Los Angeles County College of Nursing and Allied Health

N 233

Medical surgical and psychiatric nursing

Role of the nurse in Substance Disorders

Required Reading

- Townsend 8th edition
- Chapter 23
- Lewis et.al. 9th edition
- Chapter 11
- Lecture notes

Nursing Goal

Implements the nursing process in the promotion and maintenance of system stability of individuals experiencing substance-related disorders.

Objectives

- Identifies the two groups of substance related disorders
- Discuss treatment modalities for substance related disorders
- Discuss drug consumption patterns

Objectives

Define substance use

Define intoxication

Define withdrawal

Identify nursing management of a client experiencing intoxication/withdrawal

Substance Use Disorders

Affects males and females of all ages, cultures and socioeconomic groups.

People have used alcohol and psychoactive substances for centuries to induce changes in perception, mood, cognition or behavior.

Substance Related Disorders

Divided in two groups:

Substance use disorder

Substance induced disorder

Substance Use Disorder

- Is a cluster of cognitive, behavioral and physiological symptoms indicating that the individual continues using the substance despite significant substance related problems

Scope of the problem

- Substance use is a major public health problem

- Roughly 9.4% of the total U.S. population has used an illegal drug in the past month

Perspective

- 24.6 million Americans aged 12 or older use illegal drugs
- About 8.4 million adults have co-occurring mental health and substance abuse disorders

Understanding Substance use

- These problems include
- Teenage pregnancy
- STDs including HIV/AIDS
- Domestic violence
- Motor vehicle crashes
- Crime, homicide, suicide

Drug Consumption Pattern

- Experimentation with drugs commonly begins during adolescence, although recent statistics show a trend toward use among preadolescents.

Drug Consumption Pattern

- Pre-teen
- Teen
- Young adult
- Adults
- Geriatric

Inhalant Use

- Has been increasing steadily. Almost 18 million people in the United States have experimented with inhalants at some time in their lives

Bagging

General findings of inhalant use

- Slurred speech
- N/V
- Drunk disoriented demeanor
- Sores or rash around mouth and nose
- Belligerent behavior
- Impaired judgment
- Seizures
- Hallucinations

Terminology

Substance use

Substance tolerance

Substance intoxication

Substance withdrawal

Substance Use

- Repeated use of a psychoactive substance
- To use wrongfully or in a harmful way

- Recurrent substance use resulting in a failure to fulfill major role obligations at work, home, etc.

Tolerance

- A user who develops a tolerance to the rewarding properties of the abused drug must take increasingly higher amounts to get the desired effect.

Intoxication

- A reversible substance specific syndrome caused by ingestion of or exposure to a particular substance
- A physical and mental state of exhilaration and emotional frenzy or lethargy and stupor

Substance Withdrawal

- An uncomfortable syndrome that occurs when tissue and blood levels of the abused substance decrease in a person who has used that substance heavily over a prolonged period

Predisposing Factors

No single theory can explain the etiology

Hereditary factors are evident with alcoholism but less so with other substances

Children of alcoholics are four times more likely than other children to become alcoholics

Predisposing Factors

Probable influences include:

Genetic predisposition

Pharmacologic properties of the particular drug

Peer pressure

Emotional distress

Environmental factors

Theories

- Genetic
- Neurobiological
- Psychobiological
- Behavioral
- Social and Psychological

Classes of psychoactive substances

9 classes of psychoactive substances are associated with substance-use and substance-induced disorders.

Commonly abused substances

- Alcohol
- Amphetamines and like drugs
- Caffeine
- Cannabis
- Hallucinogens

Commonly abused substances cont.

- Inhalants
- Opioids
- Sedatives/Hypnotics/Anxiolytics
- Cocaine and crack cocaine
- Tobacco

Alcohol

- Alcohol consumption is permitted by law and supported by most people in our society as a recreational activity
- Alcoholism affects 10-17 million people

Alcohol

- Two thirds of American Adults consume beverages containing alcohol
- There are estimated 600,000 ED visits per year in the US related to alcohol consumption

Alcohol

- Its abbreviation ETOH is used in medical records
- Most states consider alcohol intoxication blood alcohol level of 0.08 to 0.10 percent
- Alcohol is the most commonly abused drug in the nation
- Alcoholism decreases life span 10 to 12 years

Alcohol intoxication

Slurred speech

Uncoordinated

Unsteady gait

Impairment in attention or memory

Stupor

Assessing for Alcohol Withdrawal

Alcohol withdrawal initial *SS in 6 to* 12 hours

- Motor impairment
- Sleep disturbances
- Tremulousness
- GI symptoms
- Confusion

Assessing for Alcohol Withdrawal

- Hallucinations
- Pulse rate
- Blood Pressure
- Diaphoresis
- Blackout
- Seizures

Withdrawal/Delirium

Onset of delirium is 24 to 48 hours after stopping or reducing alcohol use. SS:

Visual hallucinations

Seizures

Fearful

Confused and disoriented

Complications of long term alcohol use

Cardiomyopathy

Esophageal varices

GI bleed

Pancreatitis

Seizure disorders

Depression

Wernicke’s-Korsacoff syndrome

Complications of long term alcohol use

- Ascites
- Hepatic Encephalopathy
- Leukopenia
- Thrombocytopenia
- Sexual Dysfunction

Diagnosis

- BAC
- Serum electrolyte analysis
- Increased plasma ammonia levels
- LFT’s
- Hematologic studies
- ECG

Treatment

Fluid administration

IV glucose

Magnesium sulfate

Chlordiazepoxide (Librium)

Valium

Anti emetics anti diarrheal

Antipsychotics

Aversion Therapy

- Disulfiram (Antabuse) daily oral dose
- Naltrexone (ReVia)
- Vivitrol injection

Antabuse reaction

- Consuming alcohol within a week from taking Disulfiram causes an immediate and unpleasant reaction.
- Signs and symptoms:
- Flushing
- Throbbing of neck and head

Antabuse reaction

- N/V
- HA
- SOB
- CP
- Palpitations
- syncope

Nursing interventions

Approach pt. in a non threatening way

Continuous monitoring

V/S urine output

Take appropriate measures to prevent suicide attempts and assault

Remove harmful objects

Institute seizure precautions

Treatment Modalities

- Twelve steps programs
- Counseling
- Group therapy
- Support
- Drug therapy

Opioids

Opioids are used medically as analgesics

- CNS depressants, sedative effects
- Opium, morphine, heroin, codeine, fentanyl, meperidine

Opioids

- Opioids stimulate opioid receptors in the CNS and surrounding tissues. CNS effects of opioids include euphoria and sedation, following by elation relaxation, and then sedation or sleep.

Opioid influence S/S

- Constricted pupils
- Slurred speech
- Sweating; clammy skin
- Visible needle marks
- Hypotension, arrhythmias
- Drowsiness decreased LOC

Opioid Reversal

- Naloxone hydrochloride (Narcan) is an opioid antagonist used to reverse the effects of opioids. It works by displacing opioids from their receptors in the CNS.
- Administered IV,IM, or SQ every 2 to 3 minutes as needed. It reverses CNS depression and increases respiratory rate within 1 to 2 minutes.

Opioid Withdrawal

Anxiety, N/V

Abdominal cramps, muscle aches

Rhinorrhea, yawning, lacrimation

Respiratory depression

Piloerection, fever, insomnia

Dilated pupils

Treatment

Symptom specific treatment

Airway and ventilation support

Antidiarrheal

Decongestants

Non-opioid analgesics

Clonidine

Stimulants

- Amphetamines
- Cocaine
- Caffeine

Stimulants intoxication

Tachycardia, hypertension

diaphoresis hyperthermia

N/V, hallucinations

Seizures confusion

Dyskinesia, dystonia

Pupillary dilation

Cocaine Withdrawal Symptoms

Depression, fatigue

Vivid or unpleasant dreams

Insomnia, hypersomnia

Psychomotor agitation or retardation

Irritability

Strong craving for more cocaine

Amphetamines (Meth)

Is a powerful CNS stimulant

Increase the release of the neurotransmitters dopamine, norepinephrine and serotonin

“Rush” or “high” results from high levels of dopamine in the brain areas that regulate feelings of pleasure

Amphetamines

Reduces appetite and awareness of body needs

Users may become obsessed or perform repetitive tasks such as cleaning, or hand-washing

Users can become addicted quickly, with rapid dose escalation

Amphetamine influence S/S

- Euphoria
- Hyperactivity, HTN, hyperthermia
- Diaphoresis
- Tremors, seizures
- AMS
- Psychotic behavior

Amphetamine Intoxication

Arrhythmias

Heart failure

Cerebral hemorrhage

Stroke

Coma

Death

Amphetamine withdrawal

CNS depression

Hallucinations

Overstimulation

Long periods of sleep

Apathy and depression

Suicide attempts

Treatment

Symptom specific treatment

Airway management

Fluid resuscitation

Arrhythmia treatment

Gastric lavage; activated charcoal

Cooling measures

Nursing Diagnosis

Some of many possible Nsg. Dx

Breathing pattern ineffective

Cardiac output decreased

Anxiety

Coping individual / family ineffective

Confusion acute

Role performance ineffective

Suicide risk for

Interventions

- Nursing interventions are:

- Symptom specific
- Substance specific
- Patient specific

Questions????