

# Manual for Prevention and Management of Alcohol Abuse



World Health Organization  
Country Office - India

# **ALCOHOL AND SUBSTANCE ABUSE INTERVENTION IN VULNERABLE POPULATION AFFECTED BY DISASTERS**



## **TRAINING MANUAL**

Developed by  
**ALCOHOL & DRUG INFORMATION CENTRE (ADIC) - INDIA**

Supported by  
**WORLD HEALTH ORGANIZATION (WHO) - INDIA**

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Alcohol & Drug Information Centre (ADIC)-India  
National Office: T.C. 2/3322  
Pattom, Trivandrum - 695 004  
Kerala State, India.  
Tel: (91) 0471 - 2551221  
E-mail: adicindia@vsnl.net

**Supported by**

World Health Organization (WHO)  
Country Office (India)  
534, A-Wing, Nirman Bhavan  
Maulana Azad Road  
New Delhi - 110 011  
Tel: (91) 11 - 23061955  
Website: [www.whoindia.org](http://www.whoindia.org)

**Principal Author**

Johnson J. Edayaranmula

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## **PREFACE**

Natural disasters including earthquakes, floods, cyclones and hurricanes and human-caused disasters like terrorism, racial conflicts and war are striking with frightening regularity in various parts of the world causing large scale death and destructions. Studies and research has revealed that disaster survivors bear a substantial burden of mental health problems. Increased alcohol and substance abuse is a well documented co-morbid factor accompanying post-traumatic stress disorders and other psychological disorders.

The recent Tsunami disaster, which has claimed thousands of valuable lives, has created a panic in South & South East Asia. As an aftermath of the disaster an increased prevalence of alcohol and substance abuse has been witnessed among the affected population.

The Health Workers and Service Providers had great difficulty in managing the crisis due to lack of training resources and technical skills. There were seldom any training modules available for the Health Workers and Service Providers on appropriate intervention strategies in the disaster affected communities, nor Self Help Materials to address the general public about the menace of alcohol and substance abuse.

It is in this context that Alcohol & Drug Information Centre (ADIC) - India with the support of the World Health Organization (WHO) - India Office has taken the initiative to develop and publish a Training Kit which include a Training Manual and a Handbook for Health Workers and Service Providers, besides, Self Help Materials consisting of Educational Pamphlets, Posters and Fact Sheets for the General Public. This Training Manual will help in providing a better understanding about the various aspects of the alcohol and substance abuse problem and effective intervention strategies to be adopted in vulnerable population affected by disasters. This Training Manual has to be used along with the Handbook and the Self Help Materials as an effective resource tool during intervention programmes in disaster affected communities. We hope this Training Manual will go a long way in dealing with the menace of alcoholism and substance abuse in vulnerable population affected by disasters.

**Dr. T. P. Jagadamma**  
Regional Director, Ministry of Health & FW  
(Chairperson, Core Team)

**Johnson J. Edayaranmula**  
Director, ADIC-India  
(Principal Author)



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Johnson J. Edayaranmula  
(Director, ADIC-INDIA)



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## Chapter I

### Introduction



Alcohol and Substance Abuse is increasing at an alarming rate, causing serious threats to every nation, by deteriorating health, increasing crimes, hampering productivity, destroying relationships, eroding social and moral values and impeding the overall progress of societies. Young people are becoming the largest hostage of the menace of substance abuse and their vulnerability is increasing day by day.

The problem of Alcoholism and Substance abuse is more rampant among the high risk population in the Coastal Areas, Tribal Colonies and Slums.

Studies and Research has proved that the situation is even worse among populations affected by man made as well as natural disasters; particularly those living in high risk areas.

Investigations have further revealed that disaster survivors bear a substantial burden of Mental Health problems, which include Post Traumatic Stress

Disorder (PTSD), anxiety, depression, panic disorders and suicidal tendencies. Increased Alcohol and Substance abuse is a well-documented co-morbid factor accompanying post traumatic stress disorder and other psychological disorders.

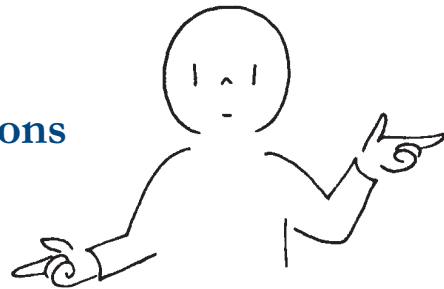
The recent Tsunami was an eye opener, which has re-affirmed the increased prevalence of Alcohol and Substance use among the affected population.

This Training Manual is developed for Trainers, Health Workers and Service Providers to have a better understanding about the various aspects of the Alcohol and Substance abuse problem and effective intervention strategies to be adopted in vulnerable population affected by disasters.



## Chapter II

# Disasters & Traumatic Reactions



When people find themselves suddenly in danger, sometimes they are overcome with feelings of fear, helplessness or horror. These events are called Traumatic Experiences. These experiences in turn produce emotional shock and may lead to several psychological problems. It is important to understand some of the common reactions experienced by people following a disaster.

### 1. Fear and Anxiety

Anxiety is a common and natural response to a dangerous situation. For many, it may last long even after the trauma is over. One may become anxious when they remember the trauma. But sometimes anxiety may occur out of the blue. Triggers or cues that can cause anxiety may include places, times of day, certain smells or noises, or any situation that reminds of the trauma.



### 2. Re-experiencing of the Trauma

People who have been traumatized often re-experience the traumatic event. For example, they may have unwanted thoughts of the trauma and find themselves unable to get rid of them. Some people have flashbacks, or very vivid images, as if the trauma is occurring again. Nightmares are also common. These symptoms occur because a traumatic experience is so shocking and so different from everyday experiences that one can't fit it into what they know about the world. So in order to understand what happened, the mind keeps bringing the memory back, as if to better digest it and fit it in.

### 3. Increased Arousal

It is also a common response to trauma. This includes feeling jumpy, jittery, shaky, being easily startled and having trouble concentrating or sleeping. Continuous arousal can lead to impatience and irritability, especially if one is not getting enough sleep. The arousal reactions are due to the fight

or flight response in the body. The fight or flight response is the way we protect ourselves against danger and it occurs also in animals. When we protect ourselves from danger by fighting or running away, we need a lot more energy than usual, so our bodies pump out extra adrenaline to help us get the extra energy we need to survive.



People who have been traumatized often see the world as filled with danger, so their bodies are on constant alert, always ready to respond immediately to any attack. The problem is that increased arousal is useful in truly dangerous situations. But alertness becomes very uncomfortable when it continues for a long time even in safe situations.

#### 4. Avoidance

It is a common way of managing trauma-related pain. The most common



is avoiding situations that remind them of the trauma, such as the place where it

happened. Often situations that are less directly related to the trauma are also avoided- such as going out in the evening if the trauma occurred at night. Another way to reduce discomfort is trying to push away painful thoughts and feelings. This can lead to feelings of numbness, where one find it difficult to have both fearful and pleasant or loving feelings. Sometimes the painful thoughts or feelings may be so intense that the mind just blocks them out altogether and one may not remember parts of the trauma.

#### 5. Anger and Irritability

Many people who have been traumatized feel angry and irritable. If one is not used to feeling angry, this may seem scary as well. It may be especially confusing to feel angry to those who are close to you. Sometimes people feel angry because of feeling irritable so often. Anger can also arise from a feeling that the world is not fair.



#### 6. Guilt and Shame

Trauma often leads to feelings of guilt and shame. Many people blame themselves for things they did or didn't do to survive. They may feel ashamed

because during the trauma they acted in ways that one would not otherwise have done. Sometimes, other people may blame them for the trauma.



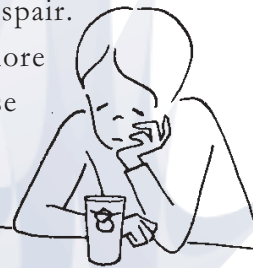
Feeling guilty about the trauma means that one is taking the responsibility for what occurred.

While this may make them feel somewhat more in control, it can also lead to feelings of helplessness and depression.

### 7. Grief and Depression

They are common reactions to trauma. This may include feelings of sadness, hopelessness or despair.

One may cry more often or may lose interest in people and activities they used to enjoy.

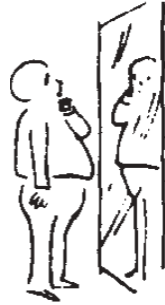


They may also feel that plans they had for the future don't seem to matter anymore, or that life isn't worth living. These feelings can lead to thoughts of wishing one were dead, or doing something to hurt or kill themselves.

### 8. Low Self-esteem

Self-image and views of the world often become more negative after a trauma.

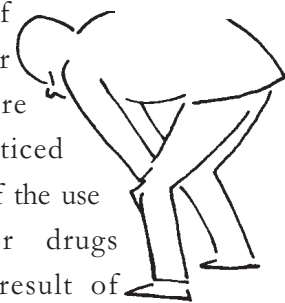
One may tell himself, "If I hadn't been so weak or stupid this wouldn't have happened to me." Many people see themselves as more negative overall after the trauma ("I am a bad person and deserved this").



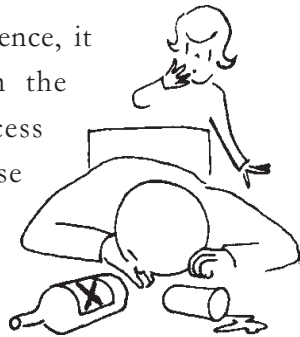
It is also very common to see others more negatively and to feel that one can't trust anyone. If one uses to think about the world as a safe place, the trauma may suddenly make him think that the world is very dangerous. If one had previous bad experiences, the trauma convinces them that the world is dangerous and others aren't to be trusted. These negative thoughts often make people feel they have been changed completely by the trauma. Relationships with others can become tense and it is difficult to become intimate with people as your trust decreases.

### 9. Alcohol & Substance Abuse

Increased use of alcohol & other substances are commonly noticed after a trauma. If the use of alcohol or drugs changed as a result of



traumatic experience, it can slow down the recovery process and cause problems of its own. Many of the reactions to trauma are connected to one another. Many people think that their common reactions to the trauma mean that they are “going crazy” or “losing it.” These thoughts can make them even more



fearful. That will prompt many to get drunk or take heavy doses of drugs with the wrong notion that they could bury their problems and be normal. But unfortunately that always ends up in bigger problems, which they may find it difficult to come out themselves.

This Manual focuses on the issue of Alcohol and Substances Abuse Intervention among those vulnerable populations affected by disasters.

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**Reference:**

- 1) “Common Reactions to Trauma” - Edin B. Foa, Elizabeth A. Hembree, David Riggs, Sheila Rauch & Martin Franklin - Centre for the Treatment & Study of Anxiety, Department of Psychiatry, University of Pennsylvania, USA.

## Chapter III

# Alcohol, Drugs & Other Substances



A drug is any substance that, when taken into the living organism may modify one or more of its functions. Drug misuse means nonspecific or indiscriminate use of drugs. Drug abuse refers to self-medication or self administration of a drug in chronically excessive quantities resulting in psychic and/or physical dependence, functional impairment, and deviation from approved social norms.

The most widely used drugs are Alcohol and Tobacco followed by Narcotic Drugs and Psychotropic Substances.

### A. ALCOHOL

The word 'Alcohol' is derived from the Arabian term, 'al-kuhul' which means 'finely divided spirit'. Alcohol is a clear, thin, highly volatile liquid, with a harsh burning taste. Chemically it is  $C_2H_5OH$  or ethyl alcohol. Alcohol is obtained through Fermentation or distillation.

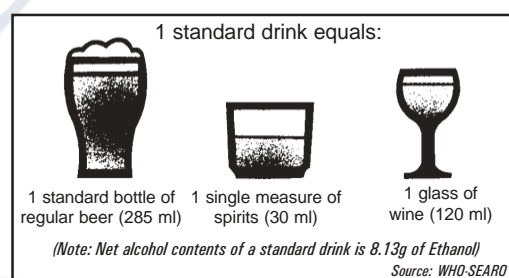
#### Types of Alcoholic Beverages

Alcoholic Beverages are available in different forms based on how it has been

produced, the percentage of ethyl alcohol it contains, its flavour and colour.

Beverage	Source	Alcohol %
Brandy	Fruit Juices	40-50
Whisky	Cereals	40-55
Rum	Sugarcane	40-55
Wines	Grapes	10-22
Beer	Cereals	6-8
Toddy	Palm Juice	5-10
Arrack	Molasses	50-60

The volume-by-volume strength of alcoholic beverages varies considerably. The amount of alcohol in one peg of spirit is equivalent to that of one glass of wine and half pint of beer.



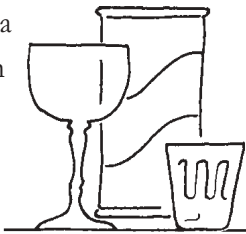
### Alcohol is a Drug

Even though many people are not aware, it is an undisputed fact that alcohol is a potent drug. Ethyl alcohol ( $C_2H_5OH$ ), the intoxicating substance in

alcoholic beverages, produces physical and psychological changes. These changes range from a feeling of well being experienced after one or two drinks, to drunkenness, which is the acute effect of having too many drinks.

Alcohol so often is misunderstood as a stimulant because it appears to make people livelier and less inhibited. It is actually

a depressant. If taken in small quantities, it depresses that part of the brain,



which controls inhibitions, and so the person feels relaxed. When Blood Alcohol Concentration (BAC) is low, the drinker experiences a feeling of relaxation, tranquility and a sense of well-being. It slightly increases the heart rate, dilates blood vessels, stimulates appetite and moderately lowers blood pressure. When BAC is high, it depresses the other areas of the central nervous system.

To sum up,

- Ethyl alcohol is a product of fermentation and distillation.
- It is a drug and has no nutritive value.
- It is a depressant of the central nervous system.

- It is a dependency-producing, highly addictive drug.

## B. DRUGS OF ABUSE

Most drugs of abuse are psychoactive substances, which act either directly or indirectly on mental function. Source-wise, it can be a natural product (e.g. cannabis), semi synthetic (e.g. heroin), synthetic (e.g. amphetamines) or designer products (e.g. ecstasy). The drugs of abuse are classified on the basis of the effects they produce on the brain.

These categories include:

**a) Narcotics:** These are products derived from the opium plant, *Papaver somniferum*. They are used medicinally to relieve pain and have a high potential for abuse. They can be naturally occurring, semi synthetic or synthetic. Examples are opium, morphine, codeine, heroin, meperidine and methadone.



**b) Depressants:** These are synthetic products used medicinally to relieve anxiety, irritability and tension and to induce sleep. Examples are

barbiturates, benzodiazepines, methaqualone, chloral hydrate and glutethimide.

**c) Stimulants:** These are synthetic drugs used to increase alertness, relieve fatigue, feel stronger and more decisive; used for euphoric effects or to counteract the “down” felling of tranquilizers or alcohol. Examples include cocaine, amphetamines, methamphetamine, phenmetrazine and methylphenidate.

**d) Hallucinogens:** These are synthetic drugs that produce behavioral changes that are often multiple and dramatic, usually associated with hallucinations. Examples include PCP, LSD, mescaline psilocybin and ecstasy.

**e) Cannabis derivatives:** These are natural products obtained from the hemp plant *Cannabis sativa*. Examples include hashish, ganja, bhang and marijuana.

The mode of administration of drugs includes inhalation (snorting, sniffing, smoking), injection (subcutaneous, intramuscular, intravenous) and

ingestion. Of these the intravenous route is the most dangerous route of administration.

### C. TOBACCO



Tobacco is obtained from the leaves of the plant *Nicotiana tabacum*. Tobacco mainly contains the nicotine groups of alkaloids and tar, which is a combination of more than 4,000 toxic substances. In addition, the combustion of tobacco produces numerous other poisonous gases like carbon monoxide. Tobacco is used in different forms, which include smoking (cigarette, bidi, cigar, hukka) chewing (pan masala, ghutka, raw tobacco) and sniffing.

#### **Reference:**

- 1) “Prevention of Harm from Alcohol Use” - World Health Organization (WHO) - Regional Office for South East Asia, New Delhi.
- 2) “A Lot of Bottle” - Derek Rutherford, Institute of Alcohol Studies, London.
- 3) “Drug Addiction, Identification & Initial Motivation” - Ministry of Social Justice & Empowerment, Govt. of India and United Nations International Drug Control Programme (UNDCP), Regional Office for South Asia.

## Chapter IV

### Causative Factors

Several factors attribute to the use of alcohol and other drugs. The following will explain the causative factors at the three stages of addiction.

#### Stage 1 - Experimental and Social Use

**Frequency of use** - Occasional, perhaps a few times monthly. Usually on weekends when at parties or with friends.



**Sources** - Friends and peers.

#### Reasons for use

- to satisfy curiosity
- to acquiesce to peer pressure
- to obtain social acceptance
- to defy parental limits
- to take a risk or seek a thrill
- to appear grown up
- to relieve boredom
- to experience pleasurable feelings
- to be sociable



#### Stage 2 - Abuse

**Frequency of use** - Regular, may use several times per week. May begin using during the day. May be using alone rather than with friends.

**Sources** - Friends; May sell drugs to keep a supply for personal use; May begin stealing to have money to buy drugs/alcohol.

#### Reasons for use

- to manipulate emotions; to experience the pleasure the substances produce; to cope with stress and uncomfortable feelings such as pain, guilt, anxiety and sadness; and to overcome feelings of inadequacy.
- persons who progress to this stage of drug/alcohol involvement often experience depression or other uncomfortable feelings when not using. Substances are used to stay high or at least maintain normal feelings



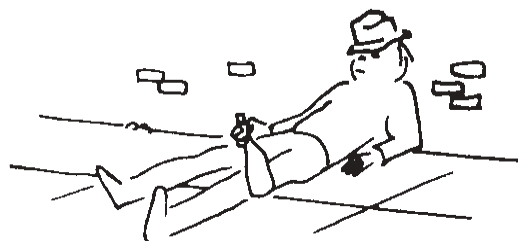
### Stage 3 - Dependency/Addiction

**Frequency of use** - daily use, continuous.

**Sources** - Will adopt any means necessary to obtain and secure needed drugs/alcohol. Will take serious risks; may engage in criminal behavior.

**Reasons for use**

- drugs/alcohol are needed to avoid restlessness, pain and depression



- strong feeling to escape the realities of daily living.
- use is out of control and cannot survive without alcohol/drugs since the person has already developed withdrawal symptoms.

SUBSTANCE USE - CAUSATIVE FACTORS			
Stages of Addiction	Frequency	Source	Reasons
Experimental & social use	Occasional Few times a month	Friends & peers	Curiosity, peer pressure, fun, adventure, sociable, risk, relieve boredom
Abuse	Regular Several times a week	Friends May sell drugs to ensure personal supply	Manipulate emotions, cope with stress, guilt, maintain high
Dependency	Daily use	Will adopt any means to obtain drugs	Escape life realities, withdrawal symptoms

**Reference:**

1) "Drug Addiction, Identification & Initial Motivation" - Ministry of Social Justice & Empowerment, Govt. of India and United Nations International Drug Control Programme (UNDCP), Regional Office for South Asia.

## Chapter V

# Effects of Alcoholism & Substance Abuse

### ALCOHOLISM

The most widely accepted definition of alcoholism, is the one offered by Keller and Effron:

*“Alcoholism is a chronic illness, psychic, somatic or psychosomatic, which manifests itself as a disorder of behaviour. It is characterised by the repeated drinking of alcoholic beverages, to an extent that exceeds customary, dietary use or compliance with the social customs of the community and that interferes with the drinker’s health or the social or economic functioning”.*

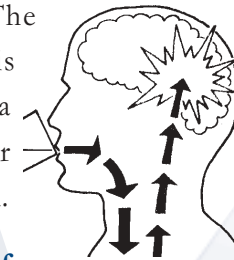
**Alcohol Dependence** can be both physical and psychological.

**Physical Dependence** is a state wherein the body has adapted itself to the presence of alcohol. If its use is suddenly stopped, withdrawal symptoms occur. These symptoms range from sleep disturbances, nervousness and tremors to convulsions, hallucinations, disorientation, delirium tremens



(DTs) and possibly death.

**Psychological Dependence** exists when alcohol becomes so central to persons thoughts, emotions and activities, that it becomes practically impossible to stop taking it. The ethos of this condition is a compelling need or craving for alcohol.



### Characteristics of Alcoholism

#### It is a Primary Disease

Initially, alcoholism was considered a symptom of some psychological disorder. It has now been understood that alcoholism *per se* is a disease, which causes mental, emotional and physical problems. These associated problems cannot be effectively dealt with, unless alcoholism is treated first.



### It is a Progressive Disease



If it is not treated, the disease progresses from bad to worse. Sometimes there may be intermittent periods where one feels there is improvement; but over a period of time, the course of the disease will only be towards deterioration.

### It may be a Terminal Disease

A person drinking excessively may die due to some medical complication like cirrhosis or pancreatitis. But on close scrutiny, it may be found that the complication itself was induced by alcohol. Thus alcohol is the real agent behind the person's death.

### It is a Treatable Disease

The disease cannot be cured; but it can be successfully arrested, with the help of timely, appropriate and comprehensive treatment. Treatment aims at total abstinence from alcohol. Ingestion of even a very small amount of alcohol



will lead the person to obsessive drinking within a few days and he will lose control. In

other words, an alcoholic can never go back to social drinking, even if he has remained sober for quite a number of years.

No.of Drinks	Immediate Effects of Drinking
1	Feeling of relaxation and an enhanced sense of well being.
2	Feeling of well being and garrulousness.
3	Impairment of judgement and foresight.
4	Decision making capabilities get affected.
5	Lack of motor coordination.
6	Drunkenness becomes obvious. Deterioration in physical and social control and competence.
7	Staggering and double vision. Vomiting may occur.
15	Loss of consciousness; but still the drinker can be aroused.
22-25	Breathing stops and death ensues.

## LONG TERM EFFECTS OF ALCOHOL

### 1. BRAIN:

Poor concentration, defective memory, blackouts, brain damage, cerebellar degeneration, injury to peripheral nerves

### 2. OESOPHAGUS:

Oesophagitis, cancer

### 3. HEART:

Hypertension, atherosclerosis, cardiomyopathy, myocardial infarction

### 4. LUNGS:

Chronic chest diseases, carcinoma, pneumonia, tuberculosis

### 5. LIVER:

Fatty liver, liver cirrhosis

### 6. STOMACH:

Vomiting, gastritis, peptic ulcers

### 7. KIDNEY:

Dysfunction

### 8. PANCREAS:

Pancreatitis, carcinoma, diabetes

### 9. BLADDER:

Cancer

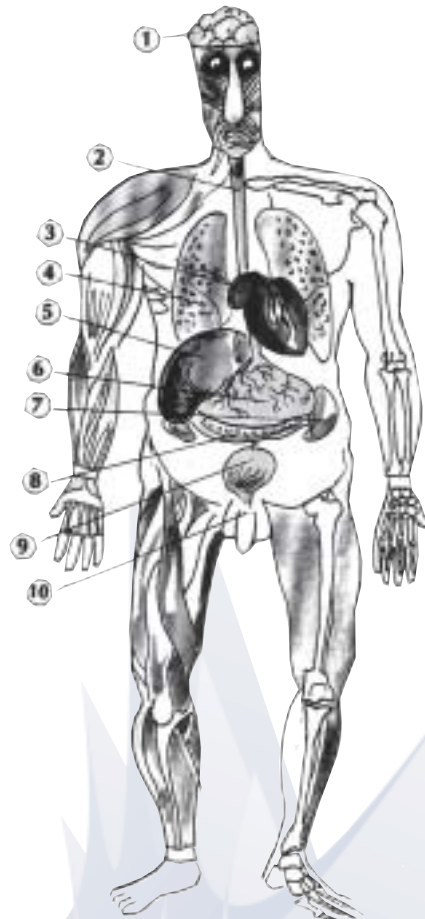
### 10. SEX ORGANS:

#### *Males :*

Loss of libido, impotence

#### *Females:*

Breast cancer, ovary impairment, menstrual problems, infertility



### Consequences of Alcohol Use

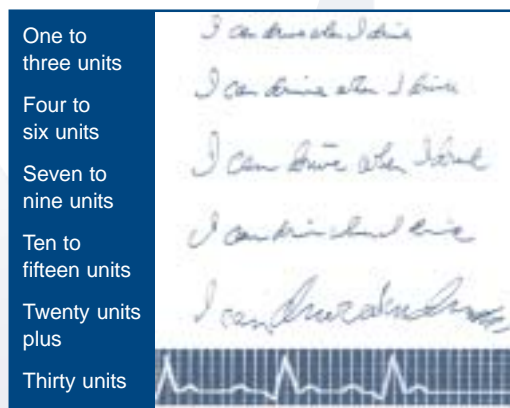
The widespread and increasing use of alcohol in a majority of communities is drawing attention to the public health consequences of alcohol consumption. Recent evidence from World Bank and WHO studies show that the impact from alcohol-related death and disability is substantial. The harmful effects of

alcohol use on health and the possibility of developing dependence have been recognized as issues of great concern for a long time. New evidence underscores the need to recognize alcohol use as one of the risk factors for many communicable and non-communicable diseases as well as for accidents, injuries, domestic and social violence. There is also growing emphasis

### CNS EFFECTS ON DIFFERENT BLOOD ALCOHOL CONCENTRATIONS (BAC)

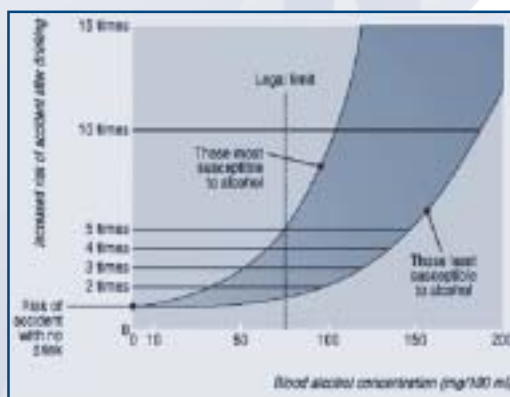
BAC	CNS effects
20-30 mg/dl	Slow motor responses and decreased thinking ability
30-80 mg/dl	Increase in motor and cognitive problems
80-200 mg/dl	Definite impairment of motor coordination and judgement; Fluctuations in mood and increased risk-taking behaviour
200-300 mg/dl	Marked slurring of speech; Inability to carry out simple tasks
>300 mg/dl	Loss of consciousness, convulsions and possible death

Source: WHO SEARO - Facts on Alcohol Use and Abuse



Source: A Lot of Bottle - Derek Rutherford, IAS, UK.

### RISKS ASSOCIATED WITH BLOOD ALCOHOL CONCENTRATION (BAC)



Source: The ABC of Alcohol - British Medical Journal.

on different patterns of drinking, influencing the type of outcomes, e.g. long-term high quantity drinking causing liver damage, while acute intoxication (binge drinking) is linked to accidents and injuries.

Alcohol use usually starts as a social phenomenon. Some individuals over time develop a pattern of use which can be labelled as harmful use or alcohol abuse and some go on to develop alcohol dependence. Individuals with alcohol dependence are usually the focus of discussion as the complications of alcohol use are very obvious. However, the occurrence of alcohol-related problems are not necessarily limited to those labelled as 'addicts' or 'drunkards'. In fact, the average person with alcohol-related problems may be neatly dressed, may not show signs of alcohol withdrawal, may have a job and good family support, but may still have significant physical, psychiatric, social or family complications due to excessive consumption of alcohol.

### Health and Safety

Trauma, violence, organ system damage, various cancers, unsafe sexual practices, premature death and poor nutritional status of families are associated with alcohol use.



Hazardous drinking is significantly associated with health problems such as injuries and hospitalizations. 15-20% of traumatic brain injuries are related to alcohol use. 37% of injuries in

public hospitals are due to alcohol. 18% of psychiatric emergencies are caused by alcohol. 34% of those who attempted suicide were abusing alcohol.

### Workplace

20% of absenteeism and 40% of accidents at work place are related to alcohol. Annual loss due to alcohol is estimated at Rs.80,000 - 100,000 mn. In a public enterprise, number of work place accidents was reduced to less than one fourth after alcoholism treatment.

### Family

85% of men who behave violent towards their wives are frequent or daily users of alcohol. More than 50% of the abusive incidents are under the influence of alcohol. An assessment showed that domestic violence reduced to one tenth of previous levels



after alcoholism treatment.

10% - 45% of household expenditure is spent on alcohol. Use of alcohol increases debts and reduces the ability to pay for food and education.

Alcohol abuse leads to separations and divorces and causes emotional hardship to the family. The emotional trauma cannot be translated in terms of money but the impact it has on quality of lives is significant.

### The Economics of Alcohol

Large amount of revenue is generated from sale of alcohol. Yet, the hidden, cumulative costs of health care, absenteeism and reduced income levels related to heavy alcohol use are higher. These costs were estimated to be 75% more than the revenue generated in a study from Karnataka.



### Drug Addiction

Just like 'Alcoholism', dependency on any other drug is also a disease - a primary, progressive, yet treatable disease.

### Substance Dependence

Substance dependence is a syndrome manifested by a behavioral pattern in which

the use of a given psychoactive drug, or class of drugs, is given a much higher priority than other behavior that once had a higher value. The features include:

- **Tolerance**

describes the need to progressively increase the dose to produce the effect originally achieved with smaller doses.

- **Physical dependence** is a state of physiologic adaptation to a drug, manifested by a withdrawal (abstinence) syndrome.

- **Psychological dependence** is accompanied by feelings of satisfaction and a desire to repeat the drug experience or to avoid the discontent of not having it.

- **Withdrawal Syndromes** is characterised by a cluster of symptoms, often specific to the drug used, which develop on total or partial withdrawal of the drug, usually after repeated and/or high-dose use.

## HARMFUL EFFECTS OF DRUGS

### Overdose



An overdose is an excessive dose of drugs, which results in a narcosis or coma and respiratory failure. Injective mode of administration carries a higher risk. It can cause brain damage and organ failure. The consumption of combinations of drugs at the same time is an important cause.

### Mental Health

- Toxic acute effects may result from taking high doses of drugs, or more usually, from the prolonged usage of high doses of drugs. The symptoms are specific to the type of drug used.

- Chronic effects such as anxiety, depression, suicidal tendencies are possibly associated, indirectly from drug use, from the lifestyle associated with being dependent on a drug (i.e. adverse life stresses).



### Transmission of Infectious Disease

Blood-borne infectious diseases may be transmitted when two or more injectors share injecting equipment; for example HIV, hepatitis B & C, and malaria.

### Sexual Health

The majority of drug users are sexually active. Sexually transmissible diseases other

than the blood-borne viruses associated with drug injection, including syphilis, gonorrhea and herpes are high among drug users. Also some female and male users may engage in sex work to get money. Pelvic inflammatory disease and unplanned pregnancies are common in female drug users.

### Social Effects of Drug Abuse

Impairment of performances at educational and occupational levels, poor interpersonal relationships, absenteeism, economic loss, unemployment, marital tensions, quarrels and divorces, antisocial behavior and criminal tendencies, traffic violations, violence, child abuse, homicides and suicides are the common social problems associated with drug abuse.



### HARMFUL EFFECTS OF TOBACCO

According to WHO (World Health Organization), Tobacco presently contributes to 5 mn. deaths per year globally. The figure is expected to rise to 10 mn. by the year 2025. Tobacco kills between 8-9 lakh people each year in India. This will multiply many fold in the next 20 years. Tobacco use is the single largest preventable cause of death and disease.

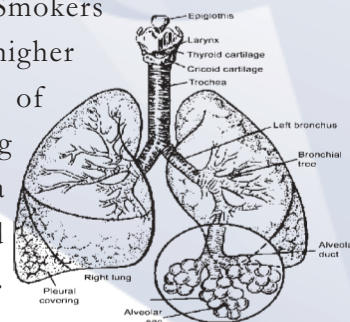
Tobacco use attribute to several diseases, which include:

**Cardiovascular Diseases:** Smokers have a 2-3 fold risk of heart diseases. It is synergistic with other CHD risk factors namely diabetes, hypertension and hypercholesterolemia.

**Arterial Diseases:** Smokers have 12-15 times greater chance of arterial disease of the limbs. Thromboangitis obliterans is an arterial disease seen in young people who smoke beedis. The blood circulation through arteries is compromised leading to pain in the leg muscles. Often the limb has to be amputated.

**Lung Cancer:** Lung cancer is the most dreadful disease among smokers. More than 80% of the lung cancer victims are smokers. Lung cancer is 10 times more prevalent in men than women.

Chronic obstructive pulmonary diseases are high among smokers. Bronchitis, both acute and chronic are common among smokers. Smokers have a higher chance of contracting pneumonia and tuberculosis.



**Other Cancers:** The risk of other cancers are also significantly increased by smoking:

Cancers	Increase in risk
Lung cancer	7-15 times
Throat cancer	5-13 times
Mouth cancer	3-10 times
Oesophageal cancer	1-3 times
Cancer of Pancreas	2 times
Cancer of kidney	1 time

**Stroke:** Smokers have a 3 fold risk for stroke. Bleeding from the blood vessels and thrombosis in the brain lead to stroke. Risk of stroke is related to the number of cigarettes or beedis smoked. The longer the duration of smoking the greater the risk.

**Passive Smoking:** Side-stream smoke has more tar, nicotine, carbon monoxide and other toxic chemicals than the smoke that is inhaled from filtered cigarettes by the smoker. A child being held by someone who is smoking, will breathe in more cancer-

causing chemicals than the smoker him or herself. Children whose parents smoke 10 or more cigarettes a day in their homes have a greater chance of becoming asthmatic. They can get frequent cold, cough and respiratory infection.

**Gastrointestinal Diseases:** Gastro esophageal reflux disease and Peptic ulcer disease are more common in smokers. The risk increases with number of cigarettes smoked per day. Gall stones, Crohn's Disease and Ulcerative colitis are associated with smoking.

**Reproductive Function:** Chronic smoking can cause impotence and oligospermia (decreased sperm count).

**Chewing of Tobacco** products causes oral Cancers, leukoplakia, nicotine stomatitis, dental caries, tooth abrasion, periodontitis (inflammation of the gums) and bad breath.

**Sniffing of Tobacco** causes chronic rhinitis, chronic sinusitis and nasal cancers.

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- 2) "Facts on Alcohol Use and Abuse" - World Health Organization (WHO), Regional Office for South East Asia.
- 3) "Alcohol : Fun or Folly" - Johnson J. Edayaranmula, ADIC - India, Trivandrum, India.

## Chapter VI

# Intervention in Vulnerable Population Affected by Disasters



The aim of all disaster mental-health management should be the humane, competent and compassionate care of the affected. The goal should be to prevent adverse health outcomes and to enhance the well-being of individuals and communities.

It is important to recognise and acknowledge that Alcohol and Substance abuse is a behavioural disorder that may commonly co-occur with Post Traumatic Stress Disorder (PTSD) and sometimes together with depression, panic disorders and other anxiety disorders. Therefore the best treatment results are achieved when all these disorders are treated together rather than one after the other.



It is also important to understand the various factors associated with disasters for the successful

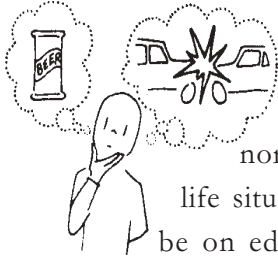
management of substance abuse among the vulnerable population affected by disasters.

### Disaster: Psychological Effects

Several people had survived disaster without developing significant psychological symptoms. Others, however, may have a difficult time “getting over it.” Survivors of trauma have reported a wide range of psychiatric problems, including depression, alcohol and drug abuse, lingering symptoms of fear and anxiety that make it hard to work or go to school, family stress, and marital conflicts.



Post-Traumatic Stress Disorder (PTSD) and Acute Stress Disorder (ASD) are the common psychiatric disorders following a traumatic event. People suffering with PTSD or ASD often have persistent nightmares or “flashbacks” of the trauma. They may avoid reminders of the trauma or “feel numb”



and have difficulty responding normally to average life situations. They may be on edge, have trouble sleeping, have angry outbursts, or seem excessively watchful. They may become badly depressed and begin to abuse alcohol and/or drugs as a way of medicating their painful feelings. This substance abuse can become active addiction.

The effects of trauma are not limited to those affected directly by the events. Others may also suffer indirect effects from trauma-referred to as “vicarious” or “secondary” traumatization. Those at risk include spouses and loved ones of trauma victims, people who try to help victims, such as police or firemen, and health care professionals who treat trauma victims, such as therapists and emergency room personnel, as well as journalists.

### **PTSD and Alcohol/Substance Abuse**

PTSD and alcohol & substance abuse problems often occur together. People with PTSD are more likely than others with similar backgrounds to have alcohol use disorders both before and after being diagnosed with PTSD, and people with alcohol & substance abuse

disorders often also have PTSD.

25-75% of those who have survived abusive or violent trauma also report problems with alcohol use.

10-33% of survivors of accidental, illness, or disaster trauma report problematic alcohol/substance use, especially if they are troubled by persistent health problems or pain.

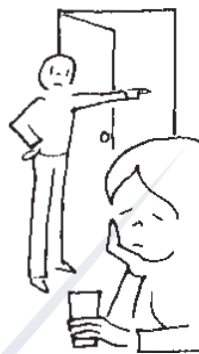
### **Disrupted Relationships**

Alcohol and substance abuse problems often lead to trauma and disrupt relationships. Persons with alcohol and substance abuse disorders are more likely than others with similar backgrounds to experience psychological trauma. They also experience problems with conflict and intimacy in relationships.

Problematic alcohol and substance use is associated with a chaotic lifestyle, which reduces family emotional closeness, increases family conflict, and reduces parenting abilities.

### **Alcohol and Substance Abuse Aggravates Problems**

PTSD symptoms often are worsened



by alcohol and substance use. Although alcohol may provide a temporary feeling of distraction and relief, it may also reduce the ability to concentrate, enjoy life and be productive.

Excessive alcohol and substance use can impair one's ability to sleep restfully and to cope with trauma memories and stress.



Alcohol and substance intoxication also increase emotional

numbing, social isolation, anger and irritability, depression, and the feeling of needing to be on guard (hypervigilance).

Alcohol and substance use disorders also reduce the effectiveness of PTSD treatment.

### Major Health Problems

Individuals with a combination of PTSD and alcohol and substance abuse problems often have additional mental or physical health problems. As many as 10-50% of adults with alcohol and substance use disorders and PTSD also have one or more of the following serious disorders:

- Anxiety disorders (such as panic attacks, phobias, incapacitating worry, or compulsions)
- Mood disorders (such as major depression or a dysthymic disorder)
- Disruptive behavior disorders (such as attention deficit or antisocial personality disorder)
- Addictive disorders (such as addiction to or abuse of street or prescription drugs)
- Chronic physical illness (such as diabetes, heart disease, or liver disease)
- Chronic physical pain due to physical injury/illness or due to no clear physical cause

### Effective Treatment Strategies

The existence of PTSD and alcohol and substance use disorder makes both problems worse in an individual. Alcohol and substance abuse problems must be carefully addressed in PTSD treatment. When alcohol/substance abuse is (or has been) a problem in addition to PTSD, it is best to seek

treatment from a PTSD specialist who also has



expertise in treating alcohol (addictive) disorders. In any PTSD treatment, several precautions related to alcohol use and alcohol disorders are advised.

The clients initial interview and assessment should include questions that sensitively and thoroughly identify patterns of past and current alcohol and substance use.



Treatment planning should include a discussion between the professional and the client about the possible effects of alcohol and substance abuse problems on PTSD, sleep, anger and irritability, anxiety, depression, and work or relationship difficulties.

Treatment should include education, therapy, and support groups that help the client address alcohol and substance abuse problems in a manner acceptable to the client.

Treatment for PTSD and alcohol and substance abuse problems should be designed as a single consistent plan that addresses both sources of difficulty together. Although there may be separate meetings for clinicians devoted primarily to PTSD or to alcohol problems, PTSD issues should be included in alcohol treatment, and alcohol use (“addiction” or “sobriety”) issues should be included in PTSD treatment.



### Community Mobilisation:- The Key

Addiction is not the problem of a single individual. What starts off as an individual’s problem, spreads and becomes a social issue. Addiction leads to violence, theft and insecurity and therefore, the entire community can be involved in dealing with the issue. So, it is important to create

an awareness about the problems associated with addiction among the public, and transforming the community into an enabling force to combat addiction. The empowered community has infinite powers to reform itself, a power that no agencies can ever match.



### Successful Approaches

- Create awareness about the consequences and sensitise the community.
- Enable the community to take up the responsibility.
- Strengthen advocacy groups. Make use of women victimized by their husbands’/ sons’ addiction, youth groups and non-users to strengthen negative attitude towards alcohol and substance use.

- Provide and instill motivation to sustain the interest of the group.

### Factors Facilitating Positive Outcome

There is much evidence to suggest that a number of factors help to facilitate positive outcomes and prevention. These include:

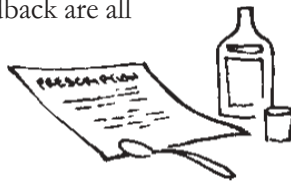
#### 1. Recognizing the Individual

It is crucial to recognize individual's strength and the suffering they have experienced. While acknowledging the sufferings of the survivors' through act of compassion and empathy, it is also important that those who care for them believe and support their capacity to master this experience.



#### 2. Information and Education

Information and education help in improving people's understanding. It should be an integral part of the support and care system. Information about what has happened, education about normal responses during such events, training tips to facilitate psychological recovery, access to information centers and ongoing information feedback are all significant.



#### 3. Sharing of Experience

Many individuals may express a tendency to share their sad experience or give testimony to externalise their problems and to obtain emotional release so as to gain understanding and support from others. This varies enormously. It may occur spontaneously when groups come together after the disaster. However, there will be others who may be reluctant to talk or share their experience. The facilitators should be aware of such variable needs and be supportive of what the survivor wants.



#### 4. Supportive Networks

Supportive networks are critical and should be retained, reinforced and rebuilt. These networks help people to deal with the disaster and its aftermath in the ongoing recovery process through the exchange of resources, practical assistance and emotional support.

#### 5. Strong Governmental Measures

In addition to the above, there are certain measures that need to be addressed by the Government, in order to make the intervention efforts fruitful. These include:

### ***Strengthening the Health System:***

The health care delivery system needs to be strengthened to make it capable of meeting the increased health needs during disasters. There should be mechanisms for mobilizing additional expert manpower and other medical resources during such emergencies.

### ***Providing Total Rehabilitation:***

Rehabilitation services should be made comprehensive by incorporating physical, psychological, social, vocational and infrastructural components.



### ***Monitoring flow of Funds:***

Utilisation of the massive charity aid that flow during disasters should be monitored, in order to prevent misuse by recipients and to avoid exploitation by people with vested interest.

### ***Checking Availability:***

Strict Governmental Regulations shall be advocated to control and prevent the trafficking of drugs and sales of alcohol in the disaster affected communities. Stringent action should be taken against bootleggers and peddlers. The Enforcement Agencies should be made more vigilant against such anti-social activities.

The above mentioned approaches and strategies, if sincerely implemented, will go a long way in keeping the menace of alcoholism and substance abuse under control in the wake of disasters.



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### ***Reference:***

- 1) *“Mental Health Intervention for Disaster” - Centre for the Treatment of Anxiety, Department of Psychiatry, University of Pennsylvania, USA.*
- 2) *“Dealing with Addiction : The Role of Social Worker/Psychologist” - Rukmani Jayaraman, T. T. Ranganathan Clinical Research Foundation, Chennai, India.*
- 3) *“Disaster Mental Health Response Handbook” - NSW Health, USA.*



*“First man takes a drink; Then drink takes a drink;  
Then drinks take a man” - Chinese Proverb*

# ALCOHOL AND SUBSTANCE ABUSE INTERVENTION IN VULNERABLE POPULATION AFFECTED BY DISASTERS

## Training Manual for Health Workers & Service Providers

Alcohol & substance abuse is increasing at an alarming rate causing serious threats to every nations, by deteriorating health, increasing crimes, hampering productivity, destroying relationships, eroding social and moral values and impeding the overall progress of societies. Studies have revealed an increased prevalence of alcohol & substance abuse among the population affected by natural and man-made disasters, making things even worse. Experiences have shown that no rehabilitation efforts can be successful without addressing the alcohol & substance abuse problem in the disaster affected communities. This Training Manual is developed to have a better understanding about the various aspects of the alcohol & substance abuse problem and effective intervention strategies to be adopted in vulnerable population affected by disasters.

*"These are dangerous times for the well-being of the world. In many regions, some of the most formidable enemies of health are joining forces with the allies of poverty to impose a double burden of disease, disability and premature death on many millions of people. It is time for us to close ranks against this growing threat"*

*- Dr. Gro Harlem Brundtland, Director General, WHO  
World Health Report - 2002*

Developed by

**ALCOHOL & DRUG INFORMATION CENTRE (ADIC)-INDIA**

National Office: T.C. 2/3322, Pattom, Trivandrum - 695 004

Kerala State, India. Tel: (91) 471 - 2551221

E-mail: [adicindia@vsnl.net](mailto:adicindia@vsnl.net)