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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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 destruction. 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.

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This Training Manual is a result of a collective effort of several persons who have made significant contributions from their valuable experience. We express our heartfelt thanks to...

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Johnson J. Edayaranmula
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Chapter I
Introduction

Alcohol and 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. 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.

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.
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$_2$H$_5$OH 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.

<table>
<thead>
<tr>
<th>Beverage</th>
<th>Source</th>
<th>Alcohol %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brandy</td>
<td>Fruit Juices</td>
<td>40-50</td>
</tr>
<tr>
<td>Whisky</td>
<td>Cereals</td>
<td>40-55</td>
</tr>
<tr>
<td>Rum</td>
<td>Sugarcane</td>
<td>40-55</td>
</tr>
<tr>
<td>Wines</td>
<td>Grapes</td>
<td>10-22</td>
</tr>
<tr>
<td>Beer</td>
<td>Cereals</td>
<td>6-8</td>
</tr>
<tr>
<td>Toddy</td>
<td>Palm Juice</td>
<td>5-10</td>
</tr>
<tr>
<td>Arrack</td>
<td>Molasses</td>
<td>50-60</td>
</tr>
</tbody>
</table>

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$_2$H$_5$OH), 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, ghotka, 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.

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.

<table>
<thead>
<tr>
<th>Stages of Addiction</th>
<th>Frequency</th>
<th>Source</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental &amp; social use</td>
<td>Occasional Few times a month</td>
<td>Friends &amp; peers</td>
<td>Curiosity, peer pressure, fun, adventure, sociable, risk, relieve boredom</td>
</tr>
<tr>
<td>Abuse</td>
<td>Regular Several times a week</td>
<td>Friends May sell drugs to ensure personal supply</td>
<td>Manipulate emotions, cope with stress, guilt, maintain high</td>
</tr>
<tr>
<td>Dependency</td>
<td>Daily use</td>
<td>Will adopt any means to obtain drugs</td>
<td>Escape life realities, withdrawal symptoms</td>
</tr>
</tbody>
</table>

Reference:
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.

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

<table>
<thead>
<tr>
<th>Cancers</th>
<th>Increase in risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung cancer</td>
<td>7-15 times</td>
</tr>
<tr>
<td>Throat cancer</td>
<td>5-13 times</td>
</tr>
<tr>
<td>Mouth cancer</td>
<td>3-10 times</td>
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<tr>
<td>Oesophageal cancer</td>
<td>1-3 times</td>
</tr>
<tr>
<td>Cancer of Pancreas</td>
<td>2 times</td>
</tr>
<tr>
<td>Cancer of kidney</td>
<td>1 time</td>
</tr>
</tbody>
</table>

**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.

**Reference:**

2) “Facts on Alcohol Use and Abuse” - World Health Organization (WHO), Regional Office for South East Asia.
3) “Alcohol : Fun or Folly” - Johnson J. Edguramnula, 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 (hyper-vigilance).

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.

Reference:
1) “Mental Health Intervention for Disaster” - Centre for the Treatment of Anxiety, Department of Psychiatry, University of Pennsylvania, USA.
3) “Disaster Mental Health Response Handbook” - NSW Health, USA.
“Wine hath drowned more men that the sea” - Thomas Fuller
“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 us to close ranks against this growing threat”

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

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ALCOHOL AND SUBSTANCE ABUSE INTERVENTION IN VULNERABLE POPULATION AFFECTED BY DISASTERS

HANDBOOK

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Development of Training Manual and Self Help Materials on “Alcohol & Substance Abuse Intervention
in Vulnerable Population Affected by Disasters” (SE/05/204056)
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 effective 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 Handbook will help in imparting special skills and techniques to Health Workers and Service Providers in effectively dealing with the alcohol and substance abuse problem in vulnerable population affected by disasters. This Handbook has to be used along with the Training Manual and the Self Help Materials as an effective resource tool during intervention programmes in disaster affected communities. We hope this Handbook will help a lot in dealing with the menace of alcoholism and substance abuse in vulnerable population affected by disasters.
ACKNOWLEDGEMENTS

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Johnson J. Edayaranmula
(Director, ADIC-INDIA)
Chapter I
Introduction

Natural and human-caused disasters often occur all of a sudden and every year millions of people are affected by it. The trauma associated with disasters usually last very long even after the event. Several psychological and behavioural problems are experienced among disaster stricken population. The populations mostly affected by disasters are the economically and socially backward people living in the densely populated coastal areas, tribal colonies and slums.

Studies conducted at the recent Tsunami affected localities has revealed that disaster survivors bear a substantial burden of Mental Health Problems, which include Post Traumatic Stress Disorders, anxiety, depression and suicidal tendencies. Increased alcohol and other substance abuse has been a well-documented co-morbid factor associated with traumatic and other psychological disorders in these affected populations.

The aggravation of the problem of alcohol and substance abuse in the Tsunami affected communities hasn’t come as a surprise as it is common knowledge that all kinds of detrimental and malevolent behaviours increase in the wake of disasters.

Alcoholism and substance abuse is an area, which is rather elusive to intervention programmes, by its very nature of being multifaceted, both etiologically and implication wise even among normal populations.

When it comes to populations affected by disasters, as in the case of the recent Tsunami, the whole scenario becomes all the more complicated. So, the formulation of an intervention protocol against this problem requires an in-depth understanding of the entire situation.

The main objective of this Handbook is to impart special skills and techniques to Health Workers and Service Providers in dealing with the alcohol and substance abuse problem in vulnerable population affected by disasters.
Researchers have long recognized the strong correlation between Post Traumatic Stress Disorders (PTSD) and Substance Abuse.

• Stressful events may influence profoundly the use of alcohol and other drugs.
• Stress is a major contributor to initiation and continuation of addiction to alcohol and other drugs.
• Stressful experiences increase the vulnerability of an individual to relapse to alcohol and other drugs even after prolonged period of abstinence.
• Adolescents and children exposed to severe stress may be more vulnerable to drug use. A number of clinical and epidemiological studies show a strong correlation between psychosocial stress early in life (e.g., parental loss, child abuse), and an increased risk for depression, anxiety, impulsive behaviour, and substance abuse in adulthood.

Psychological Problems

People who go through traumatic experiences often have symptoms and problems afterward. The seriousness of the symptoms and problems depends on several factors including a person’s life experiences before the trauma, his natural ability to cope with stress, the magnitude of the trauma and the nature of help and support a person gets from family, friends and professionals immediately following the trauma.

As most of the trauma survivors are not familiar with the effects of trauma, they often have trouble in understanding what is happening to them. They may think the trauma is their fault, that they are going crazy, or that there is something wrong with
them because other people who experienced the trauma don’t appear to have the same problems. Survivors may turn to drugs or alcohol to make them feel better. They may turn away from friends and family who don’t seem to understand. They may not know what to do to get better.

**Effects of Trauma**

During a trauma, survivors often become overwhelmed with fear. Soon after the traumatic experience, they may re-experience the trauma mentally and physically. Since this can be uncomfortable and sometimes painful, survivors tend to avoid reminders of the trauma.

**Alcohol & Substance Use**

The recent Tsunami disaster affected population comprised mainly of the fishing community, who mostly belongs to the poorest socio-economic groups. These groups are noted to have a higher preponderance for developing alcoholism and substance abuse among other unhealthy behaviours, even in the absence of any disasters. The problem of alcoholism and substance abuse has aggravated in all the disaster affected communities.

**Reasons for the Increase**

Several reasons have been attributed for the increase in alcohol and substance abuse behaviour in the disaster stricken communities, which include:

1. **Stress & Grief**

   The trauma caused by the near and dear ones, loss of house, property and other belongings besides the loss of vocational means like fishing boats, nets, etc. may led to lot of stress. These people show a tendency to resort to alcohol and other substances as a stress reliever.

2. **Depression**

   It is a well-known psychiatric fact that alcoholism is an important manifestation on depression, especially among men. Disasters are highly ‘depresso-genic’ situations, and in turn lead to increased alcoholism and substance abuse. The helpless, hopeless and worthless feeling aggravates depression.
3. Low Educational Status
The educational status of these populations is so poor that they have very little understanding of the implications of their behaviours. Illiteracy also prevails among these populations.

4. Limited Rehabilitation
The rehabilitation measures in most areas are limited to mere supply of food packets and clothing and treatment of illness. The social, psychological and vocational components are most often missing. These had generated a sense of hopelessness and had led to abusive behaviours. Serious lack of coordination in the relief work is often noticed. Even though funds and resources may flow from various quarters, they are usually mal-directed, wasted or misused.

5. Poor Health System
Most of the disaster affected areas have underdeveloped health systems, which could provide only basic facilities like, emergency drugs or sometimes antibiotics. Anti depressants and de-addiction facilities are rarely available. The grossly understaffed health system can rarely provide specialist care and counselling services.

6. Lax Regulations
The Governmental regulations over drug trafficking and alcohol sales usually go lax during the times of disasters and emergencies. This leads to wide spread availability of such substances.

7. Flow of Money
During disasters, Government and other Voluntary Agencies very often supply aid to victims in the form of money, which can very easily get misused. In addition many unaffected individuals also feign as victims of the disaster and obtain the aid and use it for unhealthy activities. There were even reported incidents of people selling the supplies they obtained for getting money for booze.
8. Exploitation

Eying the flow of money in the affected areas some people even promote the sale of alcohol and other substances in these areas, particularly spurious liquors. In these circumstances, it is a real challenge for the Government as well as the Health and Social Welfare Agencies to implement suitable intervention strategies to counter the menace of alcoholism and substance abuse among the vulnerable population affected by disasters.

Reference:


2) “Effects of Traumatic Experiences” - Eve B. Carlson & Josef Ruzek, University of Pennsylvania.

3) “Alcoholism and Substance Abuse Among Disaster Stricken Population” - Anoop Lal, Medical College, Trivandrum, India.
Chapter III

Intervention Skills & Approaches

Mental health interventions have a vital role to play in the coordinated response to disaster in the community. Effective responses to disaster situations involve the government, non-government organisations and the community.

In order to be of assistance to disaster-affected communities, the care provider must be knowledgeable about the nature of the event, the post-event circumstances and the type and availability of relief and support services.

This chapter elaborates the intervention skills and approaches that need to be adopted to deal with the problem of alcohol and substance abuse in disaster-stricken communities. The intervention approaches outlined here are derived in the light of global experiences and from feedbacks obtained from volunteers with disaster relief work experience.

I. Assessing the Magnitude of the Problem

Even though researches show that there is a definite increase in the use of addictive substances in the aftermath of disasters, the nature and magnitude of the problem varies from community to community. Most of the scientific enquiries into the problem have been carried out Western communities, and it is often difficult to extrapolate their findings to Indian settings. Hence it is very important to conduct well-planned studies among the disaster-stricken local populations in order to draw customized intervention strategies and to streamline preventive measures. Quantitative methods like cross-sectional sample surveys and qualitative methods like ethnography and indwelling can be used for this purpose. Voluntary Health Agencies or State Research Teams can carry out the studies.
II. Dissemination of information

In many instances, vulnerable people resort to unhealthy behaviors due to the non-availability of information that might help them take a decision on the contrary. Hence, it is very important for the health care provider to serve as a medium for provision of adequate information. This should be aimed at creating awareness regarding the ill effects of drug and alcohol use and orienting them about the services that are available in the area to help them cope with their problems.

The most common forms of information dissemination are leaflets, fliers or posters containing clear and simple messages. However, the use of other mediums - such as fact-sheets, comics, street plays, theatre, public meetings, workshops, and video - can also be employed. One to one communication is very useful because it not only helps to get the message through, but also provides an opportunity for counselling and identification of high risk individuals. It is important that people are given accurate and honest information that can allow them to make informed choices.

III. Counselling

Disaster Counselling Skills

Disaster counselling involves both listening and guiding. Survivors typically benefit from both talking about their disaster experiences and being assisted with problem-solving and referral to resources.

Establishing Rapport

Survivors respond when workers offer caring eye contact, a calm presence, and are able to listen with their hearts. Rapport refers to the feelings of interest and understanding that develop when genuine concern is shown. Conveying respect and being nonjudgmental are necessary ingredients for building rapport.

Listen Actively

Workers listen most effectively when they take in information through their ears, eyes, and heart to better understand the survivor’s situation and needs. Some tips for listening are:
• **Allow silence** - Silence gives the survivor time to reflect and become aware of feelings. Silence can prompt the survivor to elaborate. Simply “being with” the survivor and their experience is supportive.

• **Attend nonverbally** - Eye contact, head nodding, caring facial expressions, and occasional “uh-huhs” let the survivor know that the worker is in tune with them.

• **Paraphrase** - When the worker repeats portions of what the survivor has said, understanding, interest, and empathy are conveyed. Paraphrasing also checks for accuracy, clarifies misunderstandings, and lets the survivor know that he or she is being heard. Good lead-ins are: “So you are saying that . . .” or “I have heard you say that . . .”

• **Reflect feelings** - The worker may notice that the survivor’s tone of voice or nonverbal gestures suggests anger, sadness, or fear. Possible responses are, “You sound angry, scared etc., does that fit for you?” This helps the survivor identify and articulate his or her emotions.

• **Allow Expression of Emotions** - Expressing intense emotions through tears or angry venting is an important part of healing; it often helps the survivor work through feelings so that he or she can better engage in constructive problem solving. Workers should stay relaxed, breathe, and let the survivor know that it is OK to feel.

• **Provide Information** - All the relevant information that might be useful for the person, especially those regarding alcohol and drug use, should be provided in an interactive manner. His queries and concerns should be addressed with love and empathy.

### IV. Identification and Referral of Problem Individuals

There is a strong association between severe stress, deteriorating mental health and substance abuse among disaster survivors. It is important to identify such individuals and refer them for professional help.

**Signs of Trauma Related Stress**

Individuals who experience the following symptoms for more than a
month may be suffering from PTSD and should be referred for professional mental health assistance.

- Recurring thoughts or nightmares about the event
- Sleep problems
- Changes in appetite
- Anxiety, fear, and edginess
- Extended periods of sadness and depression and loss of energy
- Memory problems
- Inability to focus or make decisions
- Emotional numbness and withdrawal
- Spontaneous crying
- Extreme fear for the safety of loved ones
- Avoidance of activities, places, or people who remind of the event

**Signs of Deterioration of Mental Health**

Individuals with the following signs should be referred for professional help.

- Disorientation (dazed, memory loss, unable to give date/time or recall recent events…)
- Depression (pervasive feeling of hopelessness & despair, withdrawal from others…)

**Signs of Alcohol and Substance Abuse**

The following indicators are associated with alcohol and substance abuse. If several symptoms are present, the person should be referred for alcohol and drug assessment.

**Physical/Emotional Indicators**

- Has smell of alcohol on breath or marijuana on clothing
- Has burned fingers, burns on lips, or needle track marks on arms
- Slurs speech or stutters, is incoherent
- Has difficulty maintaining eye contact
- Has dilated (enlarged) or constricted (pinpoint) pupils
- Has tremors (shaking or twitching of hands and eyelids)
- Is hyperactive and overly energetic

- Anxiety (constantly on edge, restless, obsessive fear of another disaster…)
- Acute psychosis (hearing voices, seeing visions, delusional thinking…)
- Inability to care for self (not eating, bathing, changing clothing or handling daily life)
- Suicidal or homicidal thoughts or plans
- Problematic use of alcohol or drugs
- Domestic violence, child abuse or elder abuse
• Appears lethargic or falls asleep easily
• Exhibits impaired coordination or unsteady gait (e.g., staggering, off balance)
• Speaks very rapidly or very slowly
• Experiences wide mood swings (highs and lows)

• Appears fearful or anxious; experiences panic attacks
• Appears impatient, agitated, or irritable
• Is increasingly angry or defiant

**Personal Attitude/ Behavior Indicators**

• Talks about getting high, uses vocabulary typical among drug users
• Behaves in an impulsive or inappropriate manner
• Denies, lies, or covers up
• Takes unnecessary risks or acts in a reckless manner
• Breaks or bends rules, cheats

**Cognitive/Mental Indicators**

• Has difficulty concentrating, focusing, or attending to a task
• Appears distracted or disoriented
• Makes inappropriate or unreasonable choices

• Has difficulty making decisions
• Experiences short-term memory loss
• Experiences blackout
• Needs directions repeated frequently
• Has difficulty recalling known details
• Needs repeated assistance completing ordinary paperwork (e.g., application forms)

**V. Treatment Guidelines for Healthcare Professionals**

• Health care professionals must be alert to the fact that PTSD frequently co-occurs with depression, other anxiety disorders, and alcohol and other substance abuse. Patients who are experiencing the symptoms of PTSD need support from physicians and health care providers.

• The likelihood of treatment success increases when these concurrent disorders are appropriately identified and treated as well.
• For substance abuse there are effective medications and behavioral therapies.

• Treatment of patients with co-morbid PTSD and addictions may vary, and for some patients, successful treatment may require initial inpatient hospitalization.

• Finally, support from family and friends can play an important role in recovery from both disorders.

VI. Promotion of Alternative or Diversionary Activities
Aggravation of trauma and progression to PTSD and substance abuse occurs mostly because people continuously dwell on thoughts of the traumatic experience. Promotion of alternative or diversionary activities helps to avoid such thoughts to some extent and also imparts a sense of well-being. The following measures can be tried:

• Encourage them to get involved in some kind of regular physical activity, such as walking, gardening, playing games or other kinds of recreation.

• Get people involved in the relief work and encourage them to go around carrying out errands along with the response volunteers.

• Create support groups of similarly affected individuals and encourage the members to help each other cope over the crisis.

• Encourage them to return to normal daily routines to the extent possible and to take control of their life.

VII. Community Mobilisation
Community mobilisation is an important approach for producing concerted efforts in the direction of achieving any social goal. This is very much true in the aftermath of disasters also. The seven stages of community mobilisation are as follows:

Stage 1: Getting Started
• Help the community see why this effort is important from its perspective

• Help people feel that they have the power to make the necessary changes

• Help develop a core group of concerned citizens-informal and formal community leaders

• Cultivate hope for a better way

• Instill a desire for change
Stage 2: Identifying Issues and Setting Priorities
- Identify important issues and commonly faced problems
- Define desired changes
- Rank problems and set priorities
- Develop a shared vision for problem resolution

Stage 3: Identifying Supporters
- Identify people who are concerned about these issues, who are willing to work toward the desired change, and who have the ability to create the change

Stage 4: Planning for Action
- Develop a plan of action to effectively address the presenting issue/problem
- Analyze the environment-examine the external and internal obstacles, external and internal opportunities, and resources

Stage 5: Organizing a Process Structure
- Define the targets-those who are most affected by the problem and those who can help create the desired change
- Develop strategies for organizing the supporters into a group/organization to address the issue
- Design strategies for mobilizing the organized group to create the desired change

Stage 6: Mobilizing the Group to Achieve Targets
- Select the appropriate tactics
- Keep the actions simple and realistic
- Own the actions
• Use tactics that will achieve small victories to advance the desired change

**Stage 7: Continuing the Process**

• Receive feedback
• Monitor actions
• Evaluate effectiveness of the strategy on overall goal
• Redefine actions
• Identify new problems, priorities, and strategies
• Implement revised action plan.

**VIII. Realizing Total Rehabilitation**

Total rehabilitation is the most important component of successful intervention. The psycho-social needs of the people who have lost everything in the disaster should be addressed. Shelter and other basic amenities should be provided. Provision of vocational aids like fishing boats and nets is very important for sustaining their motivational levels. Individuals with morbid fear to reside in the same area should be re-located.

The care provider should also play a vital role in facilitating Community participation and Local Self Government involvement in mobilizing the support of the Government and other Aids Agencies towards realizing total rehabilitation of the affected communities.

**Reference:**

1) “Substance Abuse and Mental Health Services” - U.S. Department of Health and Human Services.
2) “Disaster Mental Health for Responders: Key Principles, Issues and Questions” - Center for Disease Control, Post-traumatic Stress Disorder Vol. 110 / No. 5.
3) “Stress & Substance Abuse” - NIDA Community Drug Alert Bulletin, Washington DC, USA.
Tips on Self-Care and Self-Help

The emotional effects of disasters are felt not only by the survivors, but also, by all those who had witnessed it and it may continue for a longer period. So it is important for the victims as well as the family members, friends, rescue workers, health care providers, volunteers, media personnel and those who had witnessed it even through the electronic media to practice few tips to cope with the problem. These include:

- Spend time with other people. Coping with stressful events is easier when people support each other.
- If it helps, talk about how you are feeling. Be willing to listen to others who need to talk about how they feel.
- Get back to your everyday routines. Familiar habits can be very comforting.
- Take time to grieve and cry if you need to. To feel better in the long run, you need to let these feelings out instead of pushing them away or hiding them.
- Ask for support and help from your family, friends, church, or other community resources. Join or develop support groups.
- Set small goals to tackle big problems. Take one thing at a time instead of trying to do everything at once.
- Eat healthy food and take time to walk, stretch, exercise, and relax, even if just for a few minutes at a time.
- Make sure you get enough rest and sleep. People often need more sleep than usual when they are very stressed.
- Do something that just feels good to you like taking a warm bath, taking a walk or sitting in the sun.
- If you are trying to do too much, try to cut back by putting off or giving up a few things that are not absolutely necessary.
- Find something positive you can do. Give blood. Donate money to help victims of the attack. Join efforts in your community to respond to this tragedy.
- Get away from the stress of the event sometimes. Turn off the TV news reports and distract yourself by doing something you enjoy.

Reference:

1) “Alcoholism and Drug Dependency: An Advanced Master Guide for Professionals” - TTK Hospital, Chennai, India.
ALCOHOL AND SUBSTANCE ABUSE INTERVENTION IN VULNERABLE POPULATION AFFECTED BY DISASTERS

Handbook for Health Workers & Service Providers

Natural and human-caused disasters are striking with frightening regularity in various parts of the World causing large scale death and destruction. The trauma associated with disasters usually lasts very long even after the event. Studies have revealed that increased alcohol and other substance abuse has been a co-morbid factor associated with traumatic and other psychological disorders among the disaster affected population. This Handbook is developed to impart special skills and techniques to Health Workers and Service Providers in dealing with the problems of alcohol and substance abuse in vulnerable population affected by disasters.

"Health is a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity" - WHO

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PATIENTS WHO DRINK
- HOW CAN DOCTORS HELP?

HAND BOOK

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Supported by
WORLD HEALTH ORGANIZATION (WHO) - INDIA
PATIENTS WHO DRINK
– HOW CAN DOCTORS HELP?

Developed for alcohol education program at
World Health Organization supported tsunami
rehabilitation project sites in
Tamil Nadu

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Web: www.addictionindia.org

2006
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Alcohol use scenario in India\(^1\)

- Steady increase in alcohol consumption and reduction in age of first alcohol use
- Most Indians do not drink, but those who drink, drink frequently and heavily
- Awareness about harm associated with alcohol is low
- Heavy drinkers often do not receive any help at the primary health care setting to reduce or stop their drinking.

Alcohol related health problems

- Aggression, violence, irritability, depression, anxiety, suspicion, hallucinations
- Cancer of mouth, throat and stomach
- Resistance to infection reduces
- Liver enlargement / fatty liver, appetite reduces, hepatitis, permanent damage to liver leading to cirrhosis
- Tremors, tingling or burning sensation in hands and feet
- Anemia, wasting away of muscle reducing stamina
- Premature death, suicide
- Intellectual sharpness reduces, memory problems, alcoholism
- Looks older and run down
- Enlargement of heart, blood vessels are damaged
- Pancreatitis
- Impotency, lack of interest in sex
- Accidents leading to fractures
- Use of other addictive drugs like ganja, sedatives etc can cause further complications

\(^1\)The Globe, Global Alcohol Policy Alliance, Issue 2, 2005
WHO Global Status Report on Alcohol, 2004
WHO Collaborative project on unrecorded consumption of alcohol, 2003,
http://www.nimhans.kar.nic.in/deaddiction/Publications.html downloaded on 7\(^{th}\) May 2006
Other alcohol related problems

- Other alcohol related problems
  - Safety risks
    - accidents while driving, working with machinery or swimming causing injury, loss of life to others and self
    - lack of inhibition and poor judgment under influence of alcohol leading to unsafe sexual behavior increasing incidence of HIV and other sexually transmitted diseases

- Work related problems
  - frequent absence
  - poor quantity and quality of work
  - reduced concentration and motivation
  - conflicts with co-workers
  - loss of job and unemployment

- Financial situation
  - reduced income due to inability to work well
  - spends on alcohol and unable to pay for essential expenses
  - borrows at high rates of interest
  - little or no savings

Why should doctors get involved?
- Alcohol users meet doctors to deal with alcohol linked health problems
- Doctors wield great influence over patients and can help them change their drinking pattern
- The earlier the intervention, lesser the damage and easier to bring about change

Effect on Family
- conflicts and physical violence
- marital separation or divorce
- embarrassment, fear and other psychological trauma, sometimes leading to suicide
- children run away from home, drop out of school

Impact on Community
- conflicts and crime rates increase
- change in cultural practices that encourage heavy drinking
- higher health care costs for government
- poor standard of living in spite of developmental efforts

Financial situation
- reduced income due to inability to work well
- spends on alcohol and unable to pay for essential expenses
- borrows at high rates of interest
- little or no savings
Four things you can do as a doctor

1. Routinely ask a few questions about frequency and quantity of alcohol intake to screen patients for alcohol related problems

   - How often do you drink alcohol?
   - Patient does not drink at all: Say, “That’s fine” and proceed with routine procedures
   - People who should completely abstain from drinking: The message for this group is simple, “You should not drink alcohol, even in small quantities”
     - Youngsters below 21 years (legal age limit)
     - Those on medications or with other medical problems like liver problems when they should not drink even small quantities of alcohol
     - Pregnant women
     - Prior history or current serious psychiatric problems
     - Previous history of alcoholism wherein drinking small quantities can trigger excessive drinking
   - If the patient does use alcohol, assess drinking pattern

   - How many days in a week do you usually drink?
   - How much do you drink in a typical day?

   I drink about 3 times a week.

   I usually drink about 2 large pegs of brandy. On my weekly off day, I drink a bottle of beer in addition to this.
2. Calculate number of units of alcohol consumed per week using table given:

<table>
<thead>
<tr>
<th>Alcohol</th>
<th>Amount</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brandy</td>
<td>60 ml</td>
<td>2</td>
</tr>
<tr>
<td>Whisky</td>
<td>90 ml</td>
<td>3</td>
</tr>
<tr>
<td>Rum</td>
<td>90 ml</td>
<td>3</td>
</tr>
<tr>
<td>Gin</td>
<td>90 ml</td>
<td>3</td>
</tr>
<tr>
<td>Beer</td>
<td>Small bottle = 325 ml</td>
<td>650 ml</td>
</tr>
<tr>
<td></td>
<td>Big bottle = 650 ml</td>
<td></td>
</tr>
</tbody>
</table>

2 pegs x 60 ml x 3 days = 4 units x 3 days = 12 units
1 bottle of beer = 2 units
Total in a week = 14 units

* as available in Tamilnadu in 2006

Other alcoholic beverages:
- Arrack contains 50-60% alcohol and is sold illegally in 100 or 200 ml sachets.
- Toddy, the fermented juice from flowers of coconut or palm trees has about 5 to 10% alcohol content.

- If consumption is 7 units or less per week, explain saying:
  - as of now drinking is within safe limits
  - they should be cautious about drinking level in future too
  - never drink more then 3 units in a day and stay away from alcohol at least 2 days a week

- If consumption is more than 7 units per week, administer “AUDIT”

AUDIT (Alcohol Use Disorders Identification Test) is an easy to use screening test for alcohol related problems which was developed by World Health Organization (WHO).
### 3. Administer AUDIT by spending about 5 minutes

Ask each question, tick the response and total the scores listed beside the answer

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How often do you have a drink containing alcohol?</td>
<td>Never (0) Monthly or less (1) 4 times a month (2) 2-3 times a week (3) 4 or more times a week (4)</td>
</tr>
<tr>
<td>2</td>
<td>How many drinks containing alcohol do you have on a typical day when you are drinking? (number of units)</td>
<td>1 or 2 (0) 3 or 4(1) 5 or 6(2) 7 or 9 (3) 10 or more (4)</td>
</tr>
<tr>
<td>3</td>
<td>How often do you have six or more drinks (number of units) on one occasion?</td>
<td>Never (0) Less than monthly(1) Monthly(2) Weekly(3) Daily or almost daily(4)</td>
</tr>
<tr>
<td>4</td>
<td>How often during the last year have you found that you were not able to stop drinking once you had started?</td>
<td>Never(0) Less than monthly(1) Monthly(2) Weekly(3) Daily or almost daily(4)</td>
</tr>
<tr>
<td>5</td>
<td>How often during the last year have you failed to do what was normally expected from you because of drinking?</td>
<td>Never (0) Less than monthly(1) Monthly(2) Weekly(3) Daily or almost daily(4)</td>
</tr>
<tr>
<td>6</td>
<td>How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?</td>
<td>Never(0) Less than monthly (1) Monthly(2) Weekly (3) Daily or almost daily(4)</td>
</tr>
<tr>
<td>7</td>
<td>How often during the last year have you had a feeling of guilt or remorse after drinking?</td>
<td>Never (0) Less than monthly (1) Monthly (2) Weekly (3) Daily or almost daily(4)</td>
</tr>
<tr>
<td>8</td>
<td>How often during the last year have you been unable to remember what happened the night before because you had been drinking?</td>
<td>Never(0) Less than monthly(1) Monthly(2) Weekly(3) Daily or almost daily(4)</td>
</tr>
<tr>
<td>9</td>
<td>Have you or someone else been injured as a result of your drinking?</td>
<td>No (0) Yes, but not in the last year(2) Yes, during the last year(4)</td>
</tr>
<tr>
<td>10</td>
<td>Has a relative or a friend or a doctor or other health worker been concerned about your drinking or suggested that you cut down?</td>
<td>No (0) Yes, but not in the last year(2) Yes, during the last year(4)</td>
</tr>
</tbody>
</table>

Add up the scores of the 10 questions to arrive at the total AUDIT score
### 4. Present simple advice on reducing alcohol use in case of harmful use

<table>
<thead>
<tr>
<th>AUDIT score</th>
<th>Risk zone and result</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Below 7</strong></td>
<td>Zone 1 - within safe drinking limits</td>
<td>“As of now, you are drinking within safe limits. But, you should be cautious. Let me explain how to measure and restrict drinking”.</td>
</tr>
<tr>
<td><strong>8 - 15</strong></td>
<td>Zone 2 - no longer within safe limits- at risk of facing alcohol related problems</td>
<td>“Your drinking is no longer within safe limits. You need to reduce your drinking. Let me give you a few suggestions. Remember that drinking can get out of control and cause problems”</td>
</tr>
<tr>
<td><strong>16 - 19</strong></td>
<td>Zone 3 - harmful drinking- may have symptoms of alcoholism</td>
<td>“You need to immediately reduce or stop your drinking. You are drinking too much and I am concerned about it. Let me tell you what to do. Continue to meet me once in 10 days. Bring a family member along with you”.</td>
</tr>
<tr>
<td><strong>Above 20</strong></td>
<td>Zone 4 - highest level of risk - referral for further assessment and treatment for alcoholism</td>
<td>“Your drinking is putting you at great risk and can affect your family too. You need to stop drinking completely. Let us discuss it further. Let me talk to your family and let us see how we can help you further”</td>
</tr>
</tbody>
</table>

Traffic lights can be used to explain the Zones.

- **Red** – Zone 4: High risk level, giving up alcohol totally would be the best option
- **Amber** – Zone 2 & 3: No longer safe and needs to reduce drinking...
- **Green** – Zone 1: Safe level but stay alert

Provide information about alcohol to those in zone 1, zone 2 and zone 3

- Explain how alcohol intake can be calculated in terms of units
- Emphasize that they should never drink more than 3 units of alcohol in a day and never drink more than 7 units in a week.
- Let them know that excessive drinking can affect health and lead to addiction
Provide tips to reduce alcohol consumption to those in Zone 2 and Zone 3

- Set a limit and drink no more than 3 units on any day. Say “No” if others pressurize you to drink more.
- Stay away from drinking at least 2 days a week.
- Always eat food when you are drinking.
- Try beer or wine, which has a lower alcoholic content instead of brandy, whisky, rum, gin or vodka.

Ask patient to:
- Maintain a record of amount and type of alcohol and number of days he drinks to keep a watch over the number of units consumed in a week and not cross the 7 unit level.
- Identify places, people or situations where heavy drinking takes place, think of ways to restrict drinking and stay within limits. (For example, wedding parties, salary days, times when he/she is upset). It may be necessary to avoid some parties or do something different to spend time or handle the situation without alcohol.

Remind the patient that:
- Drinking is not a solution. There are many better and safer ways to have fun, relax or deal with problems without using alcohol.
- Motivate the patient by saying, “It is definitely possible for you to change your drinking pattern”. Express your concern too by saying that if he does not reduce drinking, it can lead to many other problems including alcoholism.

Look for symptoms of alcoholism in those in zone 3 and zone 4

- About 20% of drinkers develop the disease of alcoholism. People of any age, sex, from any family or socio-economic background can become alcoholics.
- Some symptoms of alcoholism:
  - drinks more to experience the effects that were earlier felt with lesser quantities
  - experiences a strong desire to drink even though alcohol is causing harm to his health, work pattern, financial situation or family relationships.
  - may have insomnia, tremors or depression if he/she does not drink.
  - is unable to reduce quantity of drinking
  - drinking becomes more important than other things in life
- When physical and psychological dependence has developed, giving up alcohol totally is the only solution. It will not be possible to reduce the quantity or frequency of drinking.
What doctors can do for those in zone 3 and zone 4

- Medical help to deal with withdrawal symptoms:
  - Chlordiazepoxide 50 to 200 mgs in divided doses can be prescribed for 3 to 5 days according to the severity of withdrawal symptoms. Dosage needs to be tapered and discontinued within a week.
  - Anti depressants like fluoxetine or amitriptyline can be used to treat depression if it persists after acute withdrawal phase.
  - Vitamin supplements, adequate fluid intake, food at regular intervals and adequate rest are essential.

Detoxification can be done on an outpatient basis if the patient is motivated, has good family support and no medical complications. A few may develop delirium tremens, the severest form of withdrawal. Disorientation, hallucinations and other medical emergencies may occur. Close monitoring on an inpatient basis is necessary.

- Your encouragement by saying “You can give up” and family support can be very helpful.

- Get the family involved. Explain that alcoholism is a disease and other relatives and friends cannot be blamed for it. Emphasize that reducing is not possible and that giving up alcohol completely is the only solution.

If the patient in Zone 3 is unable to reduce drinking and when the Zone 4 patient is not able to give up drinking completely, referral must be made to an addiction treatment centre.

Treatment for addiction

- During addiction treatment, the patient receives help to
  - Deal with withdrawal symptoms in a safe and comfortable manner.
  - Examine his life situation, recognize the damage due to drinking and plan to lead a meaningful life without alcohol.
  - Psychological therapy in the form of counseling, group therapy, family therapy and continued follow up is provided to stabilize recovery.

- Follow up visits for at least two years with the treatment center is extremely important. Relapses may occur and with help, most are able to give up drinking completely.

- Disulfiram may be prescribed to produce unpleasant reactions if he drinks alcohol. As flushing, sweating, tachycardia, nausea and can become life threatening, this helps resists temptation to drink. Acamprasil or topiramate is also used to deal with craving.
Where are addiction treatment facilities available?

- All district head quarter hospitals have facilities to provide the necessary help. Psychiatric departments and mental health institutions provide specialized services.
- Many NGOs offer free in-patient alcoholism treatment facilities with support from the Ministry of Social Justice and Empowerment. The District Social Welfare Officer who coordinates the grants for the centers will be able to provide the name and location of these centers.
- Information is also available at the web site: www.addictionindia.org
- AlcoholicsAnonymous (self help group) meetings are held in some towns and cities and can be a great source of support and encouragement.
Notes: