



# Alcohol & Substance Abuse

## **Symposium : Behavioural Pediatrics-II**

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### **Substance Abuse in Children and Adolescents**

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#### **Abstract:**

Consumption of licit and illicit substances has increased all over the world and the age of initiation of abuse is progressively falling. The common drugs of abuse amongst children and adolescents in India are tobacco and alcohol. Use of illicit drugs like cannabis and heroin have also been reported.

A high prevalence of drug use and even intravenous use among street children and working children is a matter of concern. Although initiation to drug use usually occurs during adolescence, the adolescent drug users are seldom seen in various treatment centres.

## Adolescents and Substance Abuse

- Adolescence is characterized as period of great physical and physiological changes.
- During adolescence, individuals typically experiment with a wide range of behaviors and life style patterns.
- Developing a sense of autonomy freedom and try to establish a personal identity.
- To assume adults role and appear more grown up start smoking, drinking and using drugs.
- Engage in substance use as a way of establishing their own individual maturity.
- Peer group pressure.



Adolescents are more likely than adults to try new drugs (or drugs they don't know the name of) on the recommendation of a peer or based on what they see in the media/internet.

They do not drink for the taste, nor do they have a preference for one drug or beverage, as adults often do.



They are tend to use whatever their peer group is using. They may hear about a negative consequence in relation to a drug but their orientation is focused on the risk/adventure and the positive stories they have heard from peers.

They also hold the belief that the negative event will not “happen to me”.

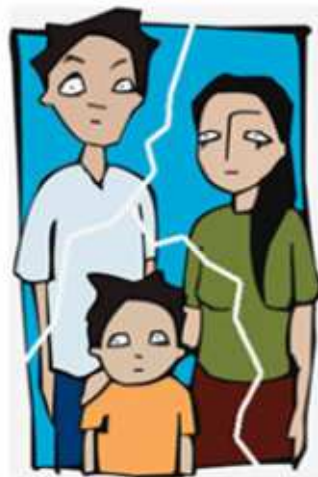


'YOU'RE WELCOME SON'

# Family's Influence on Substance Abuse

## Positive Influence

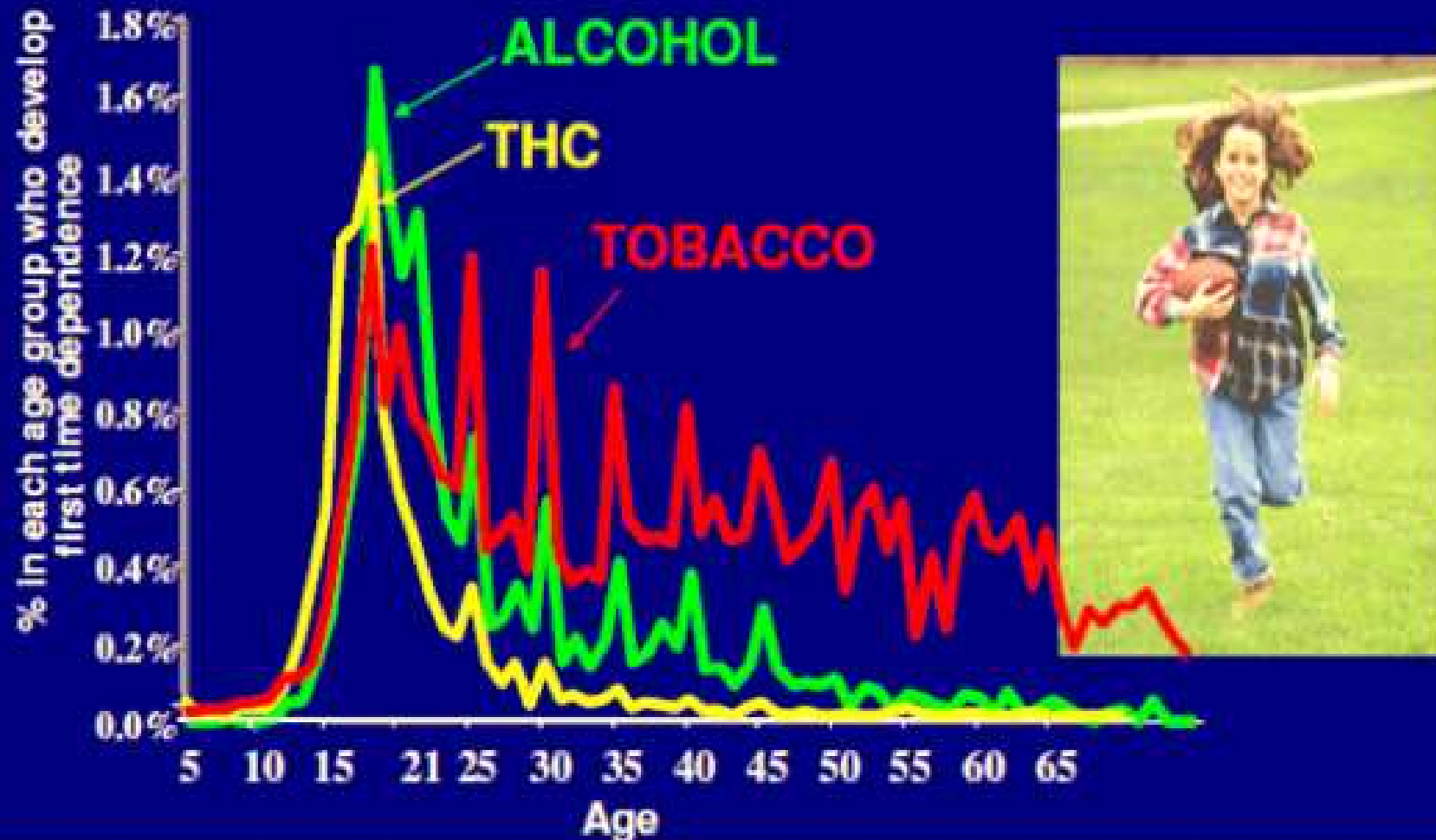
- Parents love and affection
- Parental Monitoring
- Good interpersonal relationship among family members.
- Provide good support to the child.



## Negative Influences

- Family history
- Parent drug use
- Parent – child conflicts
- Family stress events
- Broken families
- Siblings rivalry.

Addiction is a developmental disease  
Often starts in childhood and adolescence



Age at **alcohol**, at **tobacco**, and at **cannabis** dependence as per DSM IV



# What is a drug ?

Any substance which  
when taken into a living organism  
modifies one or more of its functions



**Division of Mental Health and  
Prevention of Substance Abuse**



# Substance abuse

Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs.

Psychoactive substance use can lead to dependence syndrome - a cluster of behavioural, cognitive, and physiological phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state.



# Use & Abuse

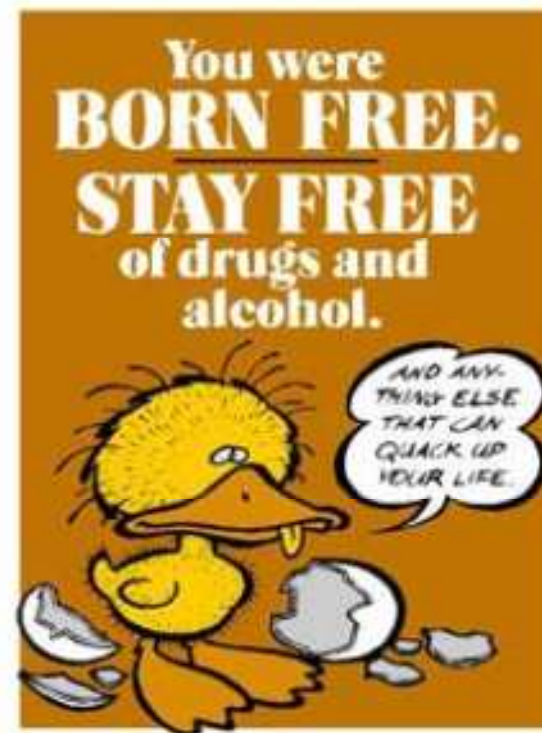
## The Four types

1. Taking  
too much

2. Taken  
too often

3. Taken  
for wrong  
reason

4. Taken  
too long



## Common Definitions of Key Terms

- **addiction:** to use compulsively or uncontrollably; to enslave
- **abuse:** to use wrongly or improperly
- **habit:** a constant, often unconscious, inclination to perform some act, acquired through its frequent repetition
- **addiction liability/potential:** the tendency to develop/produce an addiction

# What is happening in India

The fast growing incidence of smoking, drinking, tobacco use and other substance abuse among the adolescents is a matter of grave concern. The projected number of drug abusers in India is about 3 million and most drug abusers are in the age group of 16-35 years (UNODC, 2003).

The data from National Household Survey (NHS) revealed that 24 per cent of the drug abusers were in the age group of 12-18 years. Nearly 11 per cent were introduced to cannabis before the age of 15 years and about 26 per cent between the age of 16 and 20 years (UNODC & Ministry of Social Justice and Empowerment, 2004).



**Virtually every drug that is abused by adults is also abused by adolescents. In addition to **alcohol**, common categories of drugs of abuse include:**

**Tobacco products**

•(for example, cigarettes, cigars, chewing tobacco)

**Cannabinoids**

•(for example, marijuana, hashish), sometimes called "pot, weed, Mary Jane, or herb" and is smoked in a "joint," "blunt," "bong," or pipe

**Cold medications**

•(for example, Sudafed, Benadryl)

**Inhalants**

•(for example, gasoline, ammonia), the use of which is often referred to as "huffing"

**Depressants**

•(for example, barbiturates, benzodiazepines), sometimes called "reds, yellows, yellow jackets, downers or roofies"

**Stimulants**

•(for example, amphetamines, cocaine, methamphetamine), sometimes called "bennies, black beauties, speed, uppers, blow, crack, rock, toot, crank, crystal, or skippy"

**Narcotics**

•(for example, morphine, heroin, codeine, Oxycontin, Vicodin), sometimes called cody, schoolboy, Tango and Cash, or monkey"

**Hallucinogens**

•(for example LSD, "mushrooms"), sometimes called "acid, yellow sunshines, buttons, or shrooms"

**Dissociative anesthetics**

•(for example, phencyclidine/PCP, ketamine), sometimes called "lovely, boat, Love Boat, angel dust, K, vitamin K, or cat" and whose use is often referred to as "getting wet"

**Club drugs**

•(for example, Ecstasy), sometimes called "X"

**Others**

•(for example, anabolic steroids), sometimes called "juice or roids"

# Overview of Addictive Substances

## Alcohol

Alcohol is a medication that blocks painful or intolerable reality. It is well known for its ability to convince us that we are functioning better, communicating better, singing better, driving better or doing almost anything better than ever, when, in fact, our skills in these areas are seriously diminished.

**Alcohol abuse** occurs when there are ongoing negative consequences from drinking.

**Alcohol dependence, or alcoholism**, is more severe and occurs when people have problems stopping drinking. About 20% of men and 8% of women are alcohol dependent.





40 percent of people who begin to drink before age 15 will become alcohol dependent at some point in their lives.

They are four times more likely to become alcohol dependent than those who delay drinking until age 21.

Types of Drink	% of Alcohol
Beers	4-8
Wine	10-15
Whisky, Gin, Brandy	40-45
Rum & Liquor	50-60
Rectified Spirit	90
Absolute Alcohol	99.5



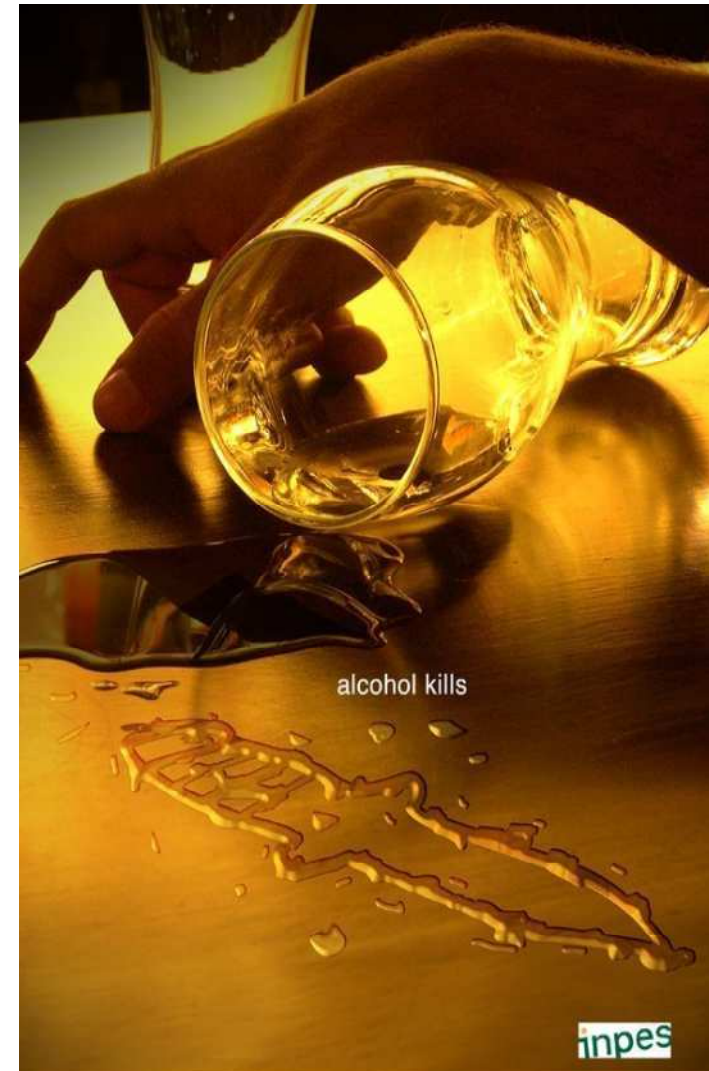


### **Immediate effects of alcohol on the brain and body**

- | The first few drinks affect judgement and reaction time.
- | More alcohol causes reactions to become even more sluggish and delays physical coordination.
- | Far too much alcohol can suppress some body functions and, in extreme cases result in death.

### **The consequences of alcohol use can be divided into three broad categories:**

- | Consequences related to alcohol use pattern
- | Medical and psychiatric consequences of alcohol use
- | Social, occupational, legal and other consequences of alcohol use



## Psychosocial complications of alcohol use

Financial	Occupational	Familial	Social	Legal
<ul style="list-style-type: none"> <li>• Spending money on alcohol instead of essential needs</li> <li>• Financial obligations not fulfilled</li> <li>• Exhausting savings</li> <li>• Borrowing money</li> <li>• Financial bankruptcy and destitution</li> </ul>	<ul style="list-style-type: none"> <li>• Inefficiency due to decreased performance</li> <li>• Unpunctuality</li> <li>• Fights, quarrels, thefts</li> <li>• Absenteeism</li> <li>• Accidents at work place</li> <li>• Getting warnings</li> <li>• Suspension from job or loss of jobs</li> <li>• Frequent changes in job</li> <li>• Declining status in job</li> <li>• Loss of work habit</li> <li>• Loss of skills</li> <li>• Long period of unemployment</li> <li>• Unsuitability for meaningful employment</li> </ul>	<ul style="list-style-type: none"> <li>• Arguments over alcohol use</li> <li>• Neglect of family obligations</li> <li>• Role change and conflict</li> <li>• Co-dependence</li> <li>• Quarrels and physical violence</li> <li>• Long absences from home</li> <li>• Frequent marital separation</li> <li>• Divorce</li> <li>• Ostracization by family</li> </ul>	<ul style="list-style-type: none"> <li>• Peer alienation</li> <li>• Misbehaviour with others</li> <li>• Arguments, fights</li> <li>• Decreased social reputation</li> <li>• Loss of position</li> <li>• Social isolation</li> <li>• Social ostracization</li> </ul>	<ul style="list-style-type: none"> <li>• Violation of rules</li> <li>• Driving under intoxication</li> <li>• Thefts and petty crimes</li> <li>• Arrests and court cases</li> <li>• Involvement with criminal gangs</li> <li>• Conviction</li> <li>• Imprisonment</li> </ul>

# Effects of Alcohol on Adolescent Brain Development

The adolescent brain is not fully developed, which creates a number of problems for teenagers and young adults who imbibe alcoholic beverages. Tests done on adolescent rates suggest that permanent damage can occur to the neurochemical, cellular, synaptic and structural organization of the brain if adolescents overdo drink.

As heavy drinking continues, the brain becomes less able to compensate for the disruptions caused by the effects of alcohol. Thus, the more a teen drinks, the higher the chances for developing permanent neuronal damage.



# Tobacco

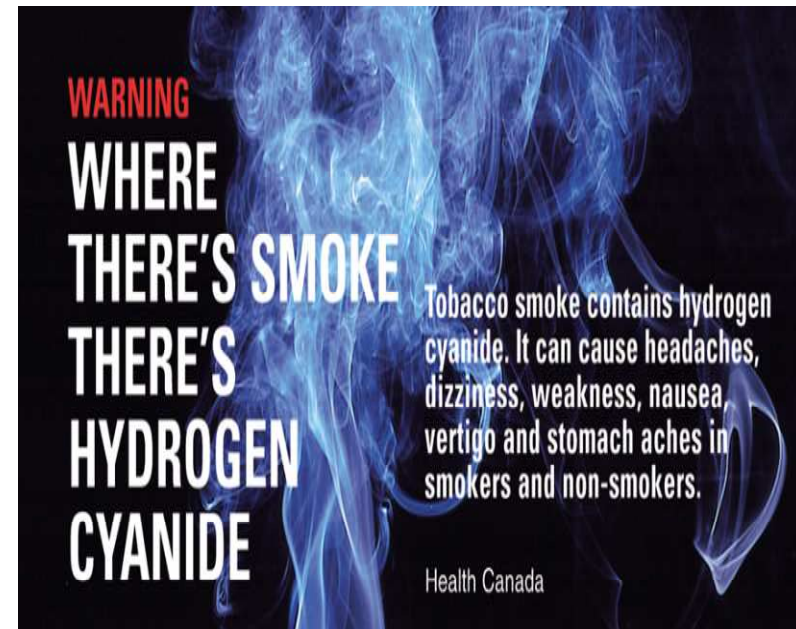
Forty lakh tobacco related deaths occur annually all over the world of which India accounts for twenty percent.

One person dies in every seven second due to Tobacco related diseases.

Tobacco & pan chewing is definitely linked to oral cancer. The incidence is highest in India.

Smoking is linked to 80 - 90 percent cases of lung cancer.

Within seconds after tobacco smoke is inhaled some 4000 toxic byproducts are absorbed into blood stream and transported to every cell.



In Kerala, use of pan parag, hans & other forms of pans show a steady increase among all sections of people

In some areas the use is as high as **20 percent** among high school students and adolescents

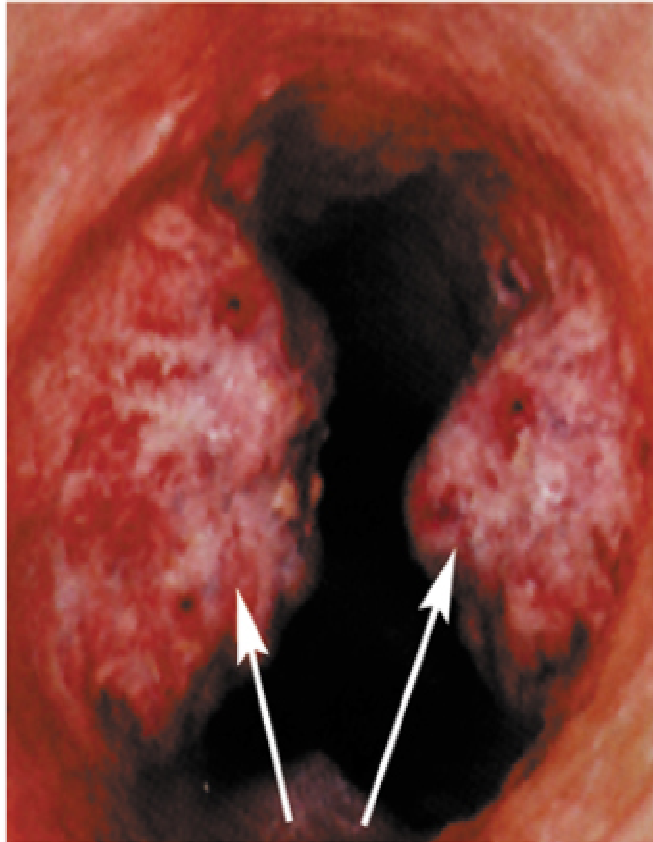


### Forms of tobacco use

- 1 Smoking
- 2 Chewing along with other substances
- 3 Snuffing
- 4 Application in the mouth as powder or paste





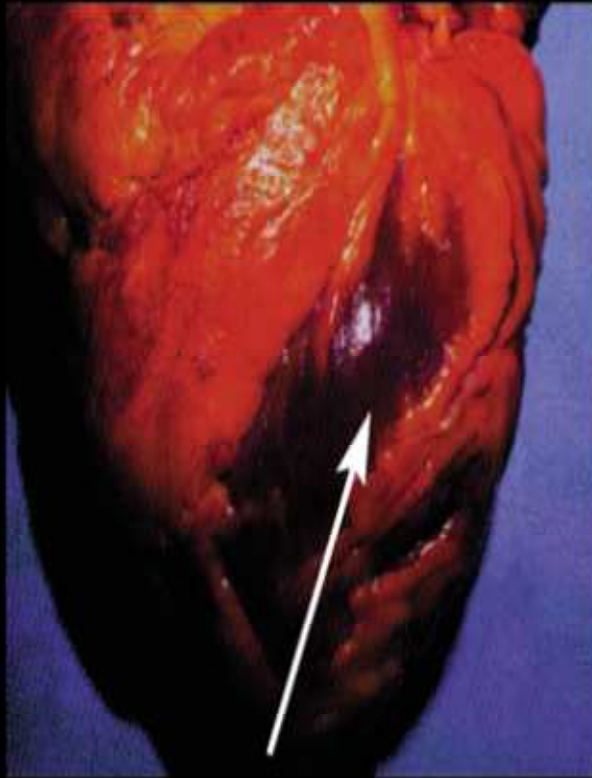


lung cancer

**WARNING**

# **CIGARETTES CAUSE LUNG CANCER**

**85% of lung cancers are caused by  
smoking. 80% of lung cancer victims  
die within 3 years.**



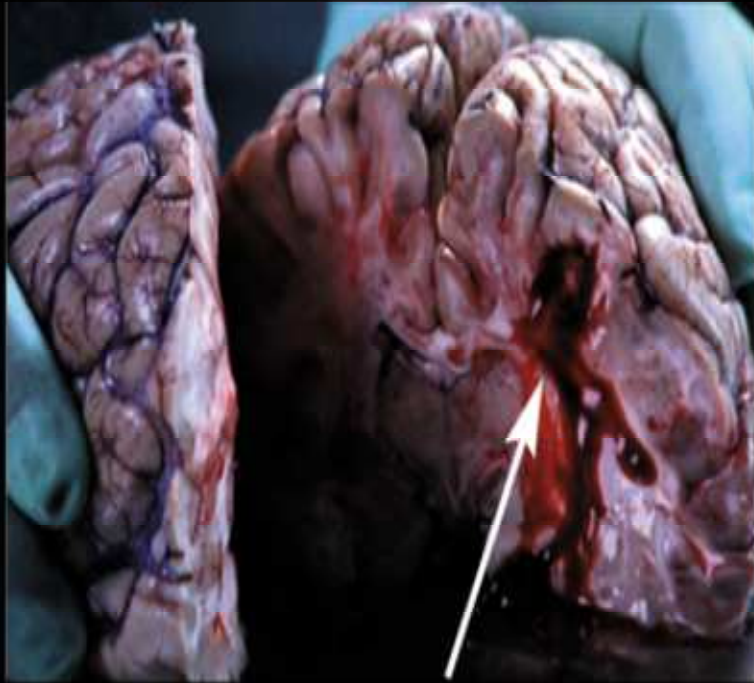
damaged heart muscle — result of clogged artery

## **WARNING**

# **CIGARETTES ARE A HEARTBREAKER**

**Tobacco use can result in the clogging of arteries in your heart. Clogged arteries cause heart attacks and can cause death.**





human brain with stroke

**WARNING**

# **CIGARETTES CAUSE STROKES**

**Tobacco smoke can cause the arteries in your brain to clog. This can block the blood vessels and cause a stroke. A stroke can cause disability and death.**



**WARNING**  
**TOBACCO USE  
CAN MAKE YOU  
IMPOTENT**

**Cigarettes may cause sexual  
impotence due to decreased blood  
flow to the penis. This can prevent  
you from having an erection.**

Adolescents' patterns of substance use are different from adults, as is their perception of themselves and their world.

Their developmental tasks are also different, and typical interventions for prevention and treatment, modeled entirely on adult development, are not appropriate.

Substance Abuse has far reaching consequences on the quality of both present and future life.

More than an individual problem it is assumed as a major social and health problem.



The focus of adolescents is on the short-term, and so they do not perceive long-term consequences of drug use as a deterrent.

Their biggest perceived risk is feeling excluded/different from their peers. In addition, drugs and alcohol work in the short-term.

Adolescents have not yet mastered deferred gratification, and so taking a drug or a drink that increases feelings of well-being and mastery/coping immediately will frequently provide a more powerful experience than any written or verbal information given by adults.



# What's Your Anti-Drug?

- What stands between you and drugs?
- Do you have a hobby, passion or person that keeps you from the downward spiral?
- **Some popular anti-drugs: music, dancing, computers, basketball, family, singing, friendship, life, football, track, rock climbing, volunteering.**

**SORT IT OUT...**  
**ASAP**  
*Alcohol & Substance Abuse Prevention*



# Thank you



Kerala State AIDS Control Society  
State Council Educational Research and Training

