ADOLESCENCE

It is the time period between onset of puberty & complete sexual maturity. The WHO defines an adolescent as any person between ages 10 & 19. Adolescence is the phase of life between childhood and adulthood, from ages 10 to 19. It is a unique stage of human development and an important time for laying the foundations of good health. In the adolescence period, an adolescent suffers from large number of problems like development of acne, loneliness, craziness for different things, eating disorders, addiction.

Adolescents experience rapid physical, cognitive and psychosocial growth. This affects how they feel, think, make decisions, and interact with the world around them.

DRUG

A drug is any chemical substance that causes a change in an organism's physiology or psychology when consumed (i.e.to, modify the chemical process(s) in the body) Drugs are typically distinguished from food and substances that provide nutritional support. Consumption of drugs can be via inhalation, injection, smoking, ingestion, absorption via a patch on the skin, suppository, or dissolution under the tongue.

ADDICTIVE DRUGS / PSYCHOACTIVE Drugs or MOOD Altering Drugs

A drug or other substance that affects how the brain works and causes changes in mood, awareness, thoughts, feelings, or behavior. Examples of psychoactive substances include alcohol, caffeine, nicotine, marijuana, and certain pain medicines. Many illegal drugs, such as heroin, LSD, cocaine, and amphetamines are also psychoactive substances

DRUG ADDICTION

It is a psychological & physical inability to stop consuming a chemical, drug, activity, or substance (addiction as a state of physical & psychological dependence on drugs). Constant and regular use of these drugs forms a habit and once acquired, it becomes very difficult to leave these habits. This condition is called drug addiction. It is also known as Drug Abuse or Substance Abuse.

SIGNS & SYMPTOMS OF DRUG ABUSE

Drug use affects people from all walks of life and all socioeconomic statuses. Whatever the reason a person starts taking drugs, whether recreationally or as prescribed, tolerance, patterns of increased use, physical dependence and, ultimately, addiction may develop. Use of most substances will produce noticeable signs and symptoms. These may include physical or behavioral symptoms—most likely both.

Some physical signs of addiction are:

- > Tremors or seizures
- > Loss of physical coordination
- > Extreme lethargy
- > Chemical odor on breath or clothes
- ➤ Pinpoint pupils (common with opioid and heroin addiction)
- ➤ Bloodshot or watery eyes
- > Changes in weight
- Changes in appetite and eating habits
- ➤ Clenching of the jaw
- > Irregular sleeping patterns or difficulty falling asleep

Some behavioral signs of addiction are:

- ➤ Changes in activities or hobbies
- > Shifts in social circles
- ➤ Decreased participation in family activities
- ➤ Poor performance in work or school
- Repeated lying, dishonesty or deceit
- > Secretive behavior
- > Self-isolation
- > Neglecting responsibilities

WITHDRAWL SYMPTOMS

Drug withdrawal is a term that describes a set of symptoms your body experiences after you suddenly stop or reduce chronic use of drugs or alcohol. Withdrawal symptoms can vary in type and severity level based on the substance being used, and on the lifespan of drug use.

Some symptoms can be dangerous and life threatening for those who attempt to withdraw from drugs on their own after becoming dependent and addicted and the person may need medical supervision.

Common drug withdrawal symptoms include the following:

- > Sweating
- > Tearing eyes
- > Runny nose
- ➤ Hot and cold flushes
- > Nausea
- > Vomiting
- ➤ Diarrhea
- ➤ Muscle cramps
- ➤ Muscle aches
- ➤ Muscle tension
- > Tremors
- ➤ Dehydration
- > Increased heart rate
- ➤ Increased blood pressure
- > Poor concentration and memory
- > Restlessness
- > Irritability
- > Agitation
- > Seizures

REASONS FOR DRUG ABUSE

Substance abuse comes in many different forms and can happen for many different reasons. While every addiction is different, and the intensity can vary from substance to substance, there are some common reasons people may become addicted to a substance.

1 Prescription Drugs

Prescription drugs can lead to drug abuse. It's very common for people to think that because their doctors give them a prescription, their medication is safe to consume without consequences.

2 Fitting In

Peer pressure causes people to do things they would normally not to impress friends or loved ones. It's a way of seeking out the feeling of being valued by others. Receiving an invitation from a friend to come and party with drugs or alcohol can be difficult to turn down.

To Feel Good

While other reasons behind doing drugs can be especially complex, this one is pretty straightforward. Drugs cause chemical reactions to be released within our brain that mimic feelings of happiness, euphoria, and comfort.

Escape from reality

Some teens turn to drugs and alcohol as a form of escapism. When they are sad or depressed they see these substances as a way to forget and feel happier. It's their attempt to self-medicate.

DIFFERENT TYPS OF DRUGS

There are various types of drugs such as

❖ Sedative & Tranquillizers

Which overcome mental irritability & excitement causing drowsiness of sleep, also called as Antidepressant.

❖ Alcohol

It is simple organic compound. it acts as a sedative, depressant & anesthetic agent. Liver is the most vital organ affected by alcohol

Tobacco

Nicotine is the primary reinforcing component of tobacco; it drives tobacco addiction. Nicotine is absorbed through mucous membranes in the mouth. Immediately after exposure to nicotine, there is a "kick" caused in part by the drug's stimulation of the adrenal glands and resulting discharge of epinephrine (adrenaline). The rush of adrenaline stimulates the body and causes an increase in blood pressure, respiration, and heart rate.

Opioids

Opioids are a broad group of pain-relieving drugs that work by interacting with opioid receptors in cells, the cells release signals that muffle your perception of pain and boost your feelings of pleasure.

Cannabinoids

Cannabinoids are naturally occurring compounds found in the Cannabis sativa plant. Cannabinoids exert their effects by interacting with specific cannabinoid receptors present on the surface of cells of CNS. The effects of

cannabinoids depend on the brain area involved. Effects on the limbic system may alter the memory, cognition and psychomotor performance; effects on the mesolimbic pathway may affect the reward and pleasure responses and pain perception may also be altered.

❖ Cocaine (Coca Alkoid)

Cocaine is a powerfully addictive stimulant drug made from the leaves of the coca plant. Cocaine increases levels of the natural chemical messenger dopamine in brain circuits related to the control of movement and reward.

Measures to Prevent Alcohol and Drug Abuse

Measures which need to be taken to prevent and control alcohol and drug abuse are

Continuous counselling is required to teach the child to deal with failures, pressures, stress, and disappointments. Productive activities such as music, painting, yoga, sports or one of their hobbies could also help.

Children tend to pick up habits from their closed ones. Thus, the habits of parents and elder siblings towards alcohol, cigarettes, and drugs also affect the child's choices.

In case the child is stressed out and on the verge of abuse, help must be provided from parents or even trusted friends who may guide them in the right direction, helping them vent out their anxiety and guilt.

Parents must stay connected with the child, keeping a track of his/her whereabouts at all times. Spending more family time together will help them stay close and honest with their parents.

Having good friends is equally important in the case of a child fallen prey to alcohol and drug abuse.

Immediate actions should be taken in these cases of alcohol and drug abuse as more delays may lead to serious issues.

However, despite all the preventive measures, if the child still does get into the abuse, it is advised to seek professional aid. There are a number of rehabilitation centers, de-addiction programs and qualified psychiatrists who would help to get rid of the problem.

SEXUALLY TRANSMITTED DISEASES

Sexually transmitted diseases (STDs) — or sexually transmitted infections (STIs) are generally acquired by sexual contact. The bacteria, viruses or parasites that cause sexually transmitted diseases may pass from person to person in blood, semen, or vaginal and other bodily fluids. Sometimes these infections can be transmitted non-sexually, such as from mothers to their infants during pregnancy or childbirth, or through blood transfusions or shared needles.

Examples include gonorrhea, genital herpes, human papillomavirus infection, HIV/AIDS, chlamydia, and syphilis.

The STDs are generally transmitted by (Mode of Transmission)

- > Sexual intercourse with infected person
- ➤ Sharing of infectious needles, surgical items
- > Transfusion of infected blood
- > From infected mother to foetus.

Prevention

The occurrence of STDs can be prevented by following means

- ➤ One must avoid sexual intercourse with unknown person & multiple persons
- ➤ Use condoms during intercourse
- > One must consult a doctor in case of doubt

AIDS (Acquired Immune Deficiency Syndrome)

Acquired immunodeficiency syndrome (AIDS) is a chronic, potentially life-threatening condition caused by the human immunodeficiency virus (HIV – was identified by Robert Gallo in 1984). By damaging your immune system, HIV interferes with your body's ability to fight infection and disease.

HIV is a sexually transmitted infection (STI). It can also be spread by contact with infected blood or from mother to child during pregnancy, childbirth or breast-feeding. Without medication, it may take years before HIV weakens your immune system to the point that you have AIDS.

Virus attacks the defense system & the HIV infected person becomes susceptible to every diseases. The person suffering from AIDS does not die of AIDS but may die of any simple disease called as secondary infection.

How AIDS Spreads

A person can get HIV when body fluids from an infected person enter his /her bloodstream. Body fluids are blood, semen, vaginal fluids, fluids from the anus, and breast milk. The virus can enter the blood through linings in the mouth, anus, or sex organs (the penis and vagina), or through broken skin. Both men and women can spread HIV. Pregnant women with HIV can also give the virus to their babies.

The most common ways that people get HIV are having sex with an infected person and sharing a needle to take drugs.

You cannot get HIV from:

- ➤ Touching or hugging someone who has HIV/AIDS.
- ➤ Public bathrooms or swimming pools.
- ➤ Sharing cups, utensils, or telephones with someone who has HIV/AIDS.
- > Bug bites.
- > Donating blood.

Who can get HIV

Anyone can get HIV if they are exposed to the virus. A person have a higher risk of getting HIV if:

- ➤ Have sex with many partners (men or women).
- ➤ Have unsafe sex with an infected person.
- ➤ Share needles to take drugs or steroids.
- ➤ Have another sexually transmitted infection (STI).
- > Transmission through infected transfusion of blood, blood products & contaminated equipment's.

SYMPTOMS OF AIDS

Some people with HIV have no symptoms for months or even years after contracting the virus. While a person with no symptoms may be unlikely to seek care, there is still a high risk of transmission. For this reason, experts recommend regular testing, so that everyone is aware of their HIV status.

Meanwhile, around 80% of people with HIV develop flu-like symptoms around 2–6 weeks after contracting the infection.

Early symptoms of HIV may include:

- > Fever
- > Chills
- > Sweating, particularly at night
- > Enlarged glands or swollen lymph nodes
- > Fatigue
- Weakness
- > Pain, including joint pain
- > Sore throat
- > Unintentional weight loss, with advancing HIV
- > Persistent cough for longer periods than one month.