resemble amphetamine effects; also known as recreational drugs.
  - ❑ Adverse effects of psychostimulants can cause hyperthermia, acute renal failure, depression, panic, psychosis, and cardiovascular collapse.
  - ❑ Sleep disorders, depression, high anxiety levels, hostility, and impulsiveness are all associated with recreational drug use.
  - ❑ Sexual assault-rape drug, flunitrazepam (Rohypnol) produces disinhibition and muscle relaxation along with antero-grade amnesia; alcohol potentiate the effects.

# Therapeutic Interventions

❓ Treatment for drug overdose:

- ❓ Narcotic antagonists
  - ❓ Nalorphine (nallin)/ naloxone (Narcan):  
improves RR although may not affect LOC
- ❓ Gastric lavage may be done if substance has been taken orally within the past several hours.

## ❓ Treatment for withdrawal symptoms:

- ❑ Antidepressants: block the “high” from stimulant abuse and diminish craving for the substance.
- ❑ Clonidine (Catapres): suppresses narcotic withdrawal symptoms and decreases adrenergic excess while opiate receptors return to normal levels.

- Methadone maintenance for opiate addiction: programs do not treat addiction, but change the addiction from an illegal drug to a legal drug, which is administered under supervision; has proved successful only in individuals with long-standing addictions.

- High- calorie, high-protein, high- vitamin diet because of poor eating habits.
- Treatment in groups run by ex- addicts.
- Therapeutic community setting.
- Psychotherapy and family therapy on out-patient basis.
- Vocational counselling.

# Nursing care

# Assessment

- History of drugs being used.
- Urine toxicology screen and HIV
- Drug abuse screening test (DAST)
- History and length of pattern of drug dependence.
- Time since last dose was taken.
- Physical status of the client for signs and symptoms of drug dependence; nutritional status.

- Symptoms of drug overdose or withdrawal.
- Degree of difficulty sustained by client in relation to family members, job, school, etc.
- Why client is seeking treatment at this time.
- Pending criminal charges.
- Presence of hallucinations, paranoid ideation, and depression (often associated with cocaine use)
- Potential for violence towards others or self
- Relationship between substance abuse

# Nursing diagnosis

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- Ineffective denial

- Risk for injury
- Risk for loneliness
- Impaired memory
- Noncompliance with abstinence and supportive therapy
- Imbalanced nutrition: less than body requirements
- Self-esteem disturbance
- Risk for self-mutilation
- Disturbed sensory perception (visual, kinesthetic, tactile)
- Risk for violence: self-directed or directed to

# Planning/ Implementation

- Set firm controls and keep area drug free when client is hospitalized.
- Keep atmosphere pleasant and cheerful but not over-stimulating.
- Contribute to client's self-confidence, self-respect, and security in a realistic manner.
- Walk the fine line between a relatively permissible and a firm attitude.

- Expect and accept evasion, manipulative behavior, and negativism, but require the client to shoulder certain standards of responsibility.
- Accept the client without approving the behavior.
- Do not permit the client to become isolated.
- Introduce the client group activities as soon as possible; evaluate client's response to group interaction.
- Protect clients from themselves and others.