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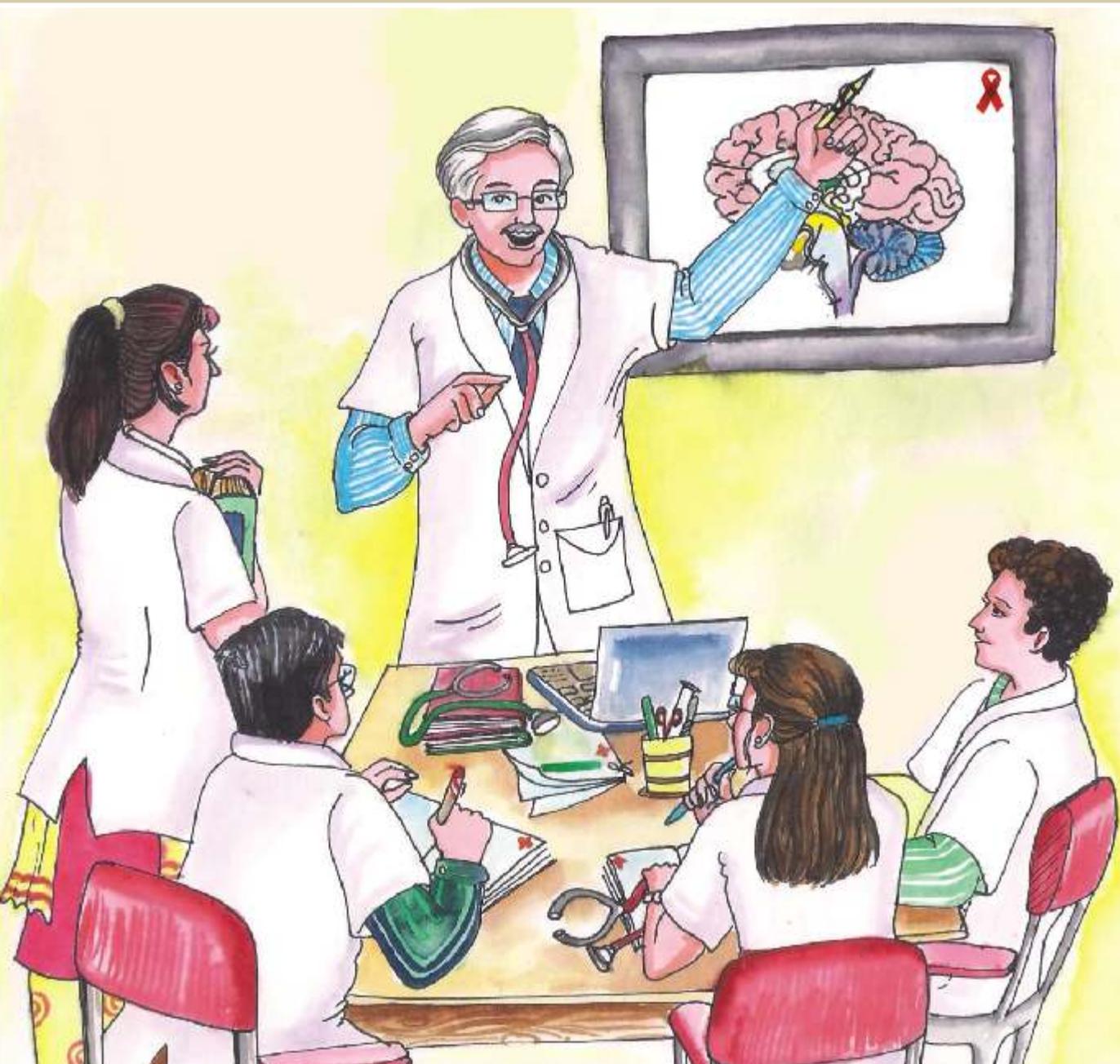
National AIDS Control Organisation

India's voice against AIDS
Department of AIDS Control
Ministry of Health & Family Welfare, Government of India
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STAYING HEALTHY

A Manual to Train Clinical Staff on
Co-morbidities associated with Injecting Drug Use



TRAINING MODULE

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A Manual to Train Clinical Staff on Co-morbidities Associated with Injecting Drug Use

“Currently ‘Injecting Drug Users’ (IDUs) are referred to as ‘People Who Inject Drugs’ (PWID). However, the term ‘Injecting Drug Users’ (IDUs), has been used in this document to maintain consistency with the term used presently in National AIDS Control Programme”.

Supported by The Global Fund to Fight AIDS, Tuberculosis and Malaria- Round-9 India HIV-IDU Grant No. IDA-910-G21-H with Emmanuel Hospital Association as Principal Recipient

Preface

The success of any strategy to reduce the harms associated with drug use, such as HIV/AIDS, depends on how well it is implemented at the grass roots level. This in turn requires significant training and capacity building of service providers and programme implementers who implement the strategies.

In India, Targeted Intervention (TI) under the National AIDS Control Programme (NACP) framework is one of the core strategies for HIV prevention among injecting drug users (IDUs). Primary health services, health education, abscess management, treatment referrals and provision of harm reduction services such as Needle Syringe Exchange Program (NSEP) and Opioid Substitution Therapy (OST) are some of the critical services provided as part of the NACP strategy to reach out to IDUs. The services are executed through peer based outreach and Drop-in Centre (DIC) based approaches.

To further strengthen these established mechanisms under the NACP and to expand the reach to vulnerable IDUs, the United Nations Office on Drugs and Crime (UNODC) in India provides technical assistance to the National AIDS Control Organisation (NACO) through the Global Fund Round 9 Project (i.e., Project HIFAZAT), amongst others, to undertake the following:

- 1) Conduct Operational Research & Diagnostic studies
- 2) Develop Quality Assurance SOPs
- 3) Develop Capacity Building/ Training manuals
- 4) Training of Master Trainers

This manual is part of a series of six training manuals developed by UNODC and has been developed for the training of clinical staff and counsellors of the IDU interventions, to understand issues related to comorbidities and to respond effectively to the physical and mental health problems associated with injected drug use. This manual aims to enhance both knowledge and skills of the clinical staff using participatory and adult learning principles. In addition, a conscious effort has been made to keep the manual interactive through frequent use of group discussions, films and brainstorming exercises so as to enable better learning.

Contributions from the Technical Working Group of Project HIFAZAT which included representatives from NACO, Project Management Unit (PMU) of Project HIFAZAT, SHARAN, Indian Harm Reduction Network and Emmanuel Hospital Association were critical in articulating and consolidating the inputs that helped in finalizing this module.

Acknowledgement

The UN Office on Drugs and Crime, Regional Office for South Asia (UNODC ROSA) in partnership with national government counterparts from the drugs and HIV sectors and with leading Non-Governmental Organisations in the countries of the South Asia is implementing a project titled “Prevention of transmission of HIV among drug users in SAARC countries” (RAS/H13).

As part of this regional initiative, UNODC is also engaged in the implementation of the Global Fund Round-9 IDU-HIV Project (i.e. HIFAZAT). Project HIFAZAT aims to strengthen the capacities, reach and quality of harm reduction services among IDUs in India. It involves providing support for scaling up of services for IDUs through the National AIDS Control Programme.

We would like to acknowledge the invaluable feedback and support received from various stakeholders which includes NACO, Project Management Unit (PMU) of Project HIFAZAT, Emmanuel Hospitals Association (the Principal Recipient of the grant “Global Fund to Fight AIDS, Tuberculosis and Malaria-India HIV-IDU Grant No. IDA-910-G21-H”), SHARAN, Indian Harm Reduction Network and individual experts who have contributed significantly in the development of this document.

Special thanks are due to the UNODC Project H13 team for their persistent and meticulous efforts in conceptualising and consolidating this document.

Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral
AUDIT	Alcohol Use Disorders Identification Test
AZT	Zidovudine
BCC	Behaviour Change Communication
BID	Twice Daily
BP	Blood Pressure
CBO	Community-Based Organisation
CNS	Central Nervous System
DIC	Drop-In Centre
DOTS	Directly Observed Treatment Strategy
DSM IV TR	Diagnostic and Statistical Manual IV Text Revision
ECT	Electroconvulsive therapy
EFV	Efavirenz
ELISA	Enzyme-Linked Immunosorbent Assay
FIDU	Female Injecting Drug User
FSW	Female Sex Worker
HAV	Hepatitis A Virus
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HR	Harm Reduction
ICD	International Classification of Diseases
ICTC	Integrated Counselling and Testing Centre
IDU	Injecting Drug User
IDU-TIs	Injecting Drug User-Targeted Interventions

IEC	Information, Education and Communication
IM	Intramuscular
LCD	Liquid Crystal Display
LFT	Liver Function Test
mg	Milligram
ml	Millilitre
MMT	Methadone Maintenance Therapy
MSE	Mental State Examination
NACO	National AIDS Control Organisation
NACP	National AIDS Control Programme
NGO	Non-Governmental Organisation
NNRTIs	Non-nucleoside Reverse Transcriptase Inhibitors
NSP	Needle Syringe Programme
NRTIs	Nucleoside /nucleotide Reverse Transcriptase Inhibitors
NVP	Nevirapine
OD	Overdose
OI	Opportunistic Infection
OST	Opioid Substitution Therapy
PEP	Post-Exposure Prophylaxis
PLHIV	People Living with HIV
PLWA	People Living with AIDS
PPTCT	Prevention of Parent to Child Transmission
PUD	People Who Use Drugs
QID	Four times a day
RNTCP	Revised National Tuberculosis Control Programme
SACS	State AIDS Control Society
SNRI	Serotonin Norepinephrine Reuptake Inhibitor
SSRI	Selective Serotonin Reuptake Inhibitors

STI	Sexually Transmitted Infection
TB	Tuberculosis
TCA	Tricyclic Antidepressant
TI	Targeted Intervention
TID	Thrice in a Day
UNAIDS	The Joint United Nations Programme on HIV/AIDS
UNODC	United Nations Office on Drugs and Crime
UNODC ROSA	United Nations Office on Drugs and Crime Regional Office for South Asia
VCT	Voluntary Counselling & Testing
VCCT	Voluntary Confidential Counselling & Testing
WHO	World Health Organization

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The Training Manual: Preparing for the Workshop

Introduction to the Manual

This 3-day training module has been developed in response to the need felt to provide training on co-morbidities associated with injected drug use for the clinical staff including counselors working on Injecting Drug Users' (IDUs) Interventions in India. It maps out a complete course for training the healthcare professionals in Targeted Interventions on co-morbidity related issues. This is part of a series of training modules designed to build the capacity of clinical staff and counselors working with Injecting Drug Users for Targeted Interventions. All components of the training manual were field tested during a training workshop in New Delhi in 2012. The workshop was attended by clinicians and nurses, working on various Targeted Interventions across India. Feedback and comments from the workshop were documented and incorporated during the development of this training manual.

Most of the sessions have been designed to cover a period of 60 to 90 minutes, which includes theory, discussion and/or activities. It is important that the training fosters an environment of learning, and is not just delivered by a person standing in front of a class lecturing on a particular subject. Trainers are encouraged to consider how they would use the training manual to develop the knowledge and capacity of the trainees. Trainees should be encouraged to take responsibility of their own learning experiences so that this process could be sustained long after the training workshop. The trainer should not feel obliged to implement all the activities within the training manual.

Purpose of the Training Manual

The aim of the training manual is to increase the knowledge, skills, confidence and build capacity of clinical staff and counselors to understand issues related to co-morbidities and to respond effectively to the physical and mental health problems associated with injected drug use.

Through a combination of theory and complementary activities, trainers will have an enhanced comprehension of key topics. The training manual provides an overview of the key topics related to common mental health co-morbidities, physical disorders such as Hepatitis C, Tuberculosis and alcohol/drug withdrawal syndrome.

Who is the Target Audience?

This manual is aimed at health workers working with Injecting Drug Users including counselors and clinical staff from Targeted Interventions (TIs) projects, Opioid substitution programmes, who may be unaware of the rapid gains in knowledge and treatment methodologies that have occurred across the world. The training manual provides evidence based approaches to the provision of services to IDUs.

Design of the Training Package

This package has been designed to develop and clarify the perspective of the participants on their role as counselors and clinical staff working in Targeted Intervention Projects for IDUs. Most of the sessions have been planned with interactive methods such as brainstorming, problem solving,

discussion etc. to facilitate the process of experiential adult learning for greater participation and better recall value of the core issues.

The package contains the following elements:

1. Manual

The manual has been designed for a three day training workshop. This training manual can be used in two ways. First, it may be implemented as a complete training package and presented in its entirety over three days. Alternatively, the trainers may focus on a selection of topics for a particular audience and expand upon the information that has been provided. It is recommended that the trainer read all the topics covered in the training manual from the beginning to the end, in order to gain a better understanding of the subjects and scope of each topic within the workshop.

2. CD

Enclosed CD provide PowerPoint presentations and all necessary material in a print ready format, which can be replicated and used during other trainings.

3. Annexures

Some additional documents have been provided as annexures to support the training.

a) **Annexure 1:** Training agenda

b) **Annexure 2:** Pre and Post-training Questionnaire containing a battery of multiple-choice questions. The same questionnaire needs to be administered at the beginning of the training programme as pre-training and at the end of the training programme as post-training questionnaire. After administering the pre-training, an analysis should be done immediately so that certain sessions can be provided more weightage as per the current knowledge level of the participants. Therefore, if the analysis reveals that the participants do not have an understanding of or have less understanding of a particular aspect, then the facilitator should put emphasis on it during the given session/s.

c) **Annexure 3:** Day-wise Feedback Forms are also provided. Copies of the same are to be given to the participants at the end of each day (days-1 to 3) for their feedback on the day's proceedings. It would be helpful to review the feedback forms on a daily basis so as to be able to respond to any significant issues such as lack of comprehension of important content or perceived lack of applicability, if any, on the topics and issues.

Before the Workshop

A 3-day workshop needs extensive preparation and the facilitator should ensure that the same is done well in advance:

a) Tips for Trainers

- Before each training/ workshop day it is recommended that the trainers familiarise themselves with the topics to be covered for that day, by carefully reading the relevant materials. This will enhance understanding of the concepts and points raised in each slide and its correlation to

the accompanying text. Depending on the skills of the trainers and their background, they can include examples or case studies of their own to bring further depth and clarity to the topic being presented.

- Most workshops require more than one trainer, so make sure that your co-trainers have read all the workshop material in this package and that they feel comfortable facilitating the workshop on selected topics from the training manual. A meeting of the trainers is held before the workshop to agree on an agenda and to decide who is going to teach which topic. Some trainers feel more comfortable presenting certain topics than other trainers and for the benefit of the trainer and the trainees this should be taken into consideration.
- Understand the profile of participants so that the training can be tailored to suit their requirements. For example, if the participants are a mix of new and older clinical staff, then ensure there is space for the older clinical staff to share their experience with the new clinical staff.

b) The Venue

The venue used for the training can make a big difference to the results of a training programme. Multi-day workshops can be held either at central locations where participants can gather each day for training, or they can be held in more isolated venues. The advantage of central venues is that the training may be more convenient for participants (who can return to their homes and families each evening), accommodation may not be needed for participants (except those from outside the area) and the training course is considerably cheaper to conduct. The advantage of a more isolated venue is that participants are forced to spend more time together, enhancing the likelihood of building up friendships and team spirit. Depending on the type of workshop, venues can also be selected according to their proximity to field activities, so that the participants can visit programme sites and meet the staff.

c) Workshop Logistics

- It is always wise to check that the equipment you need is available and working properly. Ensure all other arrangements have been made like projector and laptop to screen the power point presentations and videos.
- If you are organizing the workshop, you may need to arrange different logistics like to and fro transportation for participants to the venue, meals, site visits, accommodation, restroom facilities, catering, social activities, safety and security of personal belongings, official equipment and materials, emergency medical assistance and so on.

d) Preparations

Prepare all materials required for the sessions pre and post – training questionnaire and feedback forms etc.

Workshop Completion Certificate

It is a good idea to award certificates to all participants on successful completion of the workshop. A small gesture of endorsement or recognition by the organisers helps a great deal to boost the level of participation and motivation both during the workshop and afterwards.

Materials Required during Training

- LCD projector (for slides) or overhead projector
- Computer with slides or printed overhead slides
- Flipcharts, a stand, at least 10 marker pens (various colours)
- Whiteboard or blackboard (plus chalk for blackboard or special whiteboard marker pens if using whiteboard)
 - Resource manual for each participant
 - Training agenda
 - Pre and post-training questionnaire
- A notebook for recording information or aspects not documented in the training materials
- Daily feedback forms
- Certificates
- CDs of the training manual including each of the slide presentations

How to Facilitate

- The workshop trainers or facilitators should be familiar with experiential and participatory forms of learning.
- They should have the ability to ask exploratory/probing/open-ended questions and should be sensitive towards involving all the participants.
- The facilitators should be technically competent to answer various intervention related questions. Adaptations of various topics may be made in order to suit local needs and priorities.
- There being many hands-on sessions, the facilitators would need to be familiar with all the field processes so that they can demonstrate as well as guide the participants correctly. It will be important at all stages for participants to correlate their classroom teachings with field level learning and vice-versa.

How to Use the Manual

The chapters on each session provide the following information:

1. **Objective:** What the facilitator hopes to achieve by the end of the session
2. **Expected Outcome:** The outcomes anticipated as a consequence of the session
3. **Methodology:** The suggested methods and techniques used to conduct the sessions
4. **Materials Required:** Materials that are required to carry out the session which may include flip charts, marker pens, handouts, etc. in addition to any preparation that may be required.

5. **Duration:** Approximate time each session would take
6. **Process:** The step-by-step details of how to conduct the sessions

Key Things to Remember as a Facilitator:

Do's

- Be flexible. Scheduling may have to change depending on the need of the participants.
- Use different teaching methods to enhance participation and retain interest.
- Ensure all teaching materials like hand-outs; charts etc. are available before the beginning of a session.
- Respect participants' local knowledge.
- Encourage participants to make presentations.
- Remember, this is a participatory workshop and your role is to FACILITATE!

Don'ts

- Let any one person dominate the discussion.
- Speak more than the participants – let the participants brainstorm and discuss.
- Allow distractions like mobile phones or chatting between participants.
- Make the training a boring experience – intersperse the sessions with energizers/games.
- Read out from the PowerPoint presentations – prepare yourself well and use the presentation slides as cue cards to elaborate on relevant points.

Day

1

Session One:

Introduction to the Agenda and Expectations from the Workshop

Session Two:

Co-morbidities amongst Injecting Drug Users – Overview

Session Three:

Mental Health and Mental Illness (Psychiatric Disorder)

Session Four:

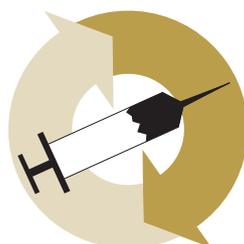
Mental Illnesses (Psychiatric Disorders) – Clinical Assessment

Session Five:

Mental Illnesses (Psychiatric Disorders) – Signs and Symptoms

Session Six:

Depression and Drug Use



Introduction to the Workshop Agenda and Expectations from the Workshop

OBJECTIVE

To introduce the training agenda to the participants and to elicit the expectations from the workshop

EXPECTED OUTCOME

By the end of the session participants will be able to:

- Understand the training agenda
- Outline their expectations from the workshop

DURATION

30 minutes

SESSION CONTENT

- Training agenda
- Expectations from the workshop

SUGGESTED TRAINING METHOD

- Training agenda in PowerPoint
- Discussion
- Brainstorming

MATERIALS / PREPARATION REQUIRED

- LCD projector
- Laptop
- PowerPoint slides for the session
- White board/flipchart
- Chart papers
- Masking tape
- Marker pen

PROCESS

STEP 1:

- After the introduction of participants, review the agenda with them.
- Introduce the purpose of the workshop, duration of sessions and day, logistical arrangements including breaks during the day, food, location of toilets.

STEP 2:

- Ask the participants what they want to learn from the workshop.
- Brainstorm with the participants.
- Ask the group to share their expectations from the training workshop. Write their responses on a flip chart. After getting their responses, review the list and mention which issues will be covered in the workshop and which issues will not. Take efforts to address the expectations of the participants during the workshop adequately.
- Invite a volunteer from the participants and assign the task of recapping the main points from the days' sessions at the beginning of each day. Inform them that this is applicable to the first two days of the workshop.

Co-morbidities amongst Injecting Drug Users – Overview

OBJECTIVE

To educate the participants about the various co-morbidities associated with injected drug use.

EXPECTED OUTCOME

By the end of the session participants will be able to:

- Define co-morbidity
- Describe the relationship between drug use and psychiatric disorders
- List various co-morbidities associated with injected drug use

DURATION

45 minutes

SESSION CONTENT

- What is co-morbidity?
- Relationship between drug use and mental illness
- Common co-morbidities, co-infections among injecting drug users

SUGGESTED TRAINING METHOD

- Brainstorming
- Discussion
- PowerPoint presentations

MATERIALS / PREPARATION REQUIRED

- LCD projector
- Laptop
- PowerPoint slides for the session
- White board/flipchart
- Chart papers
- Masking tape
- Marker pen

PROCESS

STEP 1: Co-morbidity

- Begin the session by asking the participants what they understand by the term co-morbidity
- Discuss with the participants the concept of co-morbidity

What is co-morbidity?

- When two disorders or illnesses occur concurrently in the same person, they are called co-morbid
- Drug abuse and other psychiatric disorders (mental illnesses) are often co-morbid
- Infectious conditions such as Hepatitis C, B and Tuberculosis are common among injecting drug users
- Non-infectious conditions such as malnutrition, anaemia are prevalent amongst people who inject drugs

When two disorders or illnesses occur together in the same individual, it is called as co-morbid disorder. A significant proportion of people who use drugs and who inject drugs also exhibit psychiatric disorders and hence drug use and mental illness are often co-morbid conditions. Additionally, injecting drug users are at greater risk of acquiring infections such as Hepatitis C, B and HIV. Tuberculosis is relatively common amongst both HIV infected as well as uninfected IDUs. Due to a variety of reasons, drug users are often malnourished and suffer from adverse health consequences such as

anaemia. It is important to recognise co-morbidity and deal with it effectively to reduce the burden of the disease and to improve the quality of life of IDUs.

STEP 2: Relationship between Drug use and Mental Illness

- Inform the participants that this session will focus on the importance of understanding the relationship between drug use and mental illness (psychiatric disorder).
- Discuss with them about the relationship between drug use disorders and mental illnesses.

Relationship between drug use and psychiatric disorder

- Six out of ten people with a drug use disorder also suffer from of psychiatric disorders (mental illness)
- Drug use can cause psychiatric disorders
- Psychiatric disorders can lead to drug use
- Drug use and psychiatric disorders are both caused by some common risk factors

The prevalence of psychiatric disorders among people who use drugs is relatively common. About six out of ten persons with a drug use disorder have a co-morbid mental illness. The relationship between the two conditions is complex. First, drug use per se can cause a mental illness. Chronic use of drugs such as alcohol, cannabis and amphetamines can produce psychiatric morbidity. Psychiatric disorders can be the reason for initiating and perpetuating with drug use. People with mental disorders can use drugs to alleviate personal distress associated with mental manifestation as a way of self

medication. In some cases, common constellation of risk factors can contribute to both disorders.

Evidence suggests that common genetic factors may predispose individuals to both mental disorders and substance dependence. Stress, trauma (e.g., physical or sexual abuse), and early exposure to drugs are common factors that can lead to addiction and to mental illness, particularly in those with underlying genetic vulnerabilities. Some areas of the brain are affected by both drug abuse and mental disorders. Brain circuits linked to reward processing as well as those involved in stress response are affected by drug abuse and show abnormalities in specific mental disorders. Both disorders often begin in adolescence or even childhood, periods when the brain is undergoing dramatic developmental changes. Early exposure to drugs of abuse can change the brain in ways that increase the risk for developing a mental illness later.

Why do drug use disorders and psychiatric disorders co-occur?

- Overlapping genetic vulnerabilities
- Overlapping environmental triggers
- Involvement of similar brain regions
- Drug use disorders and psychiatric disorders are developmental disorder

The prevalence of co-morbidity between drug use disorders and mental health morbidity is very high.

Comparison with the general population: Patients with mood or anxiety disorders are two times at greater risk of developing drug use disorder. Additionally, patients with drug use disorders are twice as likely to be diagnosed with mood or anxiety disorders.

Comparison between males and females: antisocial personality disorder is more common in substance using men. Substance using women have higher rates of major depression, post-traumatic stress disorder, and other anxiety disorders.

Prevalence of psychiatric co-morbidity

Comparison with general population

- Patients with mood or anxiety disorders are at twice greater risk for developing drug use disorder
- Patients with drug use disorders are twice as likely to be diagnosed with mood or anxiety disorders

Comparison between males and females

- Antisocial personality disorder is more common in drug using men
- drug using women have higher rates of major depression, post-traumatic stress disorder and other anxiety disorders

The high prevalence of co-morbid drug use disorder and mental illness points to the need for a comprehensive approach that identifies, evaluates, and simultaneously treats both disorders. Patients with co-occurring disorders often exhibit more severe symptoms than those caused by either disorder alone, underscoring the need for integrated treatment. Careful diagnosis and monitoring will help ensure that symptoms related to drug dependence such as drug induced intoxication and drug withdrawal syndrome are not mistaken for a separate mental disorder. Another important factor is that, stigma that is common with drug use is more for persons with co-morbid conditions.

Need for diagnosis and treatment

- Co-morbidity is relatively common
- Co-morbid patients exhibit more severe symptoms
- Need to differentiate symptoms related to intoxication and withdrawal of psychiatric disorders
- Greater stigma attached to people with co-morbid disorders

Research shows that mental disorders can increase vulnerability to subsequent drug abuse and

Need for diagnosis and treatment

- Diagnosis and treatment of one disorder will likely reduce risk of the other
- Integrated treatment to treat both conditions is important
- There should not be any bias in providing necessary treatment with medications for people with co-morbid psychiatric disorder
- Concurrent therapy with pharmacological and behavioural treatment is ideal

that drug abuse constitutes a risk factor for subsequent mental disorders. Therefore, diagnosis and treatment of one disorder will likely reduce risk for the other, or at least improve its prognosis. The need to develop effective interventions to treat both conditions concurrently is strongly supported by research. Integrated approach to treat both the conditions is important. There should not be any bias in providing necessary treatment with medications for people with co-morbid psychiatric disorder. In most cases, concurrent therapy with pharmacological and behavioural treatment is ideal.

STEP 3: Co-infections

- Inform the participants that the following session will outline the co-infections among Injecting drug users.
- Discuss the various co-infections with the participants

Co-infections amongst IDUs

- Hepatitis C
- Hepatitis B and A
- HIV
- Tuberculosis
- Sexually Transmitted Infections (STIs)

HIV and Hepatitis B (HBV) are blood borne pathogens that are acquired and transmitted by injecting drug users and they are at high risk due to their unsafe injecting and sexual behaviours. Additionally, they are at risk of contracting Hepatitis C (HCV) and majority of injecting drug users are co-infected with HCV within the first year of injecting. Tuberculosis is common in both uninfected as well as HIV infected IDUs. STIs are also not uncommon as drug users often exhibit high risk sexual behaviours.

In a study conducted among IDUs in Chennai, it was found that co-infections were prevalent among HIV infected IDUs. The prevalence of HCV, HBV and Tuberculosis amongst HIV positive IDUs was 94%, 12% and 34% respectively.

STEP 4: Other physical co-morbidities

- Outline the other physical co-morbidities among the injecting drug users.
- Inform the participants about poly-substance abuse and dependence among injecting drug users and the need to be informed about withdrawals from various substances that are concurrently used by IDUs.

Drug users are at increased risk of malnutrition as a result of a combination of behavioural (chaotic lifestyles leading to poor dietary quality and food insecurity), metabolic (inadequate storage of nutrients in damaged livers), increased nutrient excretion through diarrhea and clinical factors (chronic infection with Hepatitis C, HIV and/or TB).

Anaemia is also common amongst IDUs. A study among HIV infected IDUs in Chennai revealed that about a fourth (23%) of them were suffering from anaemia.

Many injecting drug users are poly-drug users and in several parts of the country, IDUs are injecting a cocktail of pharmaceutical preparations such as opioids, benzodiazepines and antihistaminics. In addition, majority of drug users also concurrently use alcohol. While managing IDUs, it is necessary to recognise the withdrawals and effectively deal with them. Withdrawals from opioids, benzodiazepines and alcohol can be effectively managed with evidence based approaches. Effective management of withdrawals by the clinical staff at the Targeted Interventions and opioid substitution therapy programmes will ensure a better therapeutic relationship between the drug users and the clinical team.

Common physical disorders among IDUs

- Anaemia
- Malnutrition

Poly-drug users

- Many injecting drug users in the country use multiple drugs
- Withdrawals from alcohol, benzodiazepines have to be managed effectively
- Opioid withdrawals can be effectively addressed using evidence based approaches

STEP 5: Conclusion

- Wrap up the session by stressing on some key messages

Key messages

Concurrent occurrence of two or more disorders in the same person is called as co-morbid disorder

Co-morbid drug use disorder and psychiatric disorder is relatively common

Drug use can cause mental disorder; mental disorder can trigger drug use; and common risk factor can contribute to both conditions

Amongst IDUs, co-infections with HIV, HCV, HBV, Tuberculosis and STIs are common

Malnutrition and anaemia are among the common physical co-morbidities associated with drug use

Poly-drug use is common and IDUs can experience withdrawal from opioids, alcohol and benzodiazepines

Mental Health and Mental Illness (Psychiatric Disorder)

OBJECTIVE

- To enable the participants to understand the concept of mental health
- To help the participants to understand the definition of mental illness

EXPECTED OUTCOME

By the end of the session participants will be able to:

- Understand key issues in the concept of mental health
- Know about stress coping and the various defense mechanisms
- Define mental illness

DURATION

60 minutes

SESSION CONTENT

- Concept of mental health and positive mental health
- Coping with stress
- Defense mechanisms
- Definition of mental illness

SUGGESTED TRAINING METHOD

- Brainstorming
- Discussion
- PowerPoint presentations

MATERIALS / PREPARATION REQUIRED

- Projector
- Laptop
- PowerPoint slides for the session
- Whiteboard/ Flipchart
- Marker pen

PROCESS

STEP 1: Mental Health

- Ask the participants to think about what is meant by mental health. While we understand physical health easily, ask them to ponder over what constitutes positive mental health.

Mental health has been defined in many ways but should always be viewed in the context of ethno-cultural factors and influence.

Mental health is defined as: a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and cope with adversity.

The emphasis is on successful performance of mental function that leads to productivity, fulfilling relationships, adapting to change and coping with difficulties.

The concept of health and wellness was altered in 1961. Both are viewed on a continuum, which is dynamic and changing. What is important is the level of wellness.

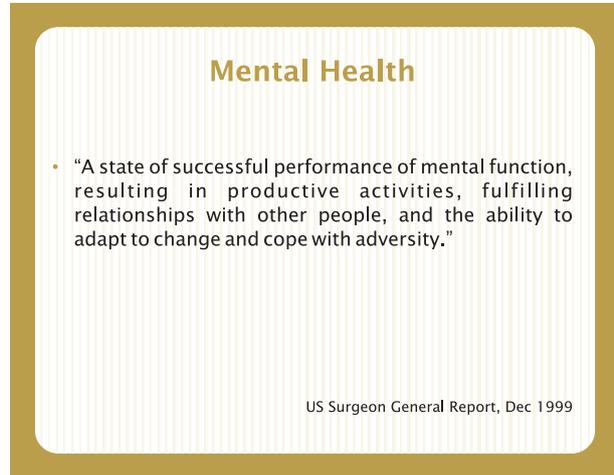
The concepts mentioned in the wellness-illness continuum are:

- Totality
- Energy
- Self-integration
- Uniqueness
- Energy-use
- Inner/outer worlds

In 1958, Maria Jahoda developed and proposed six categories of positive mental health. They are:

1. Attitude of individual toward self
2. Presence of growth and development, or actualisation
3. Personality integration
4. Autonomy and independence
5. Perception of reality
6. Environmental mastery

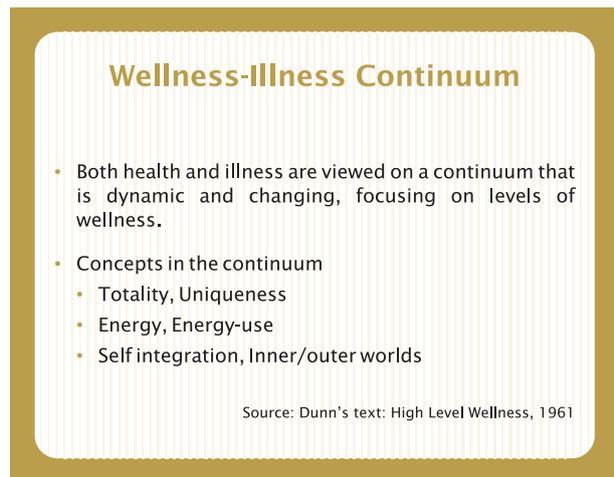
A mentally healthy person accepts the self; is self reliant; and is self confident.



Mental Health

- “A state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and cope with adversity.”

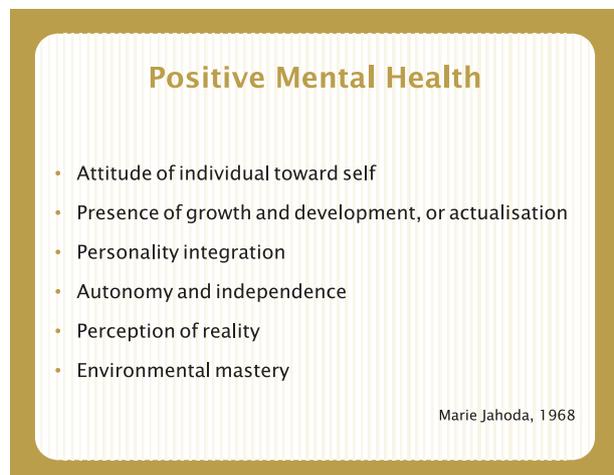
US Surgeon General Report, Dec 1999



Wellness-Illness Continuum

- Both health and illness are viewed on a continuum that is dynamic and changing, focusing on levels of wellness.
- Concepts in the continuum
 - Totality, Uniqueness
 - Energy, Energy-use
 - Self integration, Inner/outer worlds

Source: Dunn's text: High Level Wellness, 1961



Positive Mental Health

- Attitude of individual toward self
- Presence of growth and development, or actualisation
- Personality integration
- Autonomy and independence
- Perception of reality
- Environmental mastery

Marie Jahoda, 1968

Self actualisation	Self fulfillment/reach highest potential
Self esteem	Seek self-respect, achieve recognition
Love/belonging	Giving/receiving affection, companionship
Safety and security	Avoiding harm; order, structure, protection
Physiological	Air, water, food

Maslow

Maslow developed a hierarchy of needs based on attainment of self actualisation, where one becomes highly evolved and attains his or her full potential.

The basic belief is that lower level needs must be met first in order to advance to the next level of needs. Therefore, physiological and safety needs must be met before issues related to love and belonging can be addressed through to self-actualisation.

STEP 2: Stress and response to it

- Brainstorm about stress and the various ways to adapt to it in everyday life

Hans Selye divided stress syndrome into three stages. He pointed out the seriousness of prolonged stress on the body and the need for identification and intervention.

<ul style="list-style-type: none"> • Alarm stage: Immediate fight or flight response to a threat or perceived threat • Resistance: Adapts to levels of stress and body returns to homeostasis • Exhaustion: With prolonged exposure to stress, body becomes depleted. Illness may develop.

Hans Selye, 1976

Alarm stage: This is the immediate physiological response to stress or perceived stress. Fight or flight response is common in this stage

Resistance: If the stress continues, the body adapts to the levels of stress and attempts to return to homeostasis

Exhaustion: With prolonged exposure and adaptation, the body eventually becomes depleted. There are no more reserves to draw upon, and serious illness may develop (mental disorders, hypertension). Without intervention, it can lead to adverse consequences including death.

In the fight-flight response, the physiological response is due to the activation of sympathetic nervous system. This is beneficial in the short term, for instance, in an emergency situation. However, with ongoing chronic psychological stressors, a person continues to experience the same physiological response as if there were a real danger, which eventually physically and emotionally depletes the body.

The diathesis stress model views behaviour as the result of interaction between genetic and biological factors.

A genetic predisposition results in a mental disorder when precipitated by environmental factors (e.g., mood disorders and schizophrenia).

Diathesis Stress Model

- Behaviour is the result of interaction between biological and environmental factors
- Some illnesses (e.g., mood disorders) are due to genetic predisposition or interacting with adverse environmental factors

STEP 3: Personality development and defense mechanisms

- Inform participants the next few slides will outline issues related to personality development and mental defense mechanisms commonly employed by human beings

Sigmund Freud was concerned with both the dynamics and structure of the psyche. He divided the personality into three parts:

Id: The 'id' developed out of Freud's concept of the pleasure principle. The 'id' comprises primitive, instinctual drives (hunger, sex, aggression). The 'id' says "I want"

Ego: It is the 'ego', or rational mind, that is called upon to control the instinctual impulses of the self-indulgent id. The 'ego' says "I think / I evaluate".

Superego: The 'superego' is the conscience of the psyche and monitors the ego. The superego says "I should / I ought".

Theories of personality development Psychoanalytic theory

- Id: Pleasure principle - Primitive and instinctual drives "I want"
- Ego: Rational mind - Control the instinctual impulses of Id
- Superego: Conscience of the psyche - exercises self judgement and holds ethical and moralistic values

Sigmund Freud

Freud's topographic model deals with levels of awareness and is divided into three categories.

Unconscious mind: All mental concepts and memories outside of conscious awareness. Becomes conscious through preconscious mind.

Preconscious mind: Not within conscious mind but can more easily be brought to conscious awareness.

Conscious mind: All consent and memories immediately available and within conscious awareness.

Topographic model of mind

- Unconscious Mind
- Preconscious Mind
- Conscious Mind

Denial: Refusing to accept a painful reality. e.g.: A man who uses heroin daily, loses his job, yet he insists he doesn't have a problem with drugs

Defence Mechanisms

- Denial: Subjects acts as if consciously unaware of a wish or reality
- Displacement: Thoughts and feelings about one person or object are transferred to another person or object
- Projection: Repressed thoughts and wishes are attributed to other people or objects
- Minimisation: To reduce something harmful or unpleasant to the smallest amount or degree | to make something seem much less important than it really is.

Displacement: Directing anger toward someone or onto another, safer substitute e.g: An employee insulted by the boss at work, and angrily shouts at his wife for no reason

Projection: Attributing to others' feelings unacceptable to self. e.g.: A support group session participant strongly dislikes another member but claims that it is the member who hates him.

Minimisation: When adults use minimisation, it decreases the significance of their behaviour. Consequently they don't recognize the effect their behaviour has on others. e.g., I don't create any problem to my family because of my drug use; I just use my money for drugs and relax on weekends.

Defence Mechanisms

- Intellectualisation: Attempt made to explain in a logically consistent way to avoid the feelings associated with a situation
- Repression: Unacceptable effects, ideas and wishes are pushed away so that they remain in the unconscious mind
- Reaction formation: Expressing an opposite feeling from what is actually felt and is considered unacceptable

Intellectualisation: Attempt made to explain in a logically consistent way to avoid the feelings associated with a situation. e.g: A man with HIV infection requests all results and investigations and discuss with his doctor in detail as if he was speaking about someone else.

Repression: Unacceptable effects, ideas and wishes are pushed away so that they remain in the unconscious mind. e.g.: A woman who does not talk at all about the traumatic incident of having been sexually abused when young by her close relative.

Reaction formation: Expressing an opposite feeling from what is actually felt and is

considered unacceptable. e.g.: X who hates Y, greets him warmly and offers food and beverages paying special attention.

Healthy Mental Mechanisms

- Humour
- Altruism
- Sublimation
- Suppression
- Anticipation

Humour: The overt expression of feelings without personal discomfort. Humour allows one to bear and yet focus on what is too terrible to be borne.

Altruism: Constructive and gratifying service to others.

Sublimation: Sublimation is simply the channeling of unacceptable impulses, thoughts and emotions into more acceptable ones.

Suppression: Painful effects, ideas are not brought to conscious surface and attention is not paid to these painful impulses.

Anticipation: The realistic anticipation of or planning for future inner discomfort

STEP 4: Mental Illness

- Ask participants to think about mental illness and the clinical manifestations of mental disorder
- Inform them that brain is the seat of the mind and hence biological aspects are important in understanding the mental disorders (psychiatric disorders)

Though there are many definitions of mental illness, it should be viewed in the context of ethno cultural factors and influence.

The definition in American Psychiatric Association –DSM IV TR is given on the left.

The definition of a mentally ill person according to the Indian Mental Health Act is as follows:

“Mentally ill person” means a person who is in need of treatment by reason of any mental disorder other than mental retardation

Mental Illness

- A clinically significant behavioural or psychological syndrome or pattern that occurs in an individual and is associated with present distress or disability or with a significantly increased risk of suffering, death, pain, disability, or an important loss of freedom.
- Must not be a culturally sanctioned response to a event
- Neither deviant behaviours nor conflicts between individual and society are mental disorders

American Psychiatric Association, 2000

It is important to stress that many clinical symptoms of various psychiatric disorders may be variations of normal functioning.

The clinical features involve disturbances to

- Thinking
- Mood (Affect)
- Perception
- Conduct and behaviour
- Personality

Deviations from normalcy can occur in terms of Intensity, duration, timing, content of thoughts, emotions and behaviours. Many of these symptoms may be context dependent

Clinical manifestations of mental illnesses (Psychiatric disorders)

- Clinical symptoms may be variations of normal functioning
- Deviations from normalcy can occur in intensity, duration, timing, content of thoughts, emotions and behaviours may be context dependent
- When attempts to cope overwhelm the individual capacity to respond, then less adequate, disorganised thoughts and behaviour emerge

When attempts to cope with life stressors overwhelm the individual capacity to respond, then less adequate, disorganised thoughts and behaviour emerge and present as clinical features of mental illness

Mind-body dualism to brain and behaviour

Descartes developed the theory of mind-body dualism (Cartesian dualism), wherein the mind was said to be completely separate from the body. Current research shows evidence for connection between mind and body.

Biological aspects of psychiatric disorders

- Cartesian dualism (Mind-body dualism)
- Connection between body and mind established through current research
- Brain is the seat of the mind
- Many psychiatric disorders are brain disorders
- Multi disciplinary understanding of psychiatric disorders is proposed

The brain is the seat of the mind and many psychiatric disorders including drug dependence, schizophrenia and mood disorders can be considered as brain disorders.

Areas of neurobiology, neuroimaging, genetics and biological markers are important for understanding psychiatric disorders.

Multidisciplinary approach to psychiatry is essential and many new treatments will involve biological, psychological and social aspects.

STEP 5: Conclusion

- Sum up the session by giving following key messages.

Key messages

Mental health and mental illness should always be viewed in the context of ethno cultural factors and influence

The mentally healthy person accepts the self, is self-reliant, and is self-confident

Physiological and safety needs of a person need to be addressed before moving on to issues such as love and self actualisation

Identification and treatment of chronic stressors is important to prevent serious illness and improve quality of life

There are three parts of personality: Id, Ego and Superego and three categories of levels of awareness: unconscious mind, preconscious mind and conscious mind.

Key defense mechanisms are employed by human beings and while some are used in psychopathological states, some defense mechanisms are healthy

The clinical manifestations of many psychiatric disorders are variations from normalcy and differ in intensity, duration, timing and context

The brain is the seat of the mind and many psychiatric disorders including drug dependence, schizophrenia and mood disorders can be considered as brain disorders

Multidisciplinary approach to psychiatry is essential and many new treatments will involve biological, psychological and social aspects

Mental Illnesses (Psychiatric Disorders) – Clinical Assessment

OBJECTIVE

To help the participants understand the process of clinical assessment.

EXPECTED OUTCOME

By the end of the session participants will be able to:

- Understand clinical assessment of mental disorders

DURATION

45 minutes

SESSION CONTENT

- Clinical assessment

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

MATERIALS / PREPARATION REQUIRED

- LCD projector
- Laptop
- PowerPoint slides for the session
- White board/flipchart
- Chart papers
- Masking tape
- Marker pen

PROCESS:

STEP 1: Presentation and discussion on clinical assessment

- Discuss with the participants the key features in clinical assessment

Clinical Assessment

- Psychiatric history
- Mental state examination
- Physical examination
- Investigations
- Differential diagnosis

As with other branches in medicine, it is important when assessing a patient to be able to record an accurate history and carry out an appropriate examination. In the case of psychiatric clinical assessment, it includes not only a physical examination but also an examination of the patient's mental state. Apart from these relevant laboratory investigations, psychometric tests may be carried out. It is always better to consider differential diagnosis after the first clinical assessment.

The psychiatric history should ideally be brought together from both the patients and reliable informants. Establishing rapport is essential for a good psychiatric history.

The present complaints and the history of present illness should be elicited first. The present illness is evaluated on the basis of onset, precipitating factors, development and reasons for referral. The chronological sequence of each symptom is determined at the assessment.

Associated features are then considered from the most recent episode and are documented in the patient's own words. Past psychiatric history comprising disease history, treatment history and history of risk is then considered. Past medical history and medication history is then recorded. The point of family history is to establish the diagnosis. Personal history, about childhood, education, employment, relationship and parenting histories is then obtained.

The Psychiatric History

- Presenting complaint
- History of presenting complaint
- Past psychiatric history
- Past medical history
- Medication history
- Family history
- Personal history
- Social history
- Drug and alcohol history
- Forensic history
- Pre-morbid personality

Social history relates to issues such as accommodation, financial position, peer and social support. Elicit current use, screen for

dependent syndrome, withdrawal state and previous contact with treatment services. Forensic history elicits information on trouble with police and incarceration. In the pre-morbid personality section, the patient's pre-morbid characteristics are elicited and screen for personality disorder traits is carried out. In the emergency setting, a full history is not possible and only essential information is collected.

A good mental state examination (MSE) is short, clear and provides a snap shot of the here and now. In the appearance and behaviour section, focus on general appearance, dress, level of self-care, facial appearance, posture, movements, social behaviour, eye contact and rapport.

In patient's speech, rate, quantity, articulation and form (the way the patient speaks) are noted. Assess the patient's mood objectively and also note down the subjective assessment. Assess patient's affect (emotional state at the instant of assessment), mood (emotional state over a period of time), anxiety and current suicidal or aggressive ideation.

In the thoughts, focus on content of thoughts. Define the type of abnormal content as obsessions or delusions. Detail the content as persecutory, passivity phenomenon (controlling the way one thinks, feels or acts), grandiose, religious, guilt, hypochondriacal, morbid jealousy and misidentification.

Start off by screening for presence of any abnormal perceptions and if there are abnormalities, define the degree of abnormality. The type of perceptual abnormalities can be illusions or hallucinations. The hallucinations can be auditory, visual, tactile, olfactory and gustatory.

The cognitive state can be assessed for attention, concentration, orientation, registration, short-term, recent, long term memory, general knowledge and intelligence.

Insight can be evaluated through addressing these questions: does the patient recognise that he/she is ill, and if so, that the illness is psychiatric in nature? Does the patient accept the need for treatment? The degree of insight is indicated by the answers to these simple questions.

Physical examination and investigations are done for the following reasons:

First, to exclude drug induced or organic psychiatric disorders. Second, to identify any physical consequence to the drug use or psychiatric disorder. Third, to monitor medication.

Ordering of psychological tests is not routine. They are useful in helping to make a diagnosis and to monitor disease progress.

Mental State Examination

- Appearance and Behaviour
- Speech
- Mood and affect
- Thoughts
- Perception
- Cognitive state
- Insight

Physical Examination, Physical Investigations, Psychometry

- Physical examination and investigations
- Full physical examination
 - Blood pressure
 - Levels of consciousness
 - Appropriate laboratory investigations
 - Psychological investigations

Differential Diagnosis

- Compiling a differential diagnosis is the first step in diagnostic process
- Redefining the diagnosis is the next step in which a provisional diagnosis is made

Compiling a differential diagnosis is the first step in diagnostic process. The second step, which takes place over the subsequent weeks, determines which one of the differential diagnosis is most likely. This is called redefining the diagnosis in which a provisional diagnosis is made.

Compiling a differential diagnosis requires practice and a thorough knowledge of the diagnostic criteria.

STEP 2: Role play for clinical assessment

Invite two volunteers and one can be the person who is a drug user being assessed for mental health; the other person can play the role of the relative who provides information related to the patient. The facilitator conducts a mock psychiatric interview with them and conducts mental status examination of the person who plays role of the patient.

Hold discussion following the role play.

STEP 3: Conclusion

- Conclude the session by giving key messages to the participants

Key messages

Clinical assessment in psychiatry comprises: psychiatric history, mental state examination, physical examination, physical investigations and psychometry. It leads to consideration of a differential diagnosis.

Psychiatric history outlines the following: presenting complaint, history of presenting complaint, past psychiatric and medical history, family history, personal history, social history, drug and alcohol history, forensic history and pre-morbid personality.

Mental state examination provides a snap shot of here and now and includes: appearance and behaviour, speech, mood and affect, thought content, perceptions, cognitive state and insight.

Physical examination and appropriate physical investigations help in diagnosis and finding the physical consequences of the underlying psychiatric disorder.

Compiling a differential diagnosis is the first step in the diagnostic process.

Mental Illnesses (Psychiatric Disorders) – Signs and Symptoms

OBJECTIVE

To educate the participants about the signs and symptoms of mental illnesses (psychiatric disorders) and the principles of management of psychiatric disorders

EXPECTED OUTCOME

By the end of the session, participants will be able to:

- Identify the key signs and symptoms of various psychiatric disorders
- List types of mental disorders
- Categorise syndromes
- Learn about principles of management of psychiatric disorders

DURATION

75 minutes

SESSION CONTENT

- Signs and symptoms of psychiatric disorders
- Types of mental disorders
- Syndromal categories
- To learn about principles of management of psychiatric disorders

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

MATERIALS / PREPARATION REQUIRED

- LCD projector
- Laptop
- PowerPoint slides for the session
- White board/flipchart
- Chart papers
- Masking tape
- Marker pen

PROCESS

STEP 1: Discussion and presentation on signs and symptoms of psychiatric disorders

- Before presenting the slides the facilitator asks the participants about the signs and symptoms for psychiatric disorders and records them on the flip chart/white board.
- Share with the participants the signs and symptoms of mental disorders and highlight that many symptoms have to be viewed in the cultural context

Signs and Symptoms of Psychiatric Disorders

Self neglect

- A lack off cleanliness in self-care
- Unkempt hair
- Wearing clothes that are dirty

Flamboyant clothing

- Dressed in colourful, flamboyant way

Self neglect : Evidence of self neglect may include:

- A lack of cleanliness in self care
- Unkempt hair
- Wearing clothes that have not been looked after

These are common in drug use disorders, psychotic disorders and dementia

Flamboyant clothing : A patient may be dressed in a colourful, flamboyant way if under the influence of certain substances or mania

Signs and Symptoms of Psychiatric Disorders

Postures and Movements

- Mannerisms: Repeated involuntary movements that is goal-directed
- Negativism: A motiveless resistance to commands
- Posturing: Adopting inappropriate bodily posture for long period
- Stereotypies: Repeated regular fixed patterns of movement or speech that is not goal directed

Mannerisms: Repeated involuntary movements that is goal directed

Negativism: A motiveless resistance to commands

Posturing: Adopting inappropriate bodily posture for long period

Stereotypes: Repeated regular fixed patterns of movement or speech that is not goal directed

Ambitendency: The patient makes a series of tentative incomplete movements when expected to carry out a voluntary action

Most of these are seen in schizophrenia and at times in drug induced psychotic disorders

Pressure of speech: Increased in quantity and rate (e.g., mania, substance induced psychotic disorders)

Flight of ideas: Stream of accelerated thoughts with abrupt changes between topics and no central direction (e.g., mania, substance induced psychotic disorders)

Circumstantiality: Slowed thinking incorporating unnecessary trivial details (e.g., epilepsy)

Loosening of association: Odd, tangential associations between ideas; incomprehensible, incoherent speech (e.g. schizophrenia)

Signs and symptoms of psychiatric disorders

Disorders of speech

- Pressure of speech: Increased in quantity and rate
- Flight of ideas: Stream of accelerated thoughts with abrupt changes between topics and no central direction
- Circumstantiality: Slowed thinking incorporating unnecessary trivial details
- Loosening of association: Odd, tangential associations between ideas; incomprehensible, incoherent speech

Affect is a pattern of observable behaviours that expresses a subjectively experienced feeling state (emotion) and is variable over time in response to changing emotional states.

Depression: Low or sad mood that may be accompanied by lack of pleasure (anhedonia). (e.g., depressive disorders, drug induced depression)

Expansive mood: Feelings expressed without restraint; self importance overrated (e.g., mania, drug induced psychotic disorders)

Ecstasy: Feeling of intense rapture (e.g., drug use)

Irritability: Liability to outbursts or reduced control over aggressive impulses towards others (e.g., drug use, withdrawal, depression, mania)

Signs and Symptoms of Psychiatric Disorders

Disorders of emotion

- Depression: Low or sad mood that may be accompanied by lack of pleasure
- Expansive mood: Feelings expressed without restraint; self importance overrated
- Irritability: Liability to outbursts or reduced control over aggressive impulses towards others

Fear: This is anxiety caused by a recognised real danger

Tension: An unpleasant increase in psychomotor activity

Agitation: Excessive motor activity with a feeling of more tension (e.g. drug induced states, depression)

Anxiety: Feeling of apprehension caused by anticipating an external or internal danger (e.g. drug induced states, anxiety disorders)

Apathy: Indifference and a loss of emotional tone and ability to feel pleasure (e.g., schizophrenia)

Signs and Symptoms of Psychiatric Disorders

Disorders of emotion

- Agitation: Excessive motor activity with a feeling of more tension
- Anxiety: Feeling of apprehension caused by anticipating an external or internal danger
- Apathy: Indifference and a loss of emotional tone and ability to feel pleasure

Signs and Symptoms of Psychiatric Disorders

Disorders of thought content

- Obsession: Repetitive, senseless thoughts, recognised as irrational and unsuccessfully resisted
- Phobia: Persistent irrational fear of an activity, object or situation leading to avoidance. Fear is disproportionate
- Hypochondriasis: Preoccupation with a fear of having a serious physical illness

Obsession: Repetitive, senseless thoughts, recognized as irrational and unsuccessfully resisted (e.g., Obsessive compulsive disorder)

Phobia: Persistent irrational fear of an activity, object or situation leading to avoidance. Fear is disproportionate (e.g., Phobic anxiety)

Hypochondriasis: Preoccupation with a fear of having a serious physical illness (e.g., somatoform disorders, depression)

Signs and Symptoms of Psychiatric Disorders

Disorders of thought content

- Delusion: A false personal belief based on incorrect inferences about external reality and firmly sustained in spite of what almost everyone else believes and in spite of what constitutes as obvious proof of evidence to the contrary. This belief is not one normally held by others of the same culture.
 - Delusion of persecution
 - Delusion of grandeur
 - Delusional jealousy
 - Delusion of reference
 - Somatic delusion
 - Bizarre delusion

Delusion: A false personal belief based on incorrect inferences about external reality and firmly sustained in spite of what almost everyone else believes and in spite of what constitutes as obvious proof of evidence to the contrary. This belief is not one normally held by others of the same culture.

Delusions are common in delusional disorders, alcohol induced delusional disorder, substance induced disorders and schizophrenia

Signs and Symptoms of Psychiatric Disorders

Disorders of Perception

- Hallucination: A false sensory perception occurring in the absence of real external stimuli. It is perceived as being located in the objective space and as having the same realistic qualities of normal perception
 - Auditory
 - Olfactory
 - Tactile
 - Visual
 - Gustatory

Illusion: A false perception of a real external stimulus.

Hallucination: A false sensory perception occurring in the absence of real external stimuli. It is perceived as being located in the objective space and as having the same realistic qualities of normal perception

Hallucinations are common in alcohol withdrawal states, substance induced disorders, schizophrenia

Disorders of attention:

Distractibility: Attention is drawn too frequently to unimportant or irrelevant external stimuli

(e.g., attention deficit hyperactivity disorder, drug induced disorders, mania)

Memory Disorders:

Amnesia: Inability to recall past experience

Paramnesias:

Confabulation: Gaps in memory are unconsciously filled with false memories

Déjà vu: Feeling that current situation has been experienced (e.g., temporal lobe epilepsy)

Jamais vu: Failure to recognise a familiar situation (e.g., temporal lobe epilepsy)

Signs and Symptoms of Psychiatric Disorders

Disorders of attention:

- Distractibility: Attention is drawn too frequently to unimportant or irrelevant external stimuli

Memory disorders

- Amnesia: Inability to recall past experience
- Paramnesias:
 - Confabulation: Gaps in memory are unconsciously filled with false memories
 - Déjà vu: Feeling that current situation has been experienced
 - Jamais vu: failure to recognise a familiar situation

Clouding of consciousness: Drowsy and does not react to stimuli

Delirium: Patient bewildered, disoriented and restless. May be associated with fear and hallucinations. The level of consciousness fluctuates, often worsens in the evenings.

Delirium is common in substance withdrawal states (alcohol delirium tremens), substance intoxication and infective conditions affecting the brain

Signs and Symptoms of Psychiatric Disorders

Disorders of consciousness

- Clouding of consciousness: Drowsy and does not react to stimuli
- Delirium: Patient bewildered, disoriented and restless. May be associated with fear and hallucinations

STEP 2: Types of mental disorders

- Inform participants about various types of mental disorders.

Types of Mental Disorders

Organic disorders

- Delirium
 - Substance withdrawal delirium
 - Substance intoxication
 - Infections

Psychoactive drug use disorders

- Acute intoxication
- Dependence syndrome
- Harmful use
- Withdrawal state

- Metabolic disorders (hepatic toxicity, thiamine deficiency, water and electrolyte imbalance)
- Head injury, epilepsy

Types of Mental Disorders

Psychotic disorders

- Schizophrenia
- Delusional (paranoid) disorders
- Schizoaffective disorders
- Bipolar disorders (mood disorders)

Psychotic disorders are characterised by lack of reality testing and absence of insight into their condition. Disorders of thinking, delusions and hallucinations are common.

- Schizophrenia
- Delusional (paranoid) disorders
- Schizoaffective disorders
- Bipolar Disorders (mood disorders)

Substance and alcohol use induced psychotic disorders should be considered in differential diagnosis.

Types of Mental Disorders

Depressive disorders

- Major depression
- Dysthymia
- Minor depression
- Bipolar depression

Depressive episodes can be caused by alcohol and other substances and hence should be considered in the differential diagnosis of depressive disorders. Similarly organic conditions such as hypothyroidism can cause depressive disorders.

It is relevant to note that a substantial proportion of these disorders are associated with psychological causation. Mixtures of symptoms are common, particularly co-existent depression and anxiety.

Types of Mental Disorders

- Neurotic, stress related and somatoform disorders
- Generalised anxiety disorder
 - Panic disorders
 - Phobic disorders
 - Obsessive-compulsive disorder
 - Acute stress reaction
 - Adjustment disorder
 - Post traumatic stress disorder
 - Dissociative disorder
 - Somatoform disorder

Personality disorders are relatively common among drug users. Suicide risk is greater among drug users when compared with non-drug users. Sleep disorder, particularly insomnia is relatively common among drug users.

Types of Mental Disorders

- Other disorders
- Personality disorders
 - Suicide and parasuicide
 - Sleep disorders
 - Psychosexual and gender disorders

STEP 3: Clinical presentation: syndromes

- The key features of syndromic case assessment are that it is:
 - Problem-oriented
 - Provides opportunity to work for a provisional diagnosis
 - Potential to organise emergency care at primary care level

Anxiety is inherent to most mental illnesses and the differential diagnosis is initially broad. Agitation is the behavioural manifestation of high levels of anxiety and can increase suicidality.

Suicidality secondary to agitation and anxiety can be effectively reduced by sedation.

Anxious and Agitated Patient

- Substance intoxication
- Substance withdrawal
- Anxiety disorders
 - Panic disorder
 - Generalised anxiety disorder
 - Post traumatic stress disorder
- Organic anxiety disorder

Depressed Patient

- Depressive disorder
- Substance induced depression
- Mixed anxiety and depression

Depressive disorders are very common. They can be primary (depressive disorders) or secondary (substance induced depression).

Depressive disorders are eminently treatable.

The primary risk from a depressive episode is suicide. The risks of negligence and vulnerability, to both oneself and one's dependents are common. There is also association between depression and aggression.

Manic and Disinhibited Patient

- Substance induced mania
- Organic manic disorder
- Bipolar disorder

Manic episodes can be primary (bipolar disorder) or secondary (substance induced). Social disinhibition may lead to the clinician's boundaries being encroached. In such situations it is important to remain calm, respectful and appropriately firm.

Manic patients can present with every type of risk to the self and others. Sedation may well be indicated. Risk management must also include an assessment of the risks from negligence (e.g. overspending or public humiliation) and vulnerability.

Insomnia

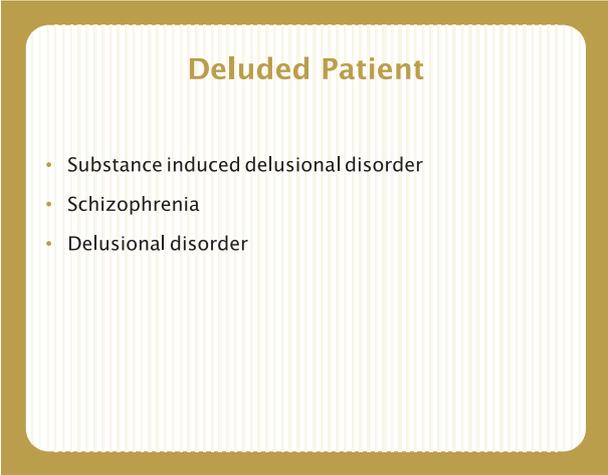
- Substance induced Insomnia
- Insomnia secondary to psychiatric disorders
- Insomnia due to physical discomfort

Episodes of insomnia can be extremely distressing. There is high life time prevalence of insomnia and it is common among people who use drugs.

Suicide is associated with insomnia as both a primary and as a secondary complication.

The presence of a delusion indicates a psychotic disorder. Psychotic disorders are a heterogeneous group.

Delusions can impact on every aspect of risk. Delusions, in which the person believes in receiving distressing threats from others, or delusions that require the patient or others to be punished or harmed are to be handled with great care. Sedation may be required to reduce the risk.



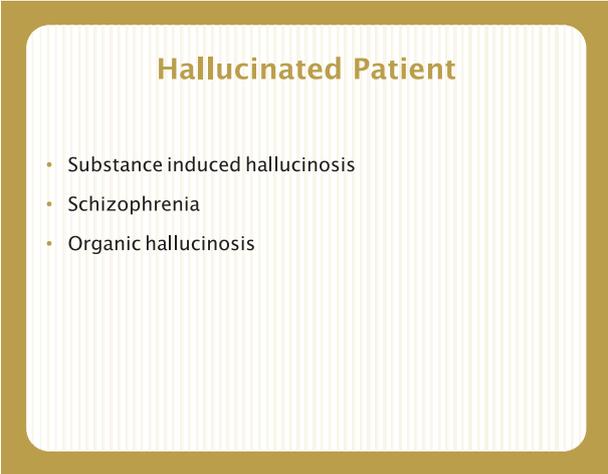
Deluded Patient

- Substance induced delusional disorder
- Schizophrenia
- Delusional disorder

As with delusions, presence of pathological hallucinations indicates a psychotic disorder.

Hallucinations can impact on every aspect of risk. Of particular importance are: command hallucinations, voices of known people and derogatory in content, intolerably distressing hallucinations.

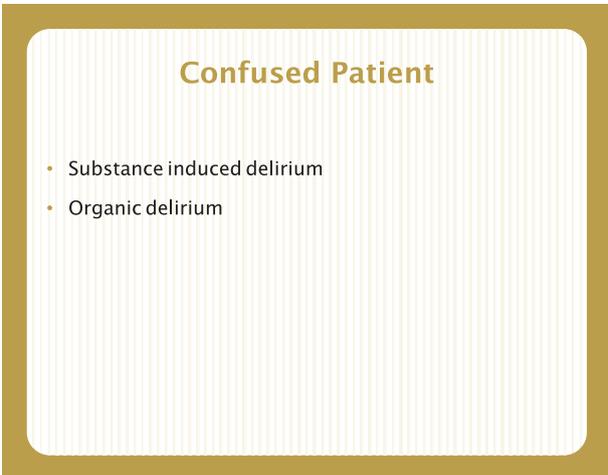
Management of risk is important and sedation may be required.



Hallucinated Patient

- Substance induced hallucinosis
- Schizophrenia
- Organic hallucinosis

The three common conditions of confusion are delirium, dementia and depressive pseudodementia. In delirium, alcohol withdrawal delirium and other drug induced delirium is common. The most usual risks are negligence and vulnerability. Sedation is part of risk management but medication should be titrated from very low dose.



Confused Patient

- Substance induced delirium
- Organic delirium

Aggressive Patient

- Substance induced aggression
- Bipolar disorder
- Schizophrenia

Management of violence is one of the most important skills in acute psychiatry.

- Always remain calm. Make sure safety is ensured
- Determine whether the aggression is a manifestation of drug use and/or mental disorder
- Sedation may be required in many cases
- Arrange for local psychiatric services

Step 4: Principle of management

- Inform participants about the key principles involved in the management of psychiatric disorders

Management

- Short-term Risk Management
- Redefining the diagnosis
- Management of the psychiatric disorder

Risk management: Keeping the patient safe is always the first concern during every clinical examination.

Redefining the diagnosis: All evidence based medicine treatment stems from diagnosis. In this phase, a provisional diagnosis is established for providing the most appropriate treatment.

Treatment of the disorder: Once a diagnosis is established, it is then possible to proceed with the treatment for the underlying psychiatric disorder with physical and psychological methods.

Short term risk management

Assessment of risk

- Risk to self
 - From deliberate self harm or suicide
 - From self neglect
 - From being vulnerable to others
- Risk to others
 - By aggression
 - By neglect of others

The slide provides information on assessment of risk to self and others. In every clinical situation, run through each of the headings and go into detail when relevant. After assessment, qualify whether the risk is high, medium or low. There are many components to risk management and sedation may be key in many cases.

It is important to decide which one of the differential diagnoses the patient is suffering from.

An initial period of assessment consists of detailed mental state examination, collecting other information to decide which diagnostic criteria are best satisfied.

If it is not possible to distinguish between two disorders, then consider a diagnostic trial.

Recognising that a degree of doubt remains over the diagnosis is a valid approach.

Refining the diagnosis

- An initial period of assessment
- A diagnostic trial
- Making a provisional diagnosis

Treatment of any psychiatric disorder is divided into short term management and long term management.

Both short term and long term management comprise: biological treatment, psychological treatment and social treatment.

Biological treatment usually is through medicines. Consider lowest effective dose and optimise dose individually. In agitated and sleepless patients, always consider sedation into the core treatment. Complete a therapeutic trial and monitor response.

Every patient can benefit from supportive counselling. Mixing various psychological interventions is not uncommon.

Social treatment is necessary to reduce the stress upon the individual and to improve the quality of life.

Management of psychiatric disorder

- Short term management
 - Biological treatment
 - Psychological treatment
 - Social treatment
- Long term treatment

STEP 4: Conclusion

- Conclude the session by giving following messages

Key messages

The key signs and symptoms in psychiatric disorders include: self neglect, pressure of speech, flight of ideas, loosening of association, expansive mood, depression, irritability, agitation, anxiety, obsession, phobia, delusions, hallucinations, distractibility, amnesia and delirium.

The types of mental disorders are: organic disorders (psychoactive drug use disorders, delirium); psychotic disorders (schizophrenia, bipolar disorder); depressive disorders (major and minor depression); neurotic, stress related and somatoform disorders (anxiety disorders) and other disorders (personality disorders, suicide, sleep disorders).

For the purpose of management at the primary care level, it may be easier to recognise syndromes. The patients can present with agitation/anxiety, depression, mania/disinhibition, insomnia, delusion, hallucination, confusion, and aggression.

The management of psychiatric disorders involves: 1) short-term risk management where the risk is assessed and managed; 2) redefining the diagnosis where a provisional diagnosis is made; and 3) management of psychiatric disorder that includes a short term treatment and a long term treatment plan.

Depression and Drug Use

OBJECTIVE

To educate the participants about depression and drug use

EXPECTED OUTCOME

By the end of the session participants will be able to:

- Understand assessment and management of depression among drug users

DURATION

60 minutes

SESSION CONTENT

- Epidemiology and aetiology of depression
- Clinical features of depression
- Suicide risk in depression
- Differential diagnosis
- Management of depression

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

MATERIALS / PREPARATION REQUIRED

- LCD projector
- Laptop
- PowerPoint slides for the session
- White board/flipchart
- Chart papers
- Masking tape
- Marker pen

PROCESS:

STEP 1: Presentation and discussion on epidemiology and aetiology of depression

Depressive disorders are very common as the lifetime risk for experiencing major depressive disorder is 15%. It is more common in women and the age of onset is usually 24–35 years.

Epidemiology and Burden

- Depression is a highly prevalent condition
- About one in a seven will experience depression during their lifetime
- Many people with depression will have a recurrent or chronic course
- Depression is the fourth leading cause of disability worldwide
- Depression results in work absence and loss of productivity leading to significant economic loss

Many people with depression have a chronic relapsing course. Relapse within the first six months of recovery occurs in a fourth of patients; more than a half will relapse within first five years.

Depression causes substantial impairment in daily functioning. Depression is found to increase the risk of social disability 2–3 fold over the general population.

Depression is the fourth leading cause of disability worldwide.

In terms of work productivity, those suffering from depression are 3–4 times more likely to take sick leaves from work than non-depressed individuals. The astounding economic costs of depression are due to premature mortality and reduced productivity and absenteeism.

The exact pathophysiology of major depression remains unknown.

First degree relatives are at great risk for depression.

Aetiology of Depression

- Biological (genetics), psychological (life events), and social factors (lack of social support) are involved in the etiology and pathophysiology of depression
- Stressful life events and stress reactivity can modify genetic and biological processes

The monoamine hypothesis of depression has been the foundation of neurobiological theories of depression. Alterations in the hypothalamic pituitary adrenal axis have been recognised in major depression. Disruptions of circadian clock are associated with bipolar depression.

Depression often follows a major psychosocial stressor. Adverse childhood experiences, inadequate social support are important factors.

There is an interaction between genetic risk and life events for developing depression. Stressful life events and stress reactivity can modify genetic and biological processes.

Numerous studies have identified the prognostic recovery and relapse probability in depressed persons and they are listed in the slide.

It is important to emphasise that alcohol and drug use are poor prognostic indicators as they can precipitate, perpetuate, exacerbate and unmask depressive episodes.

Factors predicting prolonged course of depressive episode

- Severe depression
- Alcohol and drug abuse
- Co-morbid illness
- Psychotic features
- Poor social support
- Early age of onset
- Long duration
- Low levels of functioning prior to depression

STEP 2: Presentation and discussion on clinical features of depression

Depression is associated with a number of physical (sleep, energy, appetite, libido), emotional (low mood, anxiety, crying) and cognitive (guilt, pessimism, suicidal thoughts) symptoms.

They can be remembered as acronym SIGECAPS. The slide describes the clinical symptoms of depression.

Low mood and or decreased interest/pleasure are important to make a diagnosis of depression. Depression is often associated with increased frequency and magnification of pain including headaches and backaches.

Clinical features of depression

Depressive Symptom	Presentation
Sleep	Insomnia or hypersomnia
Interest/pleasure	Decreased (anhedonia)
Guilt	Increased; irrational thoughts
Energy	Decreased (fatigue)
Concentration	Decreased (indecisive)
Appetite	Decreased or increased
Psychomotor activity	Agitation or retardation
Suicide	Thoughts, plans, attempts

Three major sub-classifications of depression are:

- Major depressive disorder
- Dysthymia
- Depressive disorder, not otherwise specified

Additionally three levels of depression have been described and they are:

- Mild: Two typical symptoms and two other symptoms
- Moderate: Two typical symptoms and three or more other symptoms
- Severe: Two typical symptoms and four or more other symptoms

Types of Depression

Types of depression	Severity of depression
Major depressive disorder	Mild
Dysthymia	Moderate
Depressive disorder, not otherwise specified <ul style="list-style-type: none"> • Minor depressive disorder • Premenstrual dysphoric disorder 	Severe

Major Depressive Disorder

Five or more of the following for at least 2 weeks:

1. Depressed mood
2. Loss of interest in pleasure
3. Significant weight loss
4. Insomnia or hypersomnia
5. Psychomotor agitation or retardation
6. Fatigue
7. Excessive guilt or feelings of worthlessness
8. Diminished ability to think or concentrate
9. Recurrent thoughts of death

To diagnose one of the symptoms of low mood or loss of interest and pleasure is essential. Five or more of the symptoms listed in the slide must be there to make a clinical diagnosis of major depression.

To make a primary diagnosis, the symptoms must not be due to the direct physiological effects of a substance or a general medical condition. The symptoms are not better accounted for by bereavement.

Dysthymia

A. Depressed mood for at least two years

B. Two or more of the following:

1. Poor appetite or overeating
2. Insomnia or hypersomnia
3. Low energy or fatigue
4. Low self esteem
5. Indecisive or poor concentration
6. Feelings of hopelessness

Dysthymia is a chronic, low grade depression, during which the full criteria for major depression are not met. Symptoms develop slowly and often persist for two or more years. The criteria are outlined in the slide.

Minor Depressive Disorder

- Episodes of at least two weeks of depression
- Fewer than five items required for major depressive disorder

Episodes of at least two weeks of depressive symptoms but with fewer than the five items required for diagnosing major depressive disorder

STEP 3: Presentation and discussion on suicidal risk in depression

Suicide is one of the most tragic consequences of depression. It is difficult to predict suicide risk beyond very short time periods.

Episode related risk factors are mentioned in the slide. Drug use substantially elevates the risk of suicide.

**Risk factors for suicide
Episode related**

- Current suicidal plans
- Prior attempts
- Severe depression
- Hopelessness and guilt
- Bipolarity
- Mixed state (with agitation)
- Psychotic features
- Substance abuse
- Serious medical condition
- Anxiety

The slide outlines the risk factors for suicide related to demographics.

In the assessment of suicidality, attention must be given to social supports, potential methods, lethality of previous attempts and plans, current drug use and personality traits such as impulsivity.

**Risk factors for suicide
Demographics**

- Male
- Adolescent or elderly
- Early onset of mood disorder
- Family history of suicide
- Adverse childhood experiences
- Adverse life circumstances
- Recent stressor
- Lack of social support

STEP 4: Presentation and discussion on differential diagnosis in depression

Bereavement or grief over loss of relationships can share symptoms with a major depression. Feelings of worthlessness and suicidal ideas are usually absent in bereavement.

A number of medical conditions can cause depression.

Substances of abuse can induce depressive episodes. While substance induced depressive symptoms usually resolve with discontinuation of the substance, some intense forms of withdrawal can last over a month.

Differential Diagnosis

- Substance induced mood disorder
- Bereavement
- Mood disorder due to a general medical condition

Common drugs of abuse causing depression

- Alcohol
- Amphetamines
- Anti-anxiety drugs
- Cocaine
- Hallucinogens
- Hypnotics
- Inhalants
- Opioids
- Sedatives

A number of substances can cause depression and they are mentioned in the slide. Alcohol and amphetamines are notorious in causing depression.

Depression due to general medical conditions

- | | |
|----------------------------------|--|
| Diabetes | Endocrine disorders |
| Cardiovascular disease | • Thyroid disorders |
| Neurological | Vitamin deficiencies (B12/Folate; Vitamin C; Niacin; Thiamine) |
| • CNS infections | Others |
| • Epilepsy | • AIDS |
| • Sleep apnoea | • Cardiopulmonary disease |
| Systemic disorders | |
| • Viral and bacterial infections | |

Depressive symptoms can result from the direct physiological effects of a specific pre-existing medical condition. Depression is particularly common in diabetes, cardiovascular disease, thyroid disease and neurological disorders.

The slide outlines common medical conditions that can cause depression.

STEP 5: Presentation and discussion on management of depression

Management of Depression

- Phase 1: Acute phase - to achieve full remission of depressive symptoms
- Phase 2: Maintenance phase - to prevent relapse and recurrence

Clinical management of depression includes screening, assessment, developing therapeutic alliance, selecting treatments, monitoring and follow-up.

Understanding that treatment of depression has two phases—acute and maintenance—will ensure that patients not only get well, but also stay well.

For many patients depression follows a chronic relapsing course and hence following principles of chronic disease management will help outcomes.

In the acute phase, symptom remission is often considered as target of treatment. Full recovery of function, may take longer to achieve, and is unlikely if symptom remission does not occur.

The slide shows key features in the acute phase of treatment.

Acute Phase Management of Depression

- 8-12 weeks of treatment
- Goal: remission of symptoms
- Establish therapeutic alliance
- Educate patients and relatives
- Aid self management
- Choose treatment(s)
- Manage side effects
- Monitor and follow-up

Maintenance treatment is particularly important for pharmacotherapy as the probability of relapse or recurrence is higher if medications are withdrawn too soon.

The slide demonstrates the salient features of maintenance phase of depression.

Maintenance Phase Management of Depression

- 6-24 months or longer of treatment
- Goal: prevention of relapse and recurrence
- Educate patients and relatives
- Aid self management
- Manage side effects
- Rehabilitate work and social function
- Monitor for recurrence

For uncomplicated depressive episodes, maintenance treatment of six months after full remission of depressive symptoms appears sufficient, but two or more years are recommended when risk factors are present. Some people may require lifelong treatment.

The risk factors are: severity, co-morbidity and frequent and chronic episodes.

Pharmacotherapy Recommendations

- Minimum six months treatment after full remission of symptoms
- At least two years (for some lifetime)
 - Severe episodes
 - Chronic episodes
 - Comorbidity
 - Difficult-to-treat episodes
 - Frequent episodes

Selecting an Antidepressant

- The first line medications are selective serotonin reuptake inhibitors (SSRIs) and serotonin norepinephrine reuptake inhibitors (SNRIs)
- They are preferred over tricyclic antidepressants (TCAs)

All of the newer, second generation antidepressants such as selective serotonin reuptake inhibitors (SSRIs) and serotonin norepinephrine reuptake inhibitors (SNRIs) are considered as first line medications. They are preferred over the Tricyclic antidepressants (TCAs) because of better tolerability and safety profile.

Selecting an Antidepressant

- Efficacy
- Side effect profile
- Concurrent medication
- Co-morbidity
- Subtype of depression
- Simplicity of use
- Cost

There are only small differences in efficacy among the antidepressants. In choosing, it is wise to consider factors other than efficacy and they include: side effect profile, concurrent medication for drug-interactions, co-morbidity, subtype of depression, simplicity of use and cost.

Side effects factor is given a high priority in selecting the antidepressant.

SSRIs

Mechanism of action	Common side effects	Drug	Daily dose
Selective inhibition of serotonin reuptake	GI distress, nausea, vomiting, diarrhoea, headache, agitation, sleep disturbance, drowsiness, dry mouth, sexual side effects	Escitalopram	5-20 mg
		Fluoxetine	20-80 mg
		Sertraline	50-200 mg
		Paroxetine	20-60 mg
		Fluvoxamine	100-300 mg

SSRIs are the most commonly used antidepressants. It is primarily due to: tolerability, safety, simplicity of use, and broad spectrum efficacy. Though they share a common mechanism of action, they are not interchangeable for clinical efficacy or side effect profile. Fluoxetine has a long half life, sertraline produces more diarrhoea than other SSRIs, paroxetine causes more weight gain than other SSRIs, sexual side effects are more noticeable with paroxetine and fluoxetine,

The slide presents the common mechanism of action, common side effects and daily doses of some SSRIs.

TCAs are still widely used. They have side effects and can be cardiotoxic. Amitryptaline and imipramine have more side effects. Nortryptaline demonstrates a therapeutic window in that plasma levels below and above the therapeutic range are associated with lower response.

The slide shows the mechanism of action, side effects and daily doses of some TCAs that are used in India.

Mechanism of action	Common side effects	Drug	Daily dose
Inhibition of serotonin and norepinephrine reuptake	Dry mouth, blurred vision, constipation, urinary retention, confusion, drowsiness, sedation, weight gain, nausea, tremor, headache, seizures, sexual dysfunction	Imipramine	75-300 mg
		Amitryptaline	75-300 mg
		Cloimipramine	75-300 mg
		Dothiepin	75-300 mg
		Nortrptaline	75-150 mg

Electroconvulsive therapy (ECT) remains an effective, safe and well tolerated treatment for patients with severe psychotic or medication resistant depression.

Wake therapy, exercise and light therapy are non-invasive treatments and are clinically useful.

Repetitive magnetic stimulation is an emerging new treatment for depression.

Evidence based psychotherapies for depression include: problem solving therapy, cognitive behaviour therapy, interpersonal psychotherapy, and family therapy. For mild to moderate severity of depression, evidence based psychotherapies are the first line treatments and are as effective as psychotherapy.

- Other evidence based therapies for depression**
- Electro Convulsive therapy (ECT)
 - Exercise, wake therapy and light therapy
 - Psychotherapy
 - Cognitive behaviour therapy
 - Family therapy
 - Interpersonal psychotherapy

Combined treatment with psychotherapy and pharmacotherapy is indicated in severe depression and co-morbid depression.

It is important to educate patients on depression. Explain depression in terms of biochemical basis: "Depression is an illness, not a weakness"

Early diagnosis and treatment is important for better recovery.

Reducing and stopping medications without medical advice is wrong as it can precipitate relapse and recurrence.

Monitor weight regularly; advise exercise and food plans to reduce weight.

- Patient/Family Education**
- Explain depression in terms of biochemical basis: "Depression is an illness, not a weakness"
 - Early diagnosis and treatment is important for recovery
 - Reducing and stopping medications without medical advice is wrong
 - Monitor weight; advise exercise and food plans

Patient Education Messages Treatment

- Antidepressants are not addictive
- Medications daily, as prescribed
- It may take 2-3 weeks before any relief is seen
- Mild side effects are common, they get better over time
- Medications should not be stopped without medical advice

During treatment with antidepressants, patients need to receive key messages:

Antidepressants are not addictive, Medications should be taken daily, as prescribed, It may take 2–3 weeks before any relief from depressive symptoms is seen, Mild side effects are common with antidepressants, they get better over time

Medications should not be stopped without medical advice as it can precipitate relapse and recurrence

STEP 6: Conclusion

- Conclude the session by giving key messages to the participants

Key messages

Depression is a disabling illness

Can be recurrent and chronic

There are cognitive, emotional and physical symptoms of depression

Suicide is an important risk of depression

Depression can be treated effectively with evidence based therapies, such as antidepressants, ECT and psychotherapy

Day 2

Session One:

Anxiety Disorder and Drug Use

Session Two:

Psychotic Disorders and Drug Use

Session Three:

Personality Disorders and Drug Use

Session Four:

Other Psychiatric Disorders and Drug Use

Session Five:

Infective Hepatitis: Hepatitis C & B

Session Six:

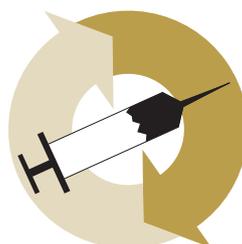
Understanding and Educating the Client on Tuberculosis

Session Seven:

Other Physical Disorders: Anaemia and Nutritional Disorders

Session Eight:

Other Common Physical Symptoms: Constipation, Pain and Poor Oral Health



Anxiety Disorder and Drug Use

OBJECTIVE

To educate the participants about anxiety and drug use

EXPECTED OUTCOME

By the end of the session participants would be able to:

- Understand assessing and managing anxiety among drug users

DURATION

60 minutes

SESSION CONTENT

- Levels of anxiety and assessment of anxiety among drug users
- Causes of anxiety
- Clinical features and management of generalized anxiety disorder
- Clinical features and management of panic disorder

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

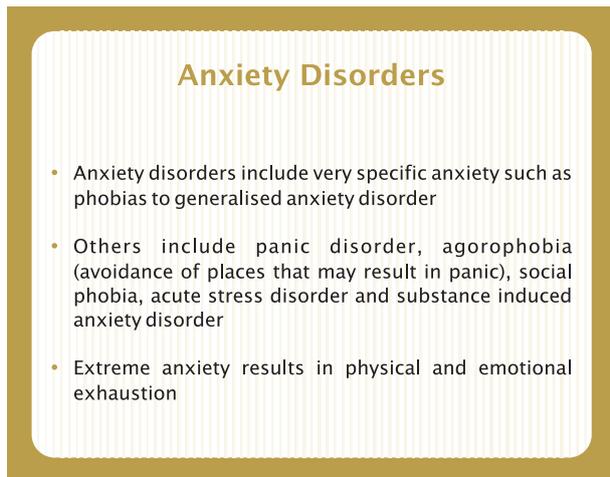
MATERIALS / PREPARATION REQUIRED

- LCD projector
- Laptop
- PowerPoint slides for the session
- White board/flipchart
- Chart papers
- Masking tape
- Marker pen

PROCESS:

STEP 1: Presentation and discussion on levels of anxiety and assessment of anxiety in drug users

- The facilitator begins the session by generating discussion among the participants on anxiety disorders
- Summarize the discussion with Power Point presentations



Anxiety Disorders

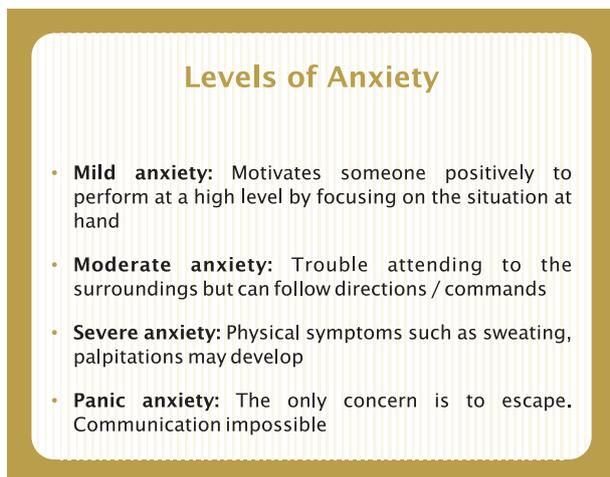
- Anxiety disorders include very specific anxiety such as phobias to generalised anxiety disorder
- Others include panic disorder, agoraphobia (avoidance of places that may result in panic), social phobia, acute stress disorder and substance induced anxiety disorder
- Extreme anxiety results in physical and emotional exhaustion

Anxiety Disorders can be very specific such as phobias or Generalized Anxiety Disorders.

Other anxiety disorders include Panic Disorder, agoraphobia (avoidance of places that may result in panic), social phobia, acute stress disorder and substance induced anxiety disorder.

Excessive anxiety may cripple physical and emotional health and result in continuous “fight or flight” reactions. The fighter is always ready for some perceived threat and is unable to relax. The escaper avoids distressing situations.

Extreme anxiety results in physical and emotional exhaustion.



Levels of Anxiety

- **Mild anxiety:** Motivates someone positively to perform at a high level by focusing on the situation at hand
- **Moderate anxiety:** Trouble attending to the surroundings but can follow directions / commands
- **Severe anxiety:** Physical symptoms such as sweating, palpitations may develop
- **Panic anxiety:** The only concern is to escape. Communication impossible

Mild anxiety: This can motivate someone positively to perform at a high level by focusing on the situation at hand. For instance, this kind of anxiety is often experienced by performers before entering the stage.

Moderate anxiety: The person has trouble attending to the surroundings but can follow directions/commands.

Severe anxiety: Increasing anxiety leads to physical symptoms such as sweating and palpitations.

Panic anxiety: The level reached is terror, where the only concern is to escape. Communication is impossible at this point.

Take a psychiatric history, conduct a mental state examination and appropriate physical examination.

Key points to assess:

- Is there a temporal relationship between drug use and anxiety?
- Is there a physical illness that explains the anxiety?
- When did the anxiety appear first? Was it during adolescence?
- Is there any evidence of a psychiatric disorder such as Generalised Anxiety Disorder or Panic Disorder?

Assessment of Anxiety in Drug Users

- Is there a temporal relationship between drug use and anxiety?
- Is there a physical illness that explains the anxiety?
- When did the anxiety appear first?
- Is there any evidence of a psychiatric disorder such as generalised anxiety disorder or panic disorder?

STEP 2: Presentation and discussion on causes of anxiety

In drug users, anxiety can be induced from withdrawal of alcohol, benzodiazepines and tobacco.

In people who use drugs, certain substances induce anxiety. They include: Caffeine; Cannabis; Hallucinogens and Cocaine.

There are metabolic, endocrine and other causes for anxiety as well.

Causes of Anxiety

Substance withdrawal	Alcohol Sedative/ hypnotic- benzodiazepines Nicotine
Toxic	Caffeine Cannabis Hallucinogens Cocaine Theophylline Sympathomimetic drugs
Metabolic and Endocrine	Hypoglycaemia Hyperventilation Hyperthyroidism
Others	Temporal lobe epilepsy Angina Pulmonary embolus Parkinson's disease Traumatic brain injury Chronic obstructive pulmonary disease

The common causes of persistent Anxiety among people who use drugs are alcohol withdrawal, benzodiazepine withdrawal and Generalised Anxiety Disorder.

The frequent causes of acute anxiety attacks are panic disorder, substance induced panic episodes, hypoglycaemia and hyperventilation.

Common Causes of Anxiety

Persistent anxiety

- Alcohol withdrawal
- Benzodiazepine withdrawal
- Generalised anxiety disorder

Acute anxiety attacks (panic episodes)

- Substance induced panic episodes
- Panic disorder
- Hypoglycaemia
- Hyperventilation

STEP 3: Presentation and discussion on clinical features and management of Generalised Anxiety Disorder

Anxiety symptom	Presentation
Worry	Excessive worrying and apprehension Difficulty in controlling worry
Sleep	Difficulty in sleep
Somatic	Palpitations Trembling Sweating Dizziness Light headaches Muscle tension Discomfort in the abdomen
Energy	Decreased (fatigue)
Concentration	Difficulty in concentration
Psychomotor activity	Restlessness, nervousness
Emotion	Irritability, tension

The clinical feature of Generalised Anxiety Disorder is presented in the slide.

The anxiety is not restricted to or even predominating in any environmental situation and hence it is free floating anxiety.

Symptoms can result from sympathetic over activity, increased muscle tension and hyperventilation.

- | |
|--|
| <ul style="list-style-type: none"> • Relaxation techniques
Supportive psychotherapy (reassurance, explanation, expert advice, suggestions, guidance, support and facilitating emotional support from key people) • Pharmacotherapy <ul style="list-style-type: none"> • Selective serotonin reuptake inhibitors (SSRIs) and venlafaxine are the first line of therapy • Beta blockers - useful for somatic symptoms • Benzodiazepines prescribed only for a short period of time |
|--|

Relaxation training may help and the patient can be taught to re-breathe from a bag or practice controlled breathing during hyperventilation.

Supportive psychotherapy is useful.

SSRIs and Venlafaxine are used as the first line pharmacotherapy. Beta Adrenergic Antagonists may be considered for treating somatic symptoms of anxiety.

It is better to avoid prescribing Benzodiazepines and if necessary, then should only be given for a short span of time.

STEP 4: Presentation and discussion on clinical features and management of Panic Disorder

Panic Symptom	Presentation
Episodic attacks of intense fear	Discrete and intense period of anxiety, apprehension and distress
Somatic	Palpitations Trembling Sweating Dizziness or light-headedness Dyspnoea or choking sensation Chest pain or discomfort Paraesthesia or altered sensations Gastrointestinal upset Chills or hot flushes
Thoughts and feelings	Fear of becoming insane Fear of dying
Content of thought	Depersonalisation or derealisation
Avoidance	Urgent desire to flee (agoraphobia may occur with or without panic and vice-versa)

The clinical feature of Generalised Anxiety Disorder is shown in the slide.

These are recurrent attacks of severe anxiety, which are not restricted to any particular situation and are therefore unpredictable.

Anxiety tends to last for only a few minutes but during the episodes, the anxiety and its autonomic symptoms build up quickly, often leading to a hurried exit from where the patient is. Thus the prime concern is to escape and seek help.

Antidepressants are effective in treating Panic Disorder, whether or not there is an underlying depressive disorder. Anxiolytics such as clonazepam can be used for the short term management of panic disorder.

Cognitive therapy: It is used for patients worried about physical consequences of anxiety. These symptoms are induced voluntarily by hyperventilation or exercise and their nature explained.

Supportive therapy: The patient must be reassured and the causes of individual symptoms must be explained to allay unnecessary worry.

The difference between Generalised Anxiety and Panic Anxiety is outlined in the slide.

All patients suffering from anxiety disorders must be educated along with their family members about anxiety and its causes.

Treatment for Panic Disorder

- Antidepressants: SSRIs are the first-line drug treatment
- Other drugs: Mirtazapine, venlafaxine, sodium valproate, imipramine and clomipramine
- Benzodiazepines: The target dose of clonazepam for panic disorder is 1 mg per day; doses up to 4 mg per day may be required

Difference between Generalised Anxiety and Panic Disorders

	Generalised Anxiety Disorder	Panic Disorder
Clinical features	Irrational worries Motor tension Hypervigilance Somatic symptoms	Sudden, unpredictable episodes of severe anxiety, shortness of breath, fear of suffocation and dying, urgent desire to flee
First line treatment	SSRIs Venlafaxine	SSRIs
Acute management	Short term treatment with benzodiazepines	Short term treatment with benzodiazepines

Patient/Family Education

- Families must understand about levels of anxiety and the need for early diagnosis and treatment
- Family therapy may be needed to agree on living arrangements that respects the needs of clients and family members
- Ongoing treatment with psychological therapies and /or medication may be necessary
- Patience, persistence and multimodal approach is required for several patients

STEP 5: Conclusion

- Conclude the session by giving key messages to the participants

Key messages

Anxiety disorders are common

Many of the symptoms of anxiety are physical symptoms

Anxiety can be treated effectively with SSRIs, relaxation and supportive psychotherapy

Caution should be exercised in prescribing benzodiazepines for anxiety

Psychotic Disorders and Drug Use

OBJECTIVE

To educate the participants about Psychotic Disorders and drug use

EXPECTED OUTCOME

By the end of the session, participants would be able to:

- Understand assessment and management of Psychotic Disorders among drug users.

DURATION

60 minutes

SESSION CONTENT

- What is psychosis?
- Causes of psychosis
- Schizophrenia: symptoms and treatment
- Bipolar disorder or mania: symptoms and treatment
- Alcoholic hallucinosis

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

MATERIALS / PREPARATION REQUIRED

- LCD projector
- Laptop
- PowerPoint slides for the session
- White board/flipchart
- Chart papers
- Masking tape
- Marker pen

PROCESS

STEP 1: Presentation and discussion on psychosis and its causes

- The facilitator begins the discussion by asking the participants about their understanding of the term 'psychosis'
- He/she sums up the discussion by taking the participants through the following presentations

Psychosis

- Psychosis is a disruptive mental state
- Individual has difficulty in distinguishing external reality from his or her own internal experiences and perceptions.

Psychosis is a disruptive mental state in which an individual has difficulties in distinguishing the external reality from his or her own internal experiences and perceptions.

Psychosis Presenting Complaints

- Hearing voices when no one is around, seeing visions
- Strange beliefs or fears
- Abnormal behaviour
- Aggressive behaviour, agitation
- Inappropriate laughter/smile
- Talking to self
- Apprehension

The presenting complaints in Psychosis are:

- Hearing voices when no one is around, seeing visions
- Strange beliefs or fears
- Abnormal behaviour
- Aggressive behaviour, agitation
- Inappropriate laughter/ smile
- Talking to self
- Apprehension
- Confusion

Causes of Psychosis

- Alcoholic hallucinosis
- Psychosis induced by amphetamines or other substances
- Acute psychotic disorder
- Schizophrenia
- Bipolar disorder, mania
- Delusional disorder
- Depression with psychotic features
- Delirium
- Dementia
- Head injury

The various causes of psychosis are listed in the slide.

It is important to emphasise that drug use can precipitate, unmask, exacerbate and perpetuate Psychotic Disorders.

Of the drugs, alcohol, cannabis, amphetamine type stimulants are more likely to precipitate psychotic episodes.

STEP 2: Presentation and discussion on symptoms and management of Schizophrenia

Schizophrenia is a complex disorder. The lifetime prevalence rate is 1% and the incidence is 15–30 cases per 1,00,000 of the population per year.

Its onset is in late teens to early 20s, (range 15–45 years) and it equally affects men and women.

It is a devastating disease for both the patient and the family and causes significant disability in the sufferer and enormous burden of the disease among care givers.

It affects thoughts and emotions to the point that social and occupational functioning is impaired in the patient markedly.

Suicide risk is also high in this group and about one in a ten with Schizophrenia commit suicide.

The subtypes of Schizophrenia are: paranoid, disorganised, catatonic, undifferentiated and residual schizophrenia.

Eugene Bleuler proposed four basic diagnostic areas for characterising schizophrenia, a term he coined. These became the four As: Inappropriate Affect, Loosening of Association, Autistic Thoughts and Ambivalence.

The positive and negative symptoms of schizophrenia are outlined in the slide.

The treatment has two phases: the acute phase and the maintenance phase.

In the acute phase, treatment with anti-psychotics such as haloperidol, chlorpromazine, risperidone, and olanzapine is carried out.

During the maintenance phase, treatment with antipsychotics such as depot preparations (Fluphenazine) is effective. Other drugs used often in this phase are: risperidone, olanzapine and haloperidol.

Additionally, family/ community support and rehabilitation are helpful.

Epidemiology and Burden Schizophrenia

- The lifetime prevalence rate is 1%
- Onset in late teens to early 20s, equally affecting men and women
- Devastating disease for both the patient and the family
- Affects thoughts and emotions to the point that social and occupational functioning is impaired
- About one in a ten with schizophrenia commit suicide

Positive and Negative Symptoms of Schizophrenia

Positive symptoms	Negative symptoms
• Delusions	• Alogia
• Hallucinations	• Affective blunting
• Hostility	• Anhedonia
• Disorganised thinking/ behaviours	• Asociality
	• Avolition
	• Apathy

Treatment of Schizophrenia

- Acute phase treatment with anti-psychotics
 - Haloperidol, chlorpromazine
 - Risperidone, Olanzapine
- Maintenance treatment with antipsychotics
 - Depot preparations (Fluphenazine)
 - Risperidone, Olanzapine, Haloperidol
- Family / community support
- Rehabilitation

STEP 3: Presentation and discussion on symptoms and management of Bipolar Disorder, Mania

Bipolar Disorder, Manic Episode

- Persistent elevated, irritable mood \geq 1 week
- Three or four (irritable mood) of the following:
 - Increased self esteem
 - Reduced sleep
 - Increased talk / pressured speech
 - Racing thoughts / flight of ideas
 - Distractibility
 - Extreme goal directed activity
 - Excessive buying/sex/business investments

The diagnostic criteria for Bipolar Disorder, Manic Episode are outlined in the slide.

Treatment of Manic Episode

- Acute phase treatment with mood stabilisers (Lithium, Divalproate), antipsychotics (Olanzapine)
- Maintenance treatment with mood stabilisers (Lithium, Divalproate, Lamotrigine, Carbamazepine)

The treatment has two phases: a) the acute phase and b) the maintenance phase.

During the acute phase, treatment with mood stabilisers (Lithium, Divalproate), antipsychotics (Olanzapine) is indicated.

In the maintenance phase, treatment with mood stabilisers (lithium, divalproate, lamotrigine, carbamazepine) is the main treatment option.

STEP 4: Alcoholic Hallucinosi

Alcoholic Hallucinosi usually occurs during alcohol withdrawal. This condition brings a hallucinatory or delusional state with clear or relatively clear consciousness. The hallucinations tend to be voices with a sexual or derogatory content and the delusions are paranoid. This state is not only related to sudden withdrawal of alcohol, but could also occur during prolonged steady drinking. The course of this state set it apart from other alcohol withdrawal states, as the condition lasts months rather than days or weeks. At times, it is a challenge to differentiate this from Paranoid Schizophrenia

Alcoholic Hallucinosi

- Usually occurs during alcohol withdrawal
- Can also occur during prolonged, steady drinking
- A hallucinatory or delusional state with clear or relatively clear consciousness
- Auditory hallucinations with sexual or derogatory content
- Delusions are paranoid
- The condition lasts for months rather than days or week

The key features of Alcoholic Hallucinosi are shown in the slide.

The three slides demonstrate the difference between Paranoid Schizophrenia and Alcoholic Hallucinosi s in their clinical presentation, associated features, course, and treatment outcome.

Differences between Alcoholic Hallucinosi s and Paranoid Schizophrenia Clinical Presentation

<p>Alcoholic Hallucinosi s Age of onset</p> <ul style="list-style-type: none"> • 40-50 years <p>Type of onset</p> <ul style="list-style-type: none"> • Usually acute <p>Duration of illness</p> <ul style="list-style-type: none"> • 3 months <p>Pre-morbid personality</p> <ul style="list-style-type: none"> • A variety <p>Alcohol dependence</p> <ul style="list-style-type: none"> • Over many years 	<p>Paranoid Schizophrenia Age of onset</p> <ul style="list-style-type: none"> • before 40 <p>Type of onset</p> <ul style="list-style-type: none"> • Insidious <p>Duration of illness</p> <ul style="list-style-type: none"> • Chronic <p>Pre-morbid personality</p> <ul style="list-style-type: none"> • Shy, aloof, withdrawn <p>Alcohol dependence</p> <ul style="list-style-type: none"> • Not stated
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Differences between Alcoholic Hallucinosi s and Paranoid Schizophrenia Associated Features

<p>Alcoholic Hallucinosi s Family history of alcoholism</p> <ul style="list-style-type: none"> • Increased <p>Family history of schizophrenia</p> <ul style="list-style-type: none"> • No evidence <p>Hallucinations & delusions</p> <ul style="list-style-type: none"> • Auditory but visual and tactile 	<p>Paranoid Schizophrenia Family history of alcoholism</p> <ul style="list-style-type: none"> • Not stated <p>Family history of schizophrenia</p> <ul style="list-style-type: none"> • Increased prevalence <p>Hallucinations & delusions</p> <ul style="list-style-type: none"> • Auditory
---	---

Differences between Alcoholic Hallucinosi s and Paranoid Schizophrenia Treatment Outcome

<p>Alcoholic Hallucinosi s Thought processes</p> <ul style="list-style-type: none"> • Coherent <p>Affect</p> <ul style="list-style-type: none"> • Anxious, depressed, perplexed but appropriate <p>Intellectual function</p> <ul style="list-style-type: none"> • Fleeting memory disturbance <p>Orientation</p> <ul style="list-style-type: none"> • At times not oriented to time 	<p>Paranoid Schizophrenia Thought processes</p> <ul style="list-style-type: none"> • Incoherent <p>Affect</p> <ul style="list-style-type: none"> • Inappropriate <p>Intellectual function</p> <ul style="list-style-type: none"> • Not compromised <p>Orientation</p> <ul style="list-style-type: none"> • Not compromised
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STEP 5: Conclusion

- Conclude the session by giving key messages to the participants:

Key messages

Psychosis is a disruptive mental state in which an individual has difficulties in distinguishing the external reality from his or her own internal experiences and perceptions.

Schizophrenia, bipolar disorder, mania and substance induced psychosis (e.g. alcoholic hallucinosi s) are important psychoses.

Schizophrenia is a complex disorder and presents with positive (e.g. delusions and hallucinations) and negative symptoms (e.g. affective blunting, avolition, apathy); it is best managed with antipsychotics (e.g. risperidone, haloperidol).

Bipolar disorder is best treated with mood stabilisers (e.g. lithium, divalproate sodium).

Alcoholic hallucinosi s has to be differentiated from paranoid schizophrenia.

Personality Disorders and Drug Use

OBJECTIVE

To educate participants about personality disorders and drug use

EXPECTED OUTCOME

By the end of the session participants would be able to:

- Understand assessment of personality disorders among drug users.

DURATION

30 minutes

SESSION CONTENT

- Personality disorders
- Types of personality disorders
- Management of personality disorders

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

MATERIALS / PREPARATION REQUIRED

- LCD projector
- Laptop
- PowerPoint slides for the session
- White board/flipchart
- Chart papers
- Masking tape
- Marker pen

PROCESS:

STEP 1: Presentation and Discussion

- Facilitator starts the session by generating a discussion among participants on personality disorders
- Summarise the discussion with Power Point presentation

The characteristics of personality disorders are outlined in the slide. The enduring pattern of inner experience or behaviour differs from individuals of the same culture in the way of perceiving and interpreting self and others, the range and appropriateness of emotional response, interpersonal functioning and impulse control. The inflexible responses are noticed in several personal and social situations.

Personality Disorders

- Enduring pattern of inner experience and behaviour that differs markedly from the expectations of the individual's culture
- Behaviour pattern is pervasive and inflexible
- Maladaptive pattern of perceiving and responding to other people and to stressful circumstances
- Onset in adolescence or early adulthood
- Stable over time
- Leads to distress or impairment

Personality disorders are categorised into three clusters and each cluster has a group of personality disorders. The slide shows the three cluster and various personality disorders grouped under them.

Cluster A includes distrustful, emotionally detached, eccentric personalities.

Cluster B includes those who have disregard for others, with unstable and intense interpersonal relationships, excessive attention seeking and lack of empathy for others.

Cluster C includes avoider of social situations; the clinging, submissive and preoccupied with order, details and rules kind of person.

Types of Personality Disorders

Clusters	Personality disorders
Cluster A: Odd, eccentric	Paranoid personality disorder Schizoid personality disorder Schizotypal personality disorder
Cluster B: Dramatic, emotional	Antisocial personality disorder Borderline personality disorder Histrionic personality disorder Narcissistic personality disorder
Cluster C: Anxious, fearful	Avoidant personality disorder Dependent personality disorder Obsessive-compulsive personality disorder

Personality disorders prone for drug use

- Antisocial personality disorder
- Borderline personality disorder
- Narcissistic personality disorder
- Paranoid personality disorder

The slide shows the four personality disorders that are prone to drug use. Of these four, antisocial personality disorder and borderline personality disorder are often associated with drug use disorder.

Antisocial Personality Disorder

- Display a pervasive pattern of disregard for and violation of the rights of others and the rules of society
- Onset by age 15 years
- Features
 - Repeated violations of the law
 - Pervasive lying and deception
 - Physical aggressiveness
 - Reckless, disregard for safety of self or others
 - Consistent irresponsibility in work and family environments
 - Lack of remorse

Antisocial Personality Disorder is a condition, in which a person has a long-term pattern of manipulating, exploiting, or violating the rights of others. Often the disorder is preceded by conduct disorder during childhood.

The characteristics of antisocial personality disorder are summarised in the slide.

Complications can include imprisonment, drug/alcohol use, violence and suicide.

Borderline Personality Disorder

- Pervasive pattern of unstable and intense interpersonal relationships, self-perception, and moods
- Transiently, such patients may appear psychotic
- Features (at least five of the following)
 - Frantic efforts to avoid expected abandonment
 - Unstable and intense interpersonal relationships
 - Markedly and persistently unstable self-image
 - Impulsivity in at least two areas that are potentially self-damaging (e.g. sex, substance abuse, reckless driving)
 - Recurrent suicidal behaviors or threats or self-mutilation
 - Affective instability
 - Chronic feelings of emptiness
 - Inappropriate and intense anger
 - Transient paranoia or dissociation

Borderline Personality Disorder is a condition, in which people have long-term patterns of unstable or turbulent emotions, such as feelings about themselves and others. These inner experiences often cause them to take impulsive actions and have chaotic relationships. People with this personality are often uncertain about their identity. As a result, their interests and values may change rapidly. People with borderline personality disorder also tend to see things in terms of extremes, such as either all good or all bad. Their views of other people may change quickly.

The above slide sketches the key characteristics of borderline personality disorder.

Narcissistic Personality Disorder is a condition, in which people have an inflated sense of self-importance and an extreme preoccupation with themselves.

The key features of Narcissistic Personality Disorder are outlined in the slide.

Narcissistic Personality Disorder

- Patients are grandiose and require admiration from others
- Features
 - Exaggeration of their own talents or accomplishments
 - Sense of entitlement
 - Exploitation of others
 - Lack of empathy
 - Envy of others
 - An arrogant, haughty attitude

Paranoid Personality Disorder is a mental health condition in which a person has a long-term distrust and suspicion of others, but does not have a full-blown psychotic disorder such as Schizophrenia.

This slide shows the characteristics of Paranoid Personality Disorder.

Paranoid Personality Disorder

- Display pervasive distrust and suspiciousness
- Features
 - Others are exploiting or deceiving the person
 - Friends and associates are untrustworthy
 - Information confided to others will be used maliciously
 - There is hidden meaning in remarks or events that others perceive as benign
 - The spouse or partner is unfaithful

STEP 3: Presentation and discussion on aetiology of personality disorder

The aetiology of personality disorders is listed in the slide. Both genetic and environmental factors operate in the development of personality disorders.

Aetiology of Personality Disorders

- Antisocial personality disorder:
 - A genetic contribution to antisocial behaviors
 - There may also be developmental or acquired abnormalities in the prefrontal brain systems and reduced autonomic activity
- Borderline personality disorder:
 - High prevalence of early abuse (sexual, physical, and emotional)
 - Mood disorders in first-degree relatives
- Paranoid personality disorder:
 - A genetic contribution to paranoid traits
 - A possible genetic link between this personality disorder and schizophrenia exist

STEP 4: Presentation and discussion on management of personality disorder

This slide mentions the various treatment options that are available to manage personality disorder.

Treatment

- Personality disorders are difficult to manage and often the persons with personality disorder are considered as “problem patients”.
- Psychotherapy is at the core of care for personality disorders.
- Group psychotherapy allows interpersonal psychopathology to display itself among peer patients, whose feedback is used to identify and correct maladaptive ideas, communication, and behaviour.
- Therapeutic community settings can help drug users with personality disorders.
- For paranoid personality disorder and borderline personality disorder, pharmacotherapy with antipsychotics and mood stabilisers respectively may be beneficial.

Personality disorders are difficult to manage and often the persons with personality disorder are considered as “problem patients”.

While psychotherapy is at the core of treatment, group therapy is more efficient and also equally effective. Therapeutic community settings can help drug users with personality disorders.

For some personality disorders, such as paranoid personality disorder and borderline personality disorder, pharmacotherapy with antipsychotics and mood stabilisers respectively may be beneficial.

Patient/Family Education

- Share personality disorder with the patient and educate his or her family on the disorder.
- Work with patient and his or her family to identify the most troublesome behaviours. Work with them on alternative responses and to anticipate triggers.
- Therapeutic relationship is prerequisite for change.
- Disorders can be frustrating to treat and require time and patience.

The patient and his or her family need to be educated on personality disorders. These disorders are difficult to treat. Time and patience is required to deal with these difficult-to-treat patients. Achieving a good therapeutic relationship is fundamental for effecting any behaviour change in the individual.

STEP 5: Conclusion

- Conclude the session by giving key messages to the participants

Key messages

When a pattern of behaviour emerges from the perception that the world is inflexible and maladaptive, it is described as a personality disorder.

There are three clusters: A, B and C and each cluster contains a group of personality disorders – eccentric, dramatic and anxious, respectively.

The four personality disorders that are prone to drug use disorder are: Antisocial Personality Disorder, Borderline Personality Disorder, Narcissistic Personality Disorder and Paranoid Personality Disorder.

Psychotherapy is at the core of care for personality disorders.

Other Psychiatric Disorders and Drug Use

OBJECTIVE

To educate the participants about sleep disorders and psychosexual dysfunction among drug users

EXPECTED OUTCOME

By the end of the session, participants would be able to:

- Assess sleep disturbance among drug users and suggest steps to overcome it
- Evaluate psychosexual dysfunction among drug users

DURATION

30 minutes

SESSION CONTENT

- Sleep disturbance
- Sleep hygiene
- Psychosexual dysfunction

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

MATERIALS / PREPARATION REQUIRED

- LCD projector
- Laptop
- PowerPoint slides for the session
- White board/flipchart
- Chart papers
- Masking tape
- Marker pen

PROCESS

STEP 1: Presentation and discussion on sleep disorders

Insomnia

- Difficulty initiating or maintaining sleep or getting up early
- Daytime impairment

Insomnia is the most common sleep disturbance among drug users. It is a major problem and is associated with low quality of life, high absenteeism from work and physical/mental illness.

Patients report that their sleep is too short, too interrupted or of poor quality, or a combination of these.

Typically there is problem in initiating or maintaining sleep or the patient gets up early in the morning. Sleep disturbance must be accompanied by impairment during the daytime to be diagnosed as insomnia.

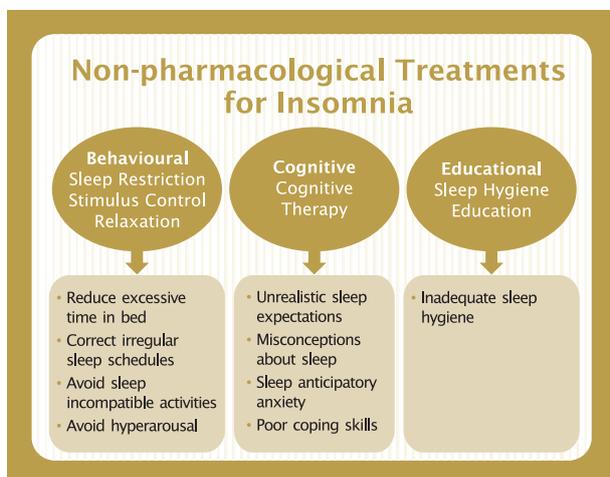
Sleep Disorder and Drug Use

- Sleep disturbance is extremely common among alcohol and other drug users
- Sleep disturbance is prevalent during withdrawal states
- Episodes of insomnia are extremely distressing and can trigger relapse following a period of abstinence

Sleep disorder, in particular insomnia, is extremely prevalent among people who use alcohol or drugs. Many drug users cite sleep as an important reason for their consumption of alcohol and/or drugs.

Sleep disturbance is common during withdrawal from alcohol and/or drugs. While the sleep pattern is restored to normalcy in some drug users after a period of abstinence, in some the sleep disturbance persists. These episodes of insomnia can be very distressing and can trigger relapse following a period of abstinence.

STEP 2: Presentation and discussion on management of sleep disorder



Insomnia can be effectively managed by non-pharmacological methods:

1. Behavioural treatment aims at restricting the excessive time spent in trying to sleep. It helps to avoid stimuli that keeps person awake and corrects the irregular sleep schedules.

2. Cognitive therapy aims to address the misconceptions about sleep and reduces the anxiety related to it.

3. Educating patients about sleep hygiene can be useful and helps them improve their sleep pattern.

Sleep hygiene: Present the two slides on sleep hygiene and generate some discussion related to this topic.

Emphasise on how the use of stimulant drugs plays a significant role in contributing to sleep disturbance. Tobacco is such a stimulant and its use after sunset must be restricted in order to ensure a good sleep.

Sleep Hygiene

- Arise at the same time each day
- Limit daily time in bed to 'normal' amount (6-7 hours)
- Discontinue use of drugs that act on the CNS such as caffeine, tobacco, alcohol, opioids and stimulants
- Avoid daytime napping
- Exercise in the morning and remain active throughout the day
- Substitute watching television at night with light reading and listening to music

Emphasise the importance of relaxation to improve sleep.

Sleep Hygiene

- Have a warm bath near bedtime
- Eat on schedule; avoid large meals at night
- Follow an evening relaxation routine
- Ensure comfortable sleeping conditions
- Spend no longer than 20 minutes awake in bed
- Use the bed only for sleep and sex!

Stimulus control and sleep restriction are effective methods to improve sleep efficiency. Present the slide and discuss it with the participants.

Stimulus Control and Sleep Restriction

- Go to bed only when sleepy
- Get out of bed when unable to sleep
- Increase sleep efficiency (time asleep as a percentage of time in bed)
- Aim to restrict time in bed with average time actually asleep
- Wake up at the same time irrespective of how much you slept
- Use alarm and take help from family members

Pharmacological Treatment of Insomnia

- Avoid using sleep inducing drugs such as benzodiazepines and other drugs such as Zolpidem in drug users (due to increased likelihood of dependence)
- When drug treatment is necessary to promote sleep, use drugs such as
 - Trazadone
 - Mirtazapine
 - Amitryptaline
 - Dotheipin
 - Quetiapine

As far as possible, drug users should not be prescribed sleep inducing drugs such as benzodiazepines (e.g. nitrazepam, alprazolam) and “Z” drugs such as zolpidem, zopiclone, in view of their dependence potential.

In case pharmacological treatment is necessary to promote sleep, it is better to prescribe anti-depressants with sedating properties. They include: trazadone, mirtazapine, amitryptaline, and dotheipin. At times, antipsychotic drugs such as quetiapine in small doses are helpful to facilitate sleep.

STEP 3: Presentation and discussion on Psychosexual Dysfunction

Psychosexual Dysfunction and Drug use

- Use of drugs, in particular opioids is associated with:
 - Hypoactive sexual desire
 - Erectile dysfunction
 - Orgasmic dysfunction

Psychosexual Dysfunction is often reported by drug users.

The usual problems associated with chronic use of alcohol and drugs, in particular opioids, are:

- Reduction in sexual drive
- Erectile dysfunction
- Orgasmic dysfunction

Psychosexual Dysfunction needs to be comprehensively assessed and effectively managed to improve quality of life.

Managing Psychosexual Dysfunction

- Stopping or even reduction of dose of opioids may improve sexual function
- Compared with methadone, buprenorphine is less likely to be associated with erectile dysfunction
- Alcohol impairs sexual functioning: It “provokes the pleasure but takes away the performance”
- Co-morbid depression is often responsible for the Psychosexual Dysfunction and hence management of depression is important

Psychosexual Dysfunction can be managed effectively. Often reassurance is required to relieve drug users of their anxiety.

Abstinence from opioids or even dose reduction is associated with improvement in sexual dysfunction.

Methadone, particularly in a high dose, is often associated with reduced sexual functioning. Compared with methadone, buprenorphine is less likely to be associated with Psychosexual Dysfunction.

Alcohol is often the cause for sexual impairment. Contrary to popular belief among drug users that alcohol helps with sexual functioning, it can actually interfere with adequate sexual functioning.

Depression is a common co-morbidity among drug users and may contribute significantly to reduced sexual desire and drive. Proper treatment of depression is helpful to improve sexual functioning.

STEP 4: Conclusion

- Conclude the session by giving key messages to the participants:

Key messages

Sleep disturbance (insomnia) is extremely common among drug users.

Insomnia is relatively frequent during withdrawal states.

Non-pharmacological techniques are important in addressing insomnia.

Sleep hygiene, stimulus control and sleep restriction are all effective methods to address insomnia.

Sleep inducing drugs with potential for dependence should be avoided in drug users.

Psychosexual Dysfunction such as reduction in sexual drive, erectile and orgasmic dysfunction is often reported by drug users.

Abstinence, dose reduction, depression management are all useful in addressing psychosexual dysfunction.

Infective Hepatitis: Hepatitis B & C

OBJECTIVE

- To present an overview on Hepatitis B & C among IDUs
- To educate the participants on basic prevention and management issues related to Hepatitis B and C

EXPECTED OUTCOME

By the end of the session, the participants will be able to understand:

- The importance of preventing Hepatitis B among IDUs
- How to prevent and manage Hepatitis C among IDUs

DURATION

120 minutes

SESSION CONTENT

- Hepatitis B drug users: prevention and management
- Hepatitis C among IDUs: prevention and management
- HIV, HCV and HBV co-infections and management

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

MATERIALS / PREPARATION REQUIRED

- LCD projector
- Laptop
- PowerPoint slides for the session
- White board/flipchart
- Chart papers
- Masking tape
- Marker pen

PROCESS:

STEP 1: Presentation and discussion on understanding occurrence of Hepatitis among IDUs

Hepatitis is inflammation of the liver. Liver can be inflamed by toxins, infections and drug use, such as alcohol use.

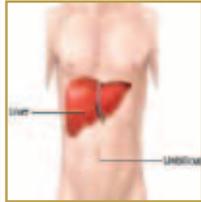
The liver performs several functions. It filters and purifies everything we eat and drink, stores vitamins and iron and helps the blood to clot. Often there may be no symptoms even if the liver is damaged. Some common symptoms of the damaged liver are: fatigue, headaches and pain in the stomach.

Chronic inflammation of the liver causes fibrosis, and extensive scarring and re-growth leads to cirrhosis. The end stage of cirrhosis is liver failure that presents with severe jaundice and encephalopathy.

There are five types of viral Hepatitis: A, B, C, D, and E. While in Hepatitis A and E the mode of transmission is through eating unhygienic food, Hepatitis B is transmitted through unsafe sexual encounter, infected injection and from parent to child (like HIV). Hepatitis D occurs along with B, and Hepatitis C is primarily transmitted through injecting mode of administration. Hepatitis B and C can lead to chronic infection.

Hepatitis

- Liver is a vital organ of the body. Functions include:
 - Processing food for energy conversion
 - Neutralising toxins and other drugs
 - Storing iron and important vitamins
 - Processing hormones
 - Fighting infections
 - Producing important proteins in the body
- Liver can re-grow, if injured



Hepatitis

- When liver is inflamed chronically, it causes scarring, called as fibrosis
- Extensive scarring and re-growth of liver leads to cirrhosis
- The end-stage of cirrhosis is liver failure, which leads to symptoms such as jaundice, collection of fluid in abdomen, easy bleeding, toxins entering into blood stream and also brain (encephalopathy) which can make the individual comatose

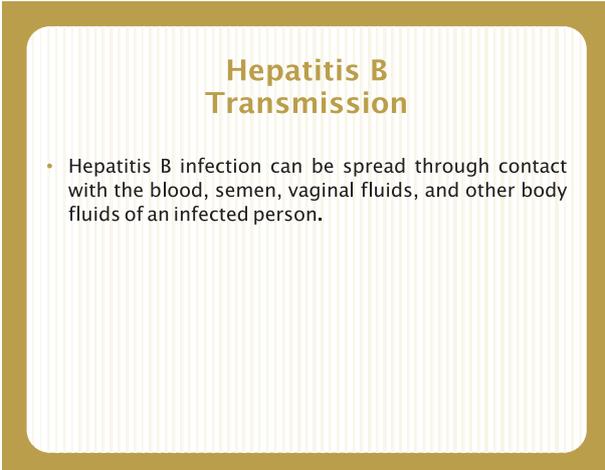


Hepatitis

- Viral Hepatitis
 - 5 types of viral hepatitis: A, B, C, D, E
 - Reaction in liver is same
 - Degree of damage and persistence of infection depends on the type (summarised in table)

Type of virus	Route of Transmission	Prognosis
A	Eating unhygienic food	Transient; very good prognosis
B	Injection, sexual	Chronic infection
C	Injection, sexual	Chronic infection
D	Occurs along with Hepatitis B	Worsens prognosis of Hepatitis B
E	Unhygienic food	Poorer than Hepatitis A

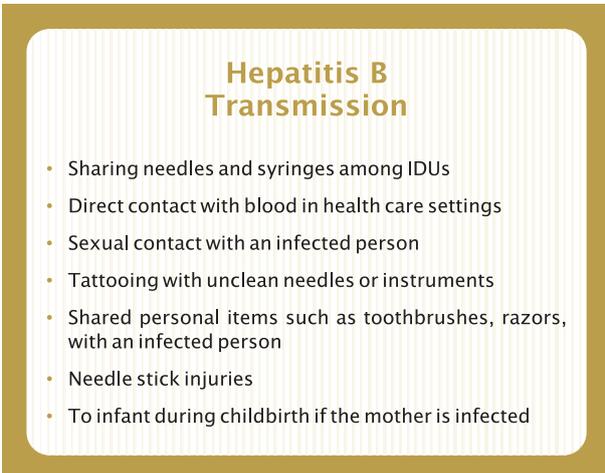
STEP 2: Presentation and discussion on Hepatitis B among people who inject drugs



Hepatitis B Transmission

- Hepatitis B infection can be spread through contact with the blood, semen, vaginal fluids, and other body fluids of an infected person.

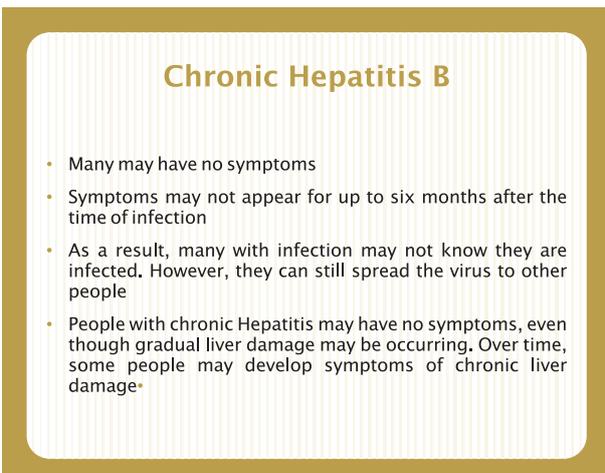
Hepatitis B infection can be spread through contact with blood, semen, vaginal fluids and other body fluids of an infected person. Hepatitis B's transmission is similar to the transmission of HIV.



Hepatitis B Transmission

- Sharing needles and syringes among IDUs
- Direct contact with blood in health care settings
- Sexual contact with an infected person
- Tattooing with unclean needles or instruments
- Shared personal items such as toothbrushes, razors, with an infected person
- Needle stick injuries
- To infant during childbirth if the mother is infected

The methods of HBV transmission are outlined in the slide.



Chronic Hepatitis B

- Many may have no symptoms
- Symptoms may not appear for up to six months after the time of infection
- As a result, many with infection may not know they are infected. However, they can still spread the virus to other people
- People with chronic Hepatitis may have no symptoms, even though gradual liver damage may be occurring. Over time, some people may develop symptoms of chronic liver damage.

The key features related to chronic Hepatitis are presented in the slide.

Antibody to HBsAg (Anti-HBs) – a positive result indicates a case of Hepatitis B in the past, or that the person has received a Hepatitis B vaccine.

Antibody to Hepatitis B core antigen (Anti-HBc) – a positive result means that the infection is recent or the person has been infected in the past

Hepatitis B surface antigen (HBsAg) – a positive result indicates an active infection.

Hepatitis E surface antigen (HBeAg) – a positive result indicates Hepatitis B infection and the person is more likely to spread the infection to others through sharing needles or sexual contact.

It is important to remember that Hepatitis B is vaccine preventable. It is strongly recommended for people at high risk, such as injecting drug users and healthcare workers.

The vaccine schedule is three doses and at times the IDUs find it difficult to complete the three doses in time if they are in active and chaotic drug use. It is necessary to monitor and follow-up with the help of peer educators and outreach workers that they complete the standard schedule.

Up to half of the injecting drug users infected with HIV are co-infected with HBV. Worldwide, there may be 3–6 million HIV-infected people living with chronic HBV.

HIV-HBV co-infection increases the morbidity and mortality beyond those caused by either infection alone. People co-infected with HIV have higher levels of Hepatitis B viremia, have progression to chronic H hepatitis B that is approximately five times as fast as that among people infected with only HBV and have a higher risk of cirrhosis and hepatocellular carcinoma. HIV immune suppression can even cause the loss of Hepatitis B surface antibodies and reactivation to chronic Hepatitis B. As compared with healthy, uninfected persons, those infected with HIV – particularly the Most immune compromised– mount poorer antibody responses to HBV vaccination.

Diagnostic Tests

- Hepatitis B surface antigen (HBsAg) - a positive result means an active infection
- Hepatitis E surface antigen (HBeAg) -- a positive result means a Hepatitis B infection and the person is more likely to spread the infection to others through sexual contact or sharing needles.

Hepatitis B Vaccination

- Hepatitis B is vaccine preventable
- HBV vaccine is already strongly recommended for injecting drug users as per WHO guidelines
- The standard schedule for infants and unvaccinated adults is 0, 1 and 6 months
- The primary 3-dose vaccine series induces protective antibody concentrations in >95% of healthy infants, children and young adults

HIV HBV Coinfection

- HIV-HBV coinfection increases the morbidity and mortality beyond those caused by either infection alone
- People coinfecting with HIV have:
 - Higher levels of hepatitis B viremia
 - Progression to chronic hepatitis B that is approximately five times as fast as that among people infected with only HBV
 - A higher risk of cirrhosis and hepatocellular carcinoma
- Those infected with HIV, particularly the most immunocompromised, mount poorer antibody responses to HBV vaccination

Hepatitis C

- Hepatitis C is inflammation of liver
- Hepatitis C is a virus that lives mostly in the blood and in liver cells



Hepatitis C (HCV) is a virus that can harm the liver and produce scarring on it. There may be no clinical symptoms. In many HCV infected individuals, the progression of the disease could cause significant problems. However, many things can be done to keep the liver healthy if one is infected with HCV.

The first six months of HCV infection are referred to as the acute infection period. Eighty percent of people do not show any symptoms during acute infection, so HCV is rarely diagnosed at this time.

Hepatitis C

Stages of infection

- Acute:
 - Some infected individuals have symptoms during this stage:
 - Nausea, vomiting, jaundice – ‘Acute hepatitis’
 - 25% of individuals clear the virus from their body by two years of infection
 - People most likely to clear HCV during acute infection are those who are symptomatic, female, and under age 40
 - HIV-positive people are only half as likely to spontaneously clear Hepatitis C

When symptoms do occur during acute infection, they include fever, fatigue, abdominal pain, nausea, vomiting, dark urine, and jaundice. In the first few months after HCV infection, some people will eliminate the virus from their bodies without treatment. This is called spontaneous clearance.

The people most likely to clear HCV during acute infection are those who are symptomatic, female, and under age 40. HIV-positive people are only half as likely to spontaneously clear Hepatitis C.

Hepatitis C

- Chronic: 75% of infected individuals will have chronic hepatitis with presence of virus in body and ability to transmit it to others
 - About 45% do not develop liver damage
 - About 30 – 40% develop mild liver damage
 - About 10 – 20% develop liver cirrhosis
 - About 1 – 5% develop liver failure or liver cancer
- In HIV-negative people, HCV progresses very slowly, usually over decades, with a wide range of outcomes

If 100 people are infected with HCV, the virus will be cleared from the body of 25 people while the remaining 75 will develop chronic infection.

Of those 75 people, 10–20 will develop cirrhosis of liver. Of those 10–20 people, 1–5 will either develop liver cancer needing a transplant or will die.

In HIV-negative people, HCV progresses very slowly, usually over decades, with a wide range of outcomes.

HCV is mainly transmitted when infected blood from one person directly enters another person's bloodstream. HCV has been detected in semen and vaginal fluid, so genital fluids may be infectious. Saliva and tears are not infectious. HCV, like HIV, cannot be transmitted by touching, kissing, hugging, sharing eating utensils or drinking from the same glass.

Hepatitis C virus is easily transmissible compared to HIV. It can live in a syringe for several days to weeks and it can be transmitted through shared needles and other injecting equipment, such as spoons used for preparation, cotton, water, measuring syringes and ties. The infection can be transmitted through tattooing, sharing infected razors and toothbrushes. Sexual transmission is possible but the chance of transmission through the sexual route is very low. Hepatitis C can be transmitted from parent to child transmission.

Worldwide, most HCV infections are related to injecting drug use, through sharing needles and other drug-injecting paraphernalia. Hepatitis C is a smaller, more enduring virus than HIV. The Hepatitis C virus can live in syringes and other objects for days or weeks.

For prevention of HCV, a new needle and syringe is required for every injection episode and it is important not to use injection paraphernalia used by someone else.

HCV infection among injecting drug users is very high in India. High levels (>90%) of Hepatitis C (HCV) infection were reported from Chennai and Manipur a decade ago (Kumar et al, 2000; Saha et al, 2000). In Chennai, IDUs were almost 28 times more likely to be infected with Hepatitis C virus than those who were not injecting drugs (Marx et al, 2003). Recent studies have indicated elevated HCV prevalence among IDUs in Manipur (90%), Mizoram (71%), Mumbai (61%), Chennai (55%) and Punjab (32%) [Devi et al, 2009; Chelleng et al, 2008; Saraswathi & Datta, 2007; Mehta et al, 2010; Jindal et al, 2008].

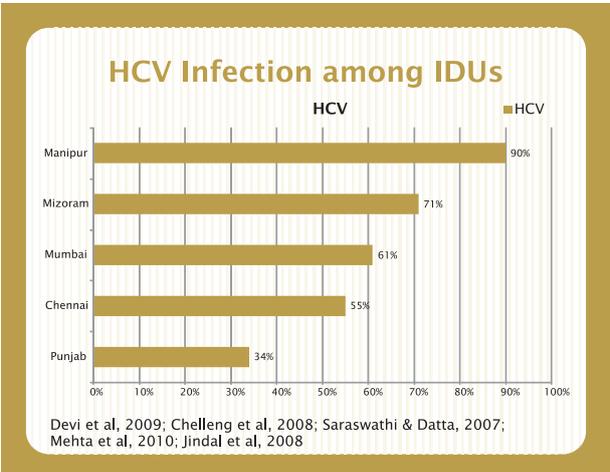
Hepatitis C

Transmission of Hepatitis C

- Sharing of contaminated injecting equipments in majority of cases
- Other injecting equipments such as spoons, tourniquet, swabs, water in addition to N/S
- Contamination of hands during mixing of drug
- Transfusion of infected blood and blood products
- Tattooing
- Infected razors and toothbrushes
- Mother to baby (5% chances)
- HIV co-infection increases the risk
- Very low risk through sexual route, (but still chances exist)

HCV and Injection Drug Use

- Worldwide, most HCV infections are attributable to injection drug use
- Hepatitis C is a smaller, more durable virus than HIV. Hepatitis C virus can live in syringes and other objects for days or weeks
- Using bleach for cleaning syringes reduces the risk for HIV transmission but is less effective against Hepatitis C
- Sharing contaminated spoons, cotton and other paraphernalia can transmit the virus
- Using a clean needle and syringe and other injection paraphernalia separately is necessary to prevent HCV transmission



Factors in progression of HCV

- Alcohol Facilitates HCV progression to severe liver disease
 - Other factors
 - HIV
 - Chronic HBV
 - Age > 40 when infected
 - Male

Alcohol facilitates the progression of HCV infection to severe liver disease. Other factors facilitating the progression include HIV co-infection, chronic HBV infection, age > 40 when infected and being male.

HIV and Hepatitis C Co-infection

- HIV accelerates Hepatitis C disease progression
- The risk of serious liver damage is greatest among HIV-positive people with fewer than 200 CD4 cells
- HCV can be treated, regardless of a person's HIV status
- Hepatitis C does not worsen HIV but may complicate HIV treatment, since many HIV drugs are metabolized by the liver

HIV accelerates Hepatitis C disease progression. It should be emphasised that many people live with both HIV and Hepatitis C viruses for several years, often without knowing that they are co-infected. The risk of serious liver damage is greatest among HIV-positive people with < 200 CD4 cells.

Hepatitis C infection does not worsen HIV but may complicate HIV treatment, since many ARVs are metabolized by the liver. Co-infected people are at greater risk of ART associated hepatotoxicity than those with HIV alone. It should be stressed that the benefit of HIV treatment outweighs the risk of liver toxicity.

- It is important to provide education to the clients about HCV transmission and counsel them about measures that can be taken by IDUs to protect their liver. Advice on alcohol consumption and treatment for alcohol-dependent individuals is also an important step.

Hepatitis C - Counselling Issues

- For every IDU, the TI health provider should:
 - Educate him or her on the transmission dynamics of Hepatitis C
 - Stress on using safe injecting equipment (not only N/S, but also others)
 - Teach the clients on how to inject safely
- For Hepatitis C infected IDU clients
 - Instil hope in the client that not every case is fatal
 - No special diet is required, but if the client is obese, fat foods should be avoided
 - Alcohol IS STRICTLY prohibited: this message should be strongly delivered to the client
 - If the client has problem of alcohol use, he should be counselled accordingly, and if required, should be sent to a de-addiction centre

Do and Donts for hepatitis

DOs

- Stop Alcohol
- Regular health check-ups
- Balance diet
- Regular exercise, stress reduction plan
- Drink a log of fluids
- Protect from re-infection
- Vaccinate against hepatitis

DONTs

- Avoid Alcohol, Acetaminophen
- Foods with high salt, sugar or fat content
- High doses of Vitamins A, D, E or K
- Iron supplements unless advised by the doctor
- Fumes from paint thinners, chemical solvents, spray, adhesives, insect sprays and cleaners can be harmful to the liver

Needle stick injuries are common among health workers as well as IDUs. The greatest risk posed by needle stick injury is Hepatitis B. Wherever possible, IDUs who are not infected and the health care providers working with IDUs should be vaccinated against HBV. There is no PEP available for HCV. PEP guidelines are available for HIV.

HIV, Hepatitis transmission through needle stick injuries

- HIV 3/1000
- HCV 20/1000
- HBV 300/1000

The first test is HCV antibody test and the information related to this is provided in the slide. Since antibodies take 6 to 24 weeks to develop, testing soon after the infection will give a negative result.

Unlike with HIV, a positive HCV antibody test result does not always mean that someone is chronically infected.

Diagnostic Tests HCV Antibody Test

- The first test is usually an HCV antibody test
- Antibodies take 6-24 weeks to develop
- If the result is positive, it means that the person is infected with Hepatitis C in the past and still may be infected
- People who have spontaneously cleared hepatitis C without treatment remain antibody-positive for years afterwards
- At times antibody test results are negative even when someone does have chronic hepatitis C (CD4 cell count is low)

An HCV RNA (viral load) test is necessary to confirm whether there is chronic infection and the information on this is provided in the two slides.

Diagnostic Tests HCV RNA (viral load) Test

- HCV RNA (viral load) test is necessary to confirm whether there is chronic infection with HCV
- The viral load test looks for genetic material of the HCV virus in the same way as an HIV viral load test detects HIV
- Detectable HCV RNA in bloodstream means that there is current infection with HCV
- If two successive test results (with a gap of six months) are undetectable, then HCV has been cleared HCV

Unlike HIV where the viral load is a barometer for risk of disease progression and a factor in treatment decisions, in HCV, the viral load is used to indicate degree of liver damage and when to

initiate treatment. But the pre-treatment viral load is one of the predictors of response to treatment. HCV treatment is less effective for people with HCV RNA greater than 400,000 IU/ml.

Diagnostic Tests HCV RNA (viral load) Test

- Coinfected people usually have higher Hepatitis C viral loads than people with HCV alone
- Hepatitis C viral load does not indicate or predict the degree of liver damage, nor is it used to decide when to start treatment

There are two types of testing:

1. Qualitative test: This indicates whether the HCV is detectable or not; used in diagnosis and monitoring response to treatment

2. Quantitative: This measures the actual amount of HCV per millimetre of blood. It is issued in determining pre-treatment viral load.

HCV Genotype

- After a confirmed HCV diagnosis, HCV genotype is done
- There are at least six different viral strains of hepatitis C, known as genotypes, numbered from 1 to 6
- In India genotype 3 and 1 are commonly reported
- It is essential to know the HCV genotype in order to plan when to use treatment and how long to stay on treatment
- HCV genotype (2 and 3 are more sensitive to treatment than 1 or 4);

There are at least six different viral strains of Hepatitis C. Each genotype has some variations called subtypes. Subtypes are designated by alphabetical letter.

Most of the reported studies from India seem to suggest that genotype-3 predominates in the north, east and west India, whereas genotype-1 is commoner in south India.

It is essential to know the HCV genotype in order to plan when to use treatment and how long to stay on treatment. HCV genotype 2 and 3 are more sensitive to treatment than 1 or 4.

Other Tests Liver Function Tests

- It is especially important for co-infected people who are taking antiretrovirals (ARVs) to have liver enzyme levels (ALT) measured routinely
- ALT is not a reliable marker for predicting whether HCV will progress, or for indicating the severity of liver disease. ALT levels often fluctuate in people with chronic HCV

When the liver is injured, some enzymes leave the liver and enter the bloodstream and they can be measured to indicate liver injury.

The relevance of liver function tests are mentioned in the slide.

Deciding whether or not to treat Hepatitis C is an individual and complex decision. Treatment guidelines generally agree about when to treat, and who to treat, irrespective of HIV status.

The key features in treatment are considered in the slide.

People with decompensated cirrhosis cannot be safely treated for Hepatitis C. A liver transplant, if available is the best option for them.

HCV Treatment

- HCV treatment is more effective when given during acute infection
- People with mild liver disease do not require immediate treatment
- Treatment should be offered to people with moderate liver damage, since they are at risk of progression to cirrhosis
- Although people with compensated cirrhosis can be treated, treatment is less likely to be effective and side effects may be worse

The advantages and disadvantages of HCV treatment is outlined in the slide.

Advantages and Disadvantages of HCV Treatment

Advantages	Disadvantages
<ul style="list-style-type: none"> • HCV virus can be cleared. • Improves liver health by reducing the inflammation • Reduces risk of long term complications • Prevents transmission of HCV virus to drug using partners and sex partners • Treatment is not lifelong 	<ul style="list-style-type: none"> • Side effects can be severe • Not all benefit with treatment • If liver is healthy, the treatment can be delayed

Hepatitis C treatment is a combination of two drugs: Pegylated Interferon and Ribavirin. Interferon stimulates the immune system to fight viruses, so it has antiviral and immunologic activity. Pegylation means that a small molecule has been attached to Interferon to make it work longer, to render the dose more convenient and to facilitate more effective treatment. Ribavirin alone is not an effective treatment for Hepatitis C. It needs to be used with Pegylated Interferon. It is given twice daily. Ribavirin is usually dosed differently depending on body weight and HCV genotype.

HCV Treatment

- Hepatitis C treatment is a combination of two drugs, pegylated interferon and ribavirin
- People who are HCV/HIV-coinfected may require a longer course of HCV treatment (at least 48 weeks) than those who are HCV- mono infected especially persons with HCV genotype 1

Side effects of HCV Treatment

- Interferon can induce depression, anxiety symptoms and suicidal risk
- Interferon can produce flu like symptoms
- Weight loss
- Fatigue
- Anemia, neutropenia, and thrombocytopenia

The side effects from Hepatitis C treatment can be uncomfortable, sometimes debilitating. Many side effects can be managed.

Step 4: Generating Discussion on Hepatitis C

- The facilitator can use the following frequently asked questions (FAQs) to generate a discussion among the participants on Hepatitis C and clear their doubts.

FAQs

Q: What are the functions of the liver?

A: The liver performs several functions. It filters and purifies everything we eat and drink, stores vitamins and iron and helps the blood to clot.

Q: What are the symptoms of 'liver disease'?

A: Often there may be no symptoms, even if the liver is damaged. Some common symptoms of a damaged liver are: fatigue, headaches and pain in the stomach.

Q: What is Hepatitis C? What are its symptoms?

A: Hepatitis C virus (HCV) can harm the liver and result in its scarring. There may be no clinical symptoms. In many HCV infected individuals, the progression of the disease can cause significant problems. However, many things can be done to keep the liver healthy if one is infected with HCV.

Q: How is Hepatitis C transmitted?

A: Injecting drug use currently accounts for maximum HCV transmissions in the world. Needle sharing poses a great risk to HCV transmission. HCV can also be transmitted by sharing of injection paraphernalia such as cookers, spoon and swabs. Within five years of injecting, most IDUs become infected with HCV. Sexual transmission of HCV can occur, particularly through sex involving tearing and blood contact.

Q: What are the differences in the transmission of Hepatitis B and C?

A: Both Hepatitis B and C are transmitted by sharing contaminated injecting equipment. HCV is easily transmissible; and even sharing injecting paraphernalia is a risk factor for HCV. In addition, tattooing is an independent risk factor for HCV. Sexual transmission of HBV from infected individuals to their sexual partners through unsafe sex is common. Needle stick injuries result in transmission of HBV among health care providers.

Q: Is there a vaccine to prevent Hepatitis?

A: There is no vaccination against HCV. Hepatitis A and B are vaccine preventable. IDUs who are uninfected should be vaccinated against HBV.

Q: What are the precautions to be taken by people infected with Hepatitis?

A: Alcohol is significantly injurious to the liver. Certain drugs harm the liver. These include commonly used drugs such as Acetaminophen (Paracetamol), a drug used to treat fever and headache. Consult a doctor to know which drugs affect the liver. Proper diet, regular exercise and healthy lifestyle are helpful for persons infected with Hepatitis.

Q: How to find out whether the liver is infected with Hepatitis B or C?

A: Liver function tests identify the type and severity of liver disease. Tests are available for detecting whether one is infected with Hepatitis B and C.

Q: Can OST be given to HCV infected people?

A: Persons on OST lead a stabilised life that helps them to adopt a healthy lifestyle. Hence, it is beneficial for HCV infected opioid injectors to receive OST.

Q: Is there a treatment for HCV?

A: Yes, there is treatment available for HCV. Drugs like Interferon and Riboverin are used to treat HCV. Currently, however, the availability of HCV treatment is limited and is not provided in public sector hospitals.

Q: What is co-infection with HIV and HCV?

A: Some people are infected with both HIV and HCV. The ART doctor will guide, with appropriate suggestions, how to manage the patient's co-infection. Depending on the liver functions, the doctor will choose appropriate ART drugs for co-infected individuals. Drugs like Nevirapine and Efavirenz can cause disturbance to liver functions. It is important to completely avoid alcohol and other harmful substances and drugs during treatment.

Q: What is the advice for IDUs co-infected with HIV and HCV?

A: It is best to seek treatment as soon as possible. ART delays the progression of HCV liver disease in HCV-HIV co-infection.

Before wrapping up the discussion on Hepatitis, ensure that the following points are highlighted to the participants:

- Persons with clinical or laboratory evidence of liver damage should consult a doctor for an appropriate drug regimen (Efavirenz is preferred for patients with significant liver dysfunction. However, it should be used with caution for patients with depression or other significant psychiatric conditions).
- Majority of individuals treated with Interferon (IFN) exhibit mental health symptoms such as depression. When Efavirenz and Interferon are given together, the patient should be assessed for depression regularly.

- When AZT and Ribavirin are given together, the patient should be monitored for anaemia regularly
- Anti-HCV therapy should be started before the CD4 count falls below 200 cells/mm³.
- The anti-HBV activity of 3TC (Lamivudine), a component of NACO first-line ART regimen, offers an advantage in HIV infected patients who are HBsAg-positive.
- Hepatic flares on ART start soon after the initiation of ART in co-infected individuals.
- Substitution drugs such as methadone may have drug interactions with some of the ART drugs.
- Individuals with pathological drinking patterns need to be treated for alcohol use disorders.

STEP 5: Conclusion

- Conclude the session by giving key messages to the participants:

Key messages

Hepatitis B infection can be spread through having contact with the blood, semen, vaginal fluids, and other body fluids of someone who already has a hepatitis B infection and thus transmission is similar to HIV

Hepatitis B is vaccine preventable. It is strongly recommended for people at high risk such as injecting drug users and healthcare workers.

HCV is mainly transmitted when infected blood from one person directly enters another person's bloodstream; it is easily transmissible compared with HIV.

Injecting drug use currently accounts for most HCV transmissions in the world: needle sharing poses a great risk for HCV transmission.

Alcohol facilitates the progression of HCV infection to severe liver disease

Unlike with HIV, a positive HCV antibody test result does not always mean that someone is chronically infected. An HCV RNA (viral load) test is necessary to confirm whether there is chronic infection.

HCV genotype testing is necessary for treatment considerations

Hepatitis C treatment is a combination of two drugs, pegylated interferon and ribavirin.

The side effects from hepatitis C treatment can be uncomfortable, sometimes debilitating; common side effects include depression, anxiety and suicidal risk.

The greatest risk posed by needle stick injury is Hepatitis, followed by HCV and HIV

HIV accelerates hepatitis C disease progression. Co-infected people are at greater risk for ART-associated hepatotoxicity than those with HIV alone.

Understanding and Educating the Client on Tuberculosis

OBJECTIVE

- To educate participants about anxiety and drug use

EXPECTED OUTCOME

By the end of the session, participants would be able to:

- Understand assessment and management of anxiety among drug users

DURATION

60 minutes

SESSION CONTENT

- Causes of anxiety
- Clinical features and management of Generalised Anxiety Disorder
- Clinical features and management of Panic Disorder

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

MATERIALS / PREPARATION REQUIRED

- LCD projector
- Laptop
- PowerPoint slides for the session
- White board/ flipchart
- Chart papers
- Masking tape
- Marker pen

PROCESS

STEP 1: Presentation and discussion on basic facts related to Tuberculosis

Physical Illness

- Physical illness among IDUs is more common as compared to the general population
- A Study from Chennai conducted in 2005 - 06 showed increased rates of physical illness (Solomon et al, 2008)
- The same group also showed that its mortality is more in comparison with the following causes: overdose, AIDS, Tuberculosis, accident (Solomon et al, 2009)

Illness	Prevalence / rate (%)
Tuberculosis	33.9
Lower respiratory tract infections	16.1
Anaemia	22.9
Hepatitis B	11.9
Hepatitis C	94.1
Cellulitis	6.8
Herpes simplex	9.3
Herpes zoster	9.3
Oral candidiasis	43.2

A study done in Chennai revealed that there are a number of physical illnesses that are prevalent among the persons who inject drugs. The rate of physical illness in IDUs is greater as compared to the medical morbidity observed in the general population. The common illnesses are: Hepatitis C, oral candidiasis, Tuberculosis(TB), anaemia, lower respiratory infections, Hepatitis B, herpes zoster, herpes simplex and cellulitis. A cohort study of IDUs in Chennai also revealed that their mortality rate is high and the common cause of death other than overdose was AIDS, Tuberculosis and accidents.

Physical Illness - Reasons

- Both drug use and physical illness may be caused by overlapping factors leading to many illnesses
- E.g. genetic factors, stress related factors
- Individuals living in poor socio-economic conditions more prone to drug use and TB

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graph TD
    A[Common vulnerability factors] --> B[Drug use]
    A --> C[Physical illness]
    
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There are a number of reasons for an increased prevalence of medical morbidities among IDUs. Drug use itself contributes significantly to increased physical illnesses. In some instances, an underlying condition such as pain can be a precipitating factor for drug use in a person. Some of today's illegal drugs were earlier used and marketed for relief of pain.

A common vulnerability factor can be the reason for both drug use and physical illness.

Tuberculosis

- Tuberculosis (TB) is caused by a microscopic organism - bacteria called mycobacterium tuberculosis
- Can affect any body part
 - Usually affect lungs
 - Other sites: lymph nodes, bone, brain, spinal cord, genital-urinary system, etc.

TB causing bacteria

Tuberculosis (TB) is caused by mycobacterium tuberculosis.

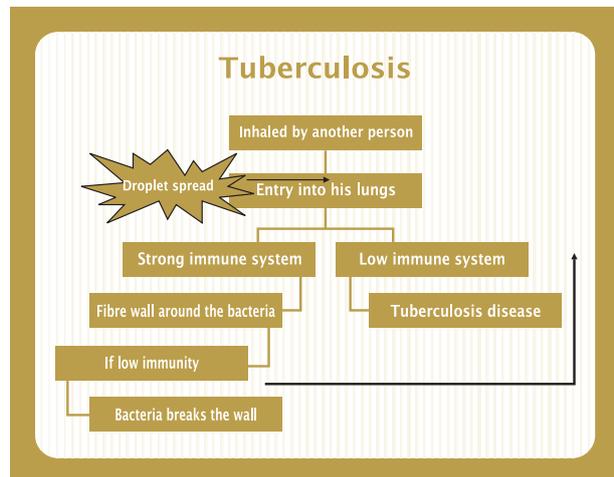
Pulmonary TB occurs in approximately 85 percent of the patients. Lung lesions can be of the following nature: cavities usually in upper lobes, infiltrates, fibrosis or progressive pulmonary disease. Extra-pulmonary TB occurs in approximately 15 percent of the cases and can happen at any age. Young children and HIV-positive adults are particularly susceptible and many have co-existent pulmonary TB.

TB is spread through the air from one person to another. The bacteria are dispersed in the air when a person with active TB disease of the lungs or throat coughs or sneezes. People nearby may breathe in these bacteria and become infected. However, not everyone infected with the TB bacteria becomes sick.

Tuberculosis

- TB is contagious and spreads through air
- Transmitted from one person to another through droplets
- When an infected person sneezes, coughs or talks, tiny droplets of saliva/mucus spread to another person, who can get infected
- If not treated, each infected person with active TB will infect 10-15 person every year
- TB is not transmitted by touching clothes or shaking hands of an infected person

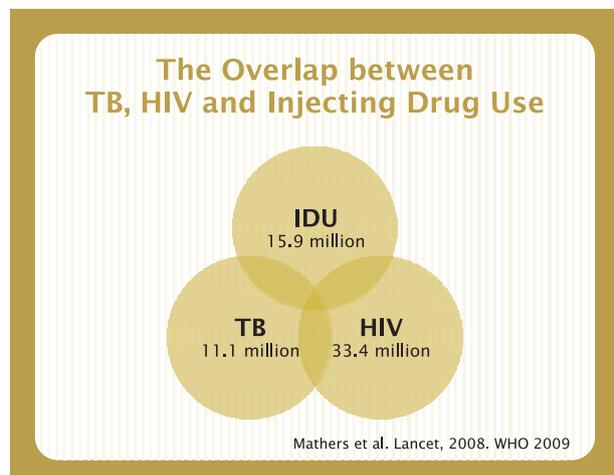
People who are not sick have what is called latent TB infection. People who have latent TB infection do not feel sick, do not have any symptoms, and cannot spread TB to others. But, some people with latent TB infection go on to get TB disease later in life.



STEP 2: Presentation and discussion on relationship between IDU, HIV and TB

Currently, it is estimated that there are 33 million people living with HIV, 16 million people who inject drugs and about 11 million people who have Tuberculosis.

There are three million HIV infected injecting drug users and 1.4 million who are HIV infected and have Tuberculosis. It is not known how many IDUs have Tuberculosis.



STEP 3: Presentation and discussion on risk factors related to Tuberculosis

- Next, ask the participants to discuss various risk factors of TB, as well as the signs and symptoms of active TB.

Tuberculosis

Risk factors for Tuberculosis

<ul style="list-style-type: none">• Living with a person who has an active TB• Poverty• Homelessness• Nursing home residents• Prison inmates• Alcohol dependents	<ul style="list-style-type: none">• Injecting Drug Users• Diabetes• Certain cancers• HIV infection• Health care workers, including doctors and nurses
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The risk factors for Tuberculosis are listed in the slide.

Who is at Risk?

- People who are co-infected with HIV and TB are 21-34 times more likely to become sick with TB
- Risk of active TB is also greater in persons suffering from other conditions that impair the immune system
- Tobacco use greatly increases the risk of TB disease and death. More than 20% of TB cases worldwide are attributed to smoking

The dramatic spread of Human Immunodeficiency Virus (HIV) in the past two decades, has been accompanied by a major increase in the number of new cases of Tuberculosis (TB). In 2010, TB killed an estimated 1.68 million people, of which 0.38 million deaths were among HIV-positive TB patients. The interaction of TB with HIV presents additional challenges to its control. It is crucial to improve and strengthen collaborative TB/HIV activities to reduce the burden of TB among people living with HIV (PLHIV) and reduce the burden of HIV among TB patients.

Risk of Active Tuberculosis

- People infected with TB bacteria have a lifetime risk for falling ill with TB of 10%
- However, persons with compromised immune systems, such as people living with HIV, malnutrition or diabetes, or people who use tobacco, have a much higher risk of falling ill

Risk of active Tuberculosis increases in persons with a compromised immune system, diabetes, malnutrition and a tobacco use history.

STEP 4: Presentation and discussion on diagnosis and treatment related to tuberculosis

Symptoms of TB depend on where in the body the TB bacteria are growing. TB bacteria usually grow in the lungs. TB in the lungs may cause symptoms such as:

- Bad cough that lasts three weeks or longer
- Pain in the chest
- Coughing up blood or sputum

Other symptoms of active TB disease are:

- Weakness or fatigue
- Weight loss
- No appetite
- Chills
- Fever
- Sweating at night

Tuberculosis

Symptoms of active Tuberculosis

<ul style="list-style-type: none"> • Generalised tiredness/weakness • Weight loss • Fever • Night sweats • Cough • Chest pain 	<ul style="list-style-type: none"> • Coughing up of sputum • Coughing blood • Shortness of breath • If other systems involved, symptoms according to the function of the organ <ul style="list-style-type: none"> • e.g. Brain: fits, unconsciousness
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Send two sputum samples to test for TB if any of the following are present: cough for more than three weeks, weight loss and sputum production.

Detecting Tuberculosis

- Diagnosis is based on a long-used method called sputum smear microscopy
- Trained laboratory technicians look at sputum samples under a microscope to see if TB bacteria are present
- With two or three such tests, diagnosis can be made within a day, but this test does not detect numerous cases of less infectious forms of TB
- Diagnosing MDR-TB (Multidrug-resistant TB) and HIV-associated TB can be more complex

Screen for TB symptoms, if a family member has pulmonary TB. All TB suspects must provide sputum samples for smear microscopy at a diagnostic centre under Revised National TB Control Programme (RNTCP). As secretions build up in the airways overnight, an early morning sputum sample is more likely to contain TB bacilli than one taken later in the day.

Tuberculosis

- Diagnosis based on
 - Symptom profile and sputum examination
- Treatment
 - Nearest TB centre under RNTCP
 - Directly Observed Treatment (DOT)
 - Person becomes non-infectious within three weeks of initiating treatment

Tuberculosis Delay in Treatment

- When a person develops active TB (disease), the symptoms (cough with sputum and blood at times, chest pains, weakness, weight loss, fever and night sweats) may be mild for many months
- This can lead to delays in seeking care and results in transmission of the bacteria to others
- People ill with TB can infect up to 10-15 other people through close contact over the course of a year
- Without proper treatment up to two thirds of people affected with TB will die

Delays in treatment can occur as symptoms may be mild for many months. When the treatment is delayed, there is a higher chance that the patients may transmit the bacteria to others. They can infect up to 10–15 people through close contact in a year. Treatment is essential as without it, two-thirds of people affected with TB will die.

Treatment of Tuberculosis Six Months Treatment

- Two months of intensive treatment with Rifapicin, Isoniazid, Pyrizanamide and Ethambutol followed by four months of continuation phase with Rifampicin and Isoniazid

First line anti TB drugs (abbreviation)	Mode of action	Potency	Recommended dose (mg/kg body weight)	
			Daily	Intermittent (3 times a week)
Isoniazid (H)	Bactericidal	High	5	10
Rifampicin (R)	Bactericidal	High	10	10
Pyrazinamide (Z)	Bactericidal	Low	25	35
Streptomycin (S)	Bactericidal	Low	15	15
Ethambutol (E)	Bacteriostatic	Low	15	30

Treatment for TB is provided at the TB centre under RNTCP. The doses are administered through directly observed treatment (DOT). Although the person with pulmonary TB becomes non-infectious within three weeks of initiating treatment, a six-month-long treatment is advocated. Two months of intensive treatment with Rifampicin (R), Isoniazid (H), Pyrazinamide (Z) and Ethambutol (E) followed by four months of continuation phase with Rifampicin (R) and Isoniazid (H) is recommended.

Tuberculosis

Other important considerations

- TB is the leading killer of people with HIV
- HIV infected people are 20 -40 times more likely to develop active TB
- TB has resurfaced in the global epidemic because of the onset of HIV infection
- Multi drug resistant TB (MDR-TB): form of TB that is difficult and expensive to treat which fails to respond to standard treatment
- Extensively drug resistant TB (XDR-TB): form of TB which is resistant to drugs used in MDR-TB

TB is still a major killer of people with HIV and such individuals are at greater risk of developing active TB. The major concerns relate to drug resistant TB bacilli. Multi-drug resistant TB (MDR-TB) is a form of TB that is difficult and expensive to treat as it fails to respond to standard treatment. Extensively drug resistant TB (XDR-TB) is a form of TB which is resistant to even drugs used in MDR-TB.

Tuberculosis is common in HIV infected as well as HIV non-infected persons who use drugs and people who inject drugs. Studies from India have confirmed that TB is common among IDUs and the high rates may be due to poverty, homelessness, malnutrition, poor living conditions, low immunity and HIV infection. The early symptoms of TB may be mistaken for other conditions prevalent among IDUs thus delaying the diagnosis. Symptoms of weight loss and tiredness can be attributed by the IDUs to general debility. Cough and chest pain may be attributed to chronic bronchitis (as most of them are smokers).

It is important for health care providers to screen IDUs for TB by sending them to TB centers. IDUs must be educated about TB and those infected must be linked to DOTS centers under RNTCP. Adherence to treatment is essential and the clinical staff should provide adherence support. Opioid Substitution Therapy or OST is an important strategy to help in TB treatment adherence.

Injecting drug users on OST have good adherence to TB treatment. The adherence to treatment can be facilitated by close supervision and monitoring. It is practically feasible to organise TB-DOTS at the OST clinics. When clients are maintained on methadone, as well as on TB treatment, drug interaction between methadone and rifampicin must be considered. The levels of methadone can come down, precipitating withdrawals. Physicians and nurses must be aware of this and methadone dose must be escalated accordingly to alleviate the withdrawals.

Tuberculosis

- IDU related issues for TB
 - IDUs have a very high rate of TB
 - Reasons are many – poverty, homelessness, poor living conditions, low immunity, poor nutrition, high HIV rates
- Early symptoms of TB may be mistaken for other conditions. e.g.
 - Weight loss, weakness or tiredness → general debility
 - Cough, chest pain → chronic bronchitis associated with co-morbid smoking

Tuberculosis

- During every follow up, symptoms of TB must be positively ruled out
- Baseline screening must be ensured by the counsellor by referral to the physician
- Clients should be educated on signs/symptoms of TB
- Clients with symptoms resembling TB must be referred to nearby DOTS centre
- For those on treatment for TB: counsel for adherence, physically verify whether the client is taking TB medicines or not

Treatment of Tuberculosis in Injecting Drug Users

- TB treatment adherence can be increased among injecting drug users by close monitoring and supervision
- Adherence to treatment is facilitated by opioid substitution therapy and IDUs on OST adhere to TB treatment as well as others
- It is possible to organise TB-DOTS in OST clinics
- There is interaction between methadone, a substitution drug and rifampicin
- In view of the drug interactions, it may be necessary to adjust the methadone dose in people who also receive rifampicin (methadone dose may be increased to reduce withdrawals)

Reducing TB Burden among People Living with HIV: WHO, 2008

The Three "I"s to reduce the burden of TB disease among people living with HIV are:

- Intensified case finding (ICS)
- Isoniazid preventive therapy (IPT)
- TB infection control for people living with HIV (IC)

The "Three Is for HIV/TB" highlight the role of ART in TB and HIV prevention. There is a strong scientific evidence base supporting the fact that ART, by lowering a person's viral load and restoring the immune system, significantly reduces HIV and TB. WHO recommends earlier ART and the immediate initiation of ART for all TB patients irrespective of CD4 count.

Decreasing the Burden of HIV in IDUs with TB

- Provision of HIV testing and counselling
- Introduction of HIV prevention methods
- Introduction of co-trimoxazole preventive therapy among eligible PLHIV
- Provision of HIV and AIDS care and support
- Provision of antiretroviral therapy

The slide addresses key issues in decreasing the burden of HIV in injecting drug users with Tuberculosis.

STEP 5: Conclusion

- Conclude the session by giving key messages to the participants

Key messages

TB co-infection is very common in HIV infected IDUs

All HIV positive IDUs should be screened for TB

Decreased adherence and low access to the health care system should be managed

Rifampicin decreases methadone concentration and produce withdrawal symptoms

Other Physical Disorders: Anaemia and Nutritional Disorders

OBJECTIVE

- To educate participants about physical disorders such as nutritional disorders and anaemia that are prevalent among drug users

EXPECTED OUTCOME

By the end of the session participants would be able to:

- Understand malnutrition and anaemia among drug users

DURATION

30 minutes

SESSION CONTENT

- Causes of malnutrition
- Prevention and management of common physical disorders – malnutrition and anaemia

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

MATERIALS / PREPARATION REQUIRED

- LCD projector
- Laptop
- PowerPoint slides for the session
- White board/ flipchart
- Chart papers
- Masking tape
- Marker pen

PROCESS

STEP 1: Presentation and discussion on causes of malnutrition

Malnutrition among IDUs: Basic Facts

- Drug users are at an increased risk of malnutrition regardless of whether or not they are infected with HIV
- Specific drugs may alter appetite, interfere with gastrointestinal absorption, and/ or have pro inflammatory responses that can lead to disturbances in metabolic rate
- Behaviourally, drug dependence may affect access to food and food selection

Both HIV infected as well as HIV non infected drug users are at risk for developing nutritional disorders.

Drug users are at an increased risk of malnutrition as a result of a combination of behavioural and metabolic factors.

The behavioural factors contributing to poor nutrition are chaotic lifestyles leading to poor dietary quality and food insecurity. The metabolic factors such as inadequate storage of nutrients in damaged livers and increased nutrient excretion through diuresis and diarrhoea are also important.

Malnutrition among IDUs: Basic Facts

- The HIV infected drug users at a greater risk for malnutrition
- The risk of co-morbid conditions, such as Hepatitis C (HCV) and Tuberculosis (TB), is increased among drug using populations and may further affect nutritional and metabolic status

Compared with HIV non-infected, HIV infected drug users at greater risk for nutritional disorders.

Many HIV infected individuals have additional morbidity such as Tuberculosis and these co-morbidities significantly contribute to poor nutritional status.

Malnutrition among IDUs: Basic Facts

Malnutrition may impact the course of HIV-infection through a variety of mechanisms:

- Compromising host immune function
- Diminishing response to therapies
- Promoting co-morbidities

Malnutrition affects the course of HIV infection in several ways. Malnutrition can compromise the host's immune response. Poor nutritional status before ART initiation diminishes response to therapy. Malnutrition can also contribute to the occurrence of co-morbidities such as Tuberculosis.

STEP 2: Presentation and discussion on nutritional status of IDUs

Nutritional compromise has been a hallmark of untreated HIV infection. Many HIV infected persons have nutritional disorders.

Persons with HIV infection often have inadequate dietary intake of calories, protein, vitamins and micronutrients. The impact of nutritional disorders among the HIV infected include: increased HIV progression; further immune decline; increased infectious disease morbidity; anaemia; fatigue and reduced productivity.

They have unintentional weight loss, which is a strong predictor of mortality.

Nutrition among IDUs

- Nutritional compromise has been a hallmark of untreated HIV infection
- Persons with HIV infection often have inadequate dietary intake of calories, protein, and micronutrients
- They have unintentional weight loss, which is a strong predictor of mortality

The slide shows some key findings from a study on nutrition among IDUs conducted in Chennai. The study found a high prevalence of poor nutritional status in both HIV-positive and HIV-negative male drug users in Chennai, with HIV-positive drug users faring worse. The high levels of food insecurity in both groups indicate critical need for intervention. Additionally, it was found that 52 percent of HIV-positive drug users and 50 percent of HIV-negative drug users had BMI levels below 18.5 kg/m². HIV-positive IDUs had significantly lower levels of fat mass, fat-free mass, and percent body fat than HIV-negative IDUs. HIV-positive IDUs had lower cholesterol levels and higher triglycerides than HIV-negative IDUs.

Nutritional Status of IDUs: India

- Poor nutritional status in both HIV-positive and HIV-negative drug users
- Nutritional status worse in HIV positive drug users
- 52% of HIV-positive drug users and 50% of HIV-negative drug users having BMI levels below 18.5 kg/m²
- HIV-positive IDUs had significantly lower levels of fat mass, fat-free mass, and percent body fat than the HIV-negative IDUs
- HIV-positive IDUs had lower cholesterol levels and higher triglycerides than HIV-negative IDUs

Tang et al, 2011

The study found that the conditions that contribute to increased nutritional disorders among HIV positive drug users include chronic infection with Hepatitis C, HIV, and/ or TB.

Nutritional Status of IDUs: India

Conditions which most certainly place HIV positive IDUs at higher risk of continued malnutrition:

- Self-reported TB
- Diarrhea
- Laboratory-confirmed Hepatitis C infection among the HIV-positive IDUs

Tang et al, 2011

STEP 3: Presentation and discussion on improving nutritional status among Injecting Drug Users

Significance of Improving Nutrition among HIV-positive IDUs

- Emerging evidence suggests that poor nutritional status at the start of ARV treatment is predictive of mortality.
- It may be important to improve nutritional status in the HIV-positive population prior to initiation of ARV treatment in order for patients to reap the full benefits of therapy.

Emerging evidence suggests that poor nutritional status at the start of ARV treatment is predictive of mortality.

It may be important to improve nutritional status in the HIV-positive population prior to initiation of ARV treatment in order for patients to reap the full benefits of therapy. Micronutrient supplementation may be beneficial. ARV may improve nutritional status and overall health.

STEP 3: Presentation and discussion on anaemia among Injecting Drug Users

Anaemia in Drug Users

- Anaemia is highly prevalent among injecting drug users, both HIV-infected and HIV-uninfected
- Anaemia may be exacerbated significantly by nutritional disorders among IDUs
- Anaemia is highly correlated with frequency of injection and it is suggested that cessation of injection use may improve anaemia
- Anaemia contributes to increased morbidity as well as mortality

Anaemia is highly prevalent in Injecting Drug Users, both among HIV-infected and HIV-uninfected

Anaemia may be exacerbated significantly by nutritional disorders among IDUs, which are very common.

Anaemia is highly correlated with frequency of injection and it is suggested that cessation of injection use may improve anaemia in drug users.

Anaemia contributes to increased morbidity as well as mortality among injecting drug users.

Anaemia in HIV Infected Drug Users

- Anemia is a common clinical finding in HIV-infected patients and is associated with:
 - Advanced disease
 - Lower quality of life
 - Higher mortality
- Factors contributing to the development of anemia
 - Nutritional deficiencies
 - Opportunistic infections
 - AIDS-related malignancies
 - Drug treatment
 - Direct effect of HIV on the bone marrow

Anaemia is a common clinical finding in HIV-infected patients. In a study conducted in Chennai, it was observed that about a fourth (23%) of HIV infected IDUs had anaemia.

This condition is associated with advanced stage of a disease, lower quality of life and higher mortality.

Many factors may contribute to the development of anaemia in HIV-infected patients including nutritional deficiencies, opportunistic infections, AIDS-related malignancies, drug treatment and a direct effect of HIV on the bone marrow.

Zidovudine an Antiretroviral (ARV) drug can cause anaemia.

Iron deficiency and inflammation-induced iron maldistribution may also contribute to HIV-associated anaemia. Due to the effects of inflammation, iron is diverted from the circulation into the reticulo endothelial system and other storage sites. Apart from inflammation, HCV may also possibly contribute to redistribution of iron.

Iron maldistribution may have another unwanted effect; it may increase a person's susceptibility to opportunistic infections and accelerate disease progression. Indeed, iron overload is associated with a poor prognosis in HIV and Hepatitis C virus infections.

ART improves anaemia through several potential mechanisms, such as the reduction of opportunistic infections and associated anaemia caused by chronic diseases, reduction of gut abnormalities and improvement in micronutrient status.

Studies have shown that ART improves anaemia in HIV infected IDUs.

Anaemia in HIV Infected Drug Users

- Zidovudine, an ARV, can contribute to anaemia
- Iron deficiency
- Inflammation-induced iron maldistribution of iron
- HCV may possibly contribute to redistribution of iron

ART and Anaemia

ART can improve anaemia in HIV infected drug users:

- Reduction of opportunistic infections
- Reduction of associated anemia caused by chronic diseases
- Reduction of gut abnormalities
- Improvement in micronutrient status

STEP 4: Conclusion

Key messages

HIV infection contributes to poor nutritional status through: anorexia, malabsorption of nutrients, increased utilization and increased nutrient losses.

Drug users are at an increased risk of malnutrition as a result of a combination of behavioural (poor dietary quality and food insecurity) and metabolic factors (inadequate storage of nutrients in damaged livers).

Malnutrition may impact the course of HIV-infection through promoting comorbidities.

A high prevalence of nutritional status is found among both HIV positive and HIV negative IDUs.

Improving nutritional status in the HIV-positive population prior to initiation of ARV treatment in order for patients may be important

ART improves anaemia in HIV infected IDUs.

Other Common Physical Symptoms: Constipation, Pain and Poor Oral Health

OBJECTIVE

- To educate participants about common physical symptoms such as constipation, pain and poor oral health that are prevalent among drug users

EXPECTED OUTCOME

By the end of the session participants would be able to:

- Know about managing common physical symptoms such as constipation, pain and poor oral health

DURATION

30 minutes

SESSION CONTENT

- Managing constipation
- Pain management in drug users
- Oral health

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

MATERIALS / PREPARATION REQUIRED

- LCD projector
- Laptop
- PowerPoint slides for the session
- White board/ flipchart
- Chart papers
- Masking tape
- Marker pen

PROCESS

STEP 1: Presentation and discussion on management of constipation

One of the key side effects of all opioids is constipation. One of the important side effects of opioid substitution therapy with buprenorphine and methadone is constipation and it lasts as long as the treatment lasts. With continued use, patients usually develop tolerance to the side effects of opioids, except constipation, which is the most common and usually the most debilitating side effect reported by patients. Constipation is also associated with serious negative effects on patients' health-related quality of life and on society in terms of health care resource use. There are multi factorial reasons for constipation among opioid users and they include: interference with normal gastrointestinal motility and by stimulating the absorption of fluids

Chronic opioid users suffer from constipation and hence it is necessary for them to adopt some strategies to address this drug induced effect.

The primary prevention strategies include:

- Increased dietary fibre
- Increased fluid intake
- Adequate exercise

At times, lack of sufficient time (spending disproportionate amount of time for the search and procurement of drugs) and lack of privacy (e.g. homelessness, shared common toilets) are the reasons.

Several novel pharmacological approaches are being developed, including assessment of pro motility and secreta-gogue agents that have efficacy in treating chronic idiopathic constipation.

Other approaches are directed at the reversal of peripheral opiate effects in the gut while maintaining the desired analgesic efficacy.

An evidence-based management approach for opioid induced constipation will be more feasible after the new generation of drugs is formally and thoroughly studied.

Constipation

- Constipation is a common effect of all opioids
- Even OST with methadone or buprenorphine is complicated by side effect of constipation
- With continued use, patients usually develop tolerance to various side effects, except constipation
- Constipation is also associated with a serious negative effects on patients' health-related quality of life
- Causes of constipation are multi factorial
 - Opioids interfere with normal gastrointestinal motility
 - Opioids stimulate the absorption of fluids

Constipation

- Constipation can be prevented by opioid users by adopting some strategies
- Primary prevention strategies
 - Increased dietary fibre
 - Increased fluid intake
 - Adequate exercise
 - Adequate time and privacy for going to the toilet

Constipation

Pharmacological management

- Pro motility and secreta- gogue agents that have efficacy in treating chronic idiopathic constipation
- Peripherally restricted μ -opiate receptor antagonists
 - Methylnaltrexone
 - Alvimopan

STEP 2: Presentation and discussion on pain management among drug users

Opioid-dependent patients and other drug users may present with pain and it is necessary that appropriate actions are initiated to effectively address it, particularly, acute pain. The slides outline the actions that need to be taken to effectively manage pain.

Appropriate Actions to Treat Drug Users in Acute Pain

- Determine the source of the pain
- Provide appropriate pain medication to relieve the symptoms; this may include opioids
- Analgesia should be prescribed on a regular basis. Additional flexibility for “breakthrough” pain may be required
- If the pain is persistent or the cause is unclear, check for underlying psychiatric problems or an undetected source of pain

- Determine the source of the pain
- Provide appropriate pain medication to relieve the symptoms; this may include opioids
- Analgesia should be prescribed on a regular basis. Additional flexibility for “breakthrough” pain may be required
- If the pain is persistent or the cause is unclear, check for underlying psychiatric problems or an undetected source of pain

Appropriate Actions to Treat Drug Users in Acute Pain

- If opioids are used, opioid dependents require more and frequent doses of narcotic analgesics compared with non-dependents due to their tolerance
- In methadone-maintained patients receiving opioid analgesics, these should be given in addition to the daily maintenance dose of methadone (perhaps even at a higher dose)
- Taper the doses of narcotic analgesics slowly to avoid drug withdrawal

Often opioids are the most effective drugs to provide analgesia and even opioid tolerant individuals may benefit with opioids for alleviation of pain.

- If opioids are used, opioid dependents require more and frequent doses of narcotic analgesics compared with non-dependents due to their tolerance
- In methadone-maintained patients receiving opioid analgesics, these should be given in addition to the daily maintenance dose of methadone (perhaps even at a higher dose)
- Taper the doses of narcotic analgesics slowly to avoid drug withdrawal

Appropriate Actions to Treat Drug Users in Acute Pain

- Drugs commonly used for multimodal analgesia in acute pain include opioids, non-opioids and a variety of adjuvant analgesics
- Combinations of analgesics are chosen based on a mechanistic approach that targets the pain pathway in both the peripheral and central nervous system
- The use of a multimodal approach for all stages of peri-operative care including pre-operative, intra-operative, and post-operative transition periods

Multimodal analgesia simply implies combining two or more analgesic agents with different mechanisms of action to provide additive, if not synergistic, pain relief. There are many variations of multimodal analgesia, but a classic example is combining a Non Steroidal Anti Inflammatory Drug (NSAID) with an opioid analgesic following surgery. Drugs commonly used for multimodal analgesia in acute pain include opioids, non-opioids and a variety of adjuvant analgesics. Combinations of analgesics are chosen based on a mechanistic approach that targets the pain pathway in both the peripheral and central nervous system.

Managing opioid tolerant persons in pre-operative phase:

Pre-operative management of opioid-dependent patients begins with pre-operative administration of their daily maintenance or baseline opioid dose before induction of general, spinal, or regional anesthesia. Patients should be instructed to take their usual dose of oral opioid on the morning of surgery.

Reassurance: Discuss patient concerns related to pain control, anxiety, and risk of relapse.

Medication: Calculate opioid dose requirement and modes of administration; provide anxiolytics or other medications as clinically indicated.

Managing opioid tolerant persons in intra-operative phase:

Maintain baseline opioids (oral, transdermal, intravenous). Increase intra-operative and post-operative opioid dose to compensate for tolerance. Provide peripheral neural or plexus blockade; consider neuraxial analgesic techniques when clinically indicated. Use non opioids as analgesic adjuncts

Appropriate Actions to Treat Drug Users in Acute Pain

- Pre-operative
 - Calculate opioid dose requirement and modes of administration; provide anxiolytics or other medications as clinically indicated
- Intra-operative
 - Maintain baseline opioids (oral, transdermal, intravenous)
 - Increase intraoperative and postoperative opioid dose to compensate for tolerance
 - Provide peripheral neural or plexus blockade; consider neuraxial analgesic techniques when clinically indicated
 - Use nonopioids as analgesic adjuncts

Managing opioid tolerant persons in post-operative phase:

Plan pre-operatively for post-operative analgesia; formulate primary strategy as well as suitable alternatives.

- Maintain baseline opioids.
- Use multimodal analgesic techniques
- Patient-controlled analgesia: Use as primary therapy or as supplementation for epidural or regional techniques
- Continue neuraxial opioids: intrathecal or epidural analgesia
- Continue continuous neural blockade

Appropriate Actions to Treat Drug Users in Acute Pain

- Post-operative
- Maintain baseline opioids
 - Use multimodal analgesic techniques
 - Patient-controlled analgesia: Use as primary therapy or as supplementation for epidural or regional techniques
 - Continue neuraxial opioids: intrathecal or epidural analgesia
 - Continue continuous neural blockade

Awareness and administration of appropriate doses of analgesics as well as continuous clinical monitoring remain the keys to successful peri-operative pain management in this group of patients.

STEP 3: Presentation and discussion on oral health

Risk Factors for Poor Oral Health

- Poor dental health
 - Tooth grinding (Bruxism) in Amphetamine type stimulant users
 - Xerostomia is the reduced ability to produce saliva in the mouth. This is a side-effect of heroin or methadone and can contribute to tooth decay, enamel erosion, and periodontal disease
 - Neglecting personal oral hygiene (e.g. poor brushing habits)
 - High intake of sugars and refined carbohydrates (sugary cereals, and items made from white flour) contribute to poorer oral health
- Poor dental health is a risk factor for complications such as increasing the risk of bacteraemia and infective endocarditis

Many drug-dependent individuals neglect their dental health before, and at times even after, entering treatment/ intervention programmes.

Dental problems are often seen in opioid and ATS users. Poor dental health is related to teeth grinding (particularly associated with ATS use), reduced saliva secretion and not brushing. Xerostomia, which can be a side-effect of methadone, can contribute to a high rate of caries.

Poor dental health can increase the risk of bacteraemia and infective endocarditis.

Oral Health in HIV-positive Drug Users

- Candidiasis
- Oral hairy leukoplakia
- HIV-associated gingivitis
- HIV-associated periodontitis
- Necrotizing ulcerative gingivitis and gingivostomatitis
- Recurrent herpes simplex
- Bacterial glossitis
- Major aphthous ulcers
- Molluscum contagiosum
- Patchy depapillated tongue
- Hairy tongue
- Angular cheilitis

Suggestions to Relieve Dry Mouth

- Take frequent sips of water
- Chewing sugarless gum helps stimulate salivary flow
- Keep a glass or bottle of water by your bed for sipping during the night or on awakening
- Drink frequently while eating
- Limit caffeine-containing substances like coffee and tea

It may be necessary to educate the patients about managing dry mouth, a common effect of opioids such as heroin and methadone

Take frequent sips of water. Chewing sugarless gum helps stimulate salivary flow. Keep a glass or bottle of water by your bed for sipping during the night or on awakening. Drink frequently while eating

Limit caffeine-containing substances like coffee and tea. Many people report increased dryness after drinking beverages containing caffeine.

STEP 4: Conclusion

Key messages

Constipation is a common physical side effect of opioids and can be effectively managed with some preventive strategies such as increased dietary fibre, increased fluid intake and physical exercise.

Appropriate steps need to be taken to effectively manage acute pain in drug users, particularly, opioid tolerant persons. Opioid analgesia may be required to address pain in opioid users.

Dry mouth is a frequent complaint in opioid users and poor oral health results from multiple factors. Education on oral hygiene is critical to prevent complications such as tooth decay and other serious infections.

Day 3

Session One:

Alcohol Use Disorder

Session Two:

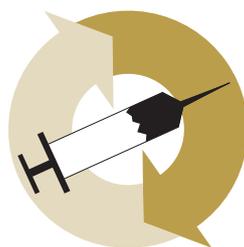
Benzodiazepine Use Disorder

Session Three:

Opioid Withdrawals

Session Four:

Networking, Referral and Linkages



Alcohol Use Disorder

OBJECTIVE

To make participants understand the role and responsibilities of doctors and nurses in the assessment and management of alcohol use disorder and alcohol withdrawal syndrome.

EXPECTED OUTCOME

By the end of the session the participants would be able to understand:

- The screening and assessment of alcohol dependence and alcohol withdrawal syndrome
- The key issues in management of alcohol dependence and alcohol withdrawal

DURATION

75 minutes

SESSION CONTENT

- Alcohol use in India
- Screening and diagnosis of alcohol dependence
- Treatment of alcohol dependence
- Diagnosis of alcohol withdrawal syndrome
- Management of alcohol withdrawal syndrome

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

MATERIALS / PREPARATION REQUIRED

- Projector
- Laptop
- PowerPoint presentation
- White board/flip chart
- Marker pen
- Masking tape

PROCESS

STEP 1: Presentation and discussion on alcohol use in India

Substance (psychoactive drug) use is increasing in India and is being reported in both urban and rural areas. The epidemiological studies carried out over time in different parts of the

country indicate an escalating trend. A national household survey conducted countrywide in 2001 revealed the prevalence rates for alcohol at 21.4 percent. Projecting this estimate to 2001 population, it can be said that there were 62.5 million alcohol users in the country.

Alcohol Use in India

- 21% of adult males use alcohol (Ray et al, 2004)
- 5% women use alcohol (Benegal et al, 2005)
- 50% of all drinkers in India satisfy criteria for hazardous drinking
- The typical pattern is heavy solitary drinking, involving predominantly spirits and usually >6 standard drinks per occasion (Gaunekar et al, 2004)
- Alcohol-related problems account for over a fifth of hospital admissions in India (Benegal, 2005)
- Alcohol misuse has a disproportionately high association with liver disease, TB, HIV and suicidal acts (Benegal, 2005)

Research studies done in India have revealed the following: One out of twenty women in India use alcohol. Half of all drinkers in India satisfy criteria for hazardous drinking. The typical pattern is heavy solitary drinking, predominantly involving spirits and usually >6 standard drinks per occasion. Alcohol-

related problems account for over a fifth of hospital admissions in India. Alcohol misuse has a disproportionately high association with liver diseases, TB, HIV and suicidal acts.

STEP 2: Presentation and discussion on screening and diagnosis of alcohol use disorder in primary care settings

Screening Instruments for Alcohol Misuse

CAGE

- C- Have you been advised to Cut down?
- A- Have you got Annoyed at other people asking you about your drinking?
- G- Have you felt Guilty about your alcohol use?
- E- Do you have an 'Eye-opener' – a drink in the morning?

Screening is required in emergency and in-patient settings. A quick way to screen is to simply ask patients whether they have ever used any substance in their lifetime.

The most commonly used screening tool is the CAGE questionnaire, which has a sensitivity of 60 to 95 percent for alcohol/drug problems and a specificity of 40 to 95 percent. The CAGE can be used for either alcohol or drug problems by replacing alcohol with the specified drug.

Two or more positive responses indicate a likely problem and require further assessment.

An additional two questions can enhance the CAGE process further:

1. Have you ever had a problem with alcohol?
2. Have you had any alcohol in the last 24 hours?

The two slides outline the screening instrument AUDIT or the Alcohol Use Disorders Identification Test that is often used to evaluate alcohol misuse and dependence.

Each of the questions have a set of responses to choose from and each response has a score ranging from 0 to 4.

Total score of 8 or more is recommended as an indicator of hazardous and harmful alcohol use, as well as possible alcohol dependence.

In general, a score of 1 or more on Question 2 or Question 3 indicates consumption at a hazardous level. Points scored above 0 on questions 4–6 (especially weekly or daily symptoms) imply the presence or incipience of alcohol dependence. Points scored on questions 7–10 indicate that alcohol-related harm is already being experienced.

It is common for drug users to under report the amount of drugs consumed by them. Instead of mistrusting the patients, it is useful to understand the denial and lies as part of the shame associated with having substance misuse.

At times the user may not report alcohol use as he or she may not perceive it as a problem to be reported.

Additionally, as alcohol use is normative in many settings, people may not want to highlight this as an issue.

Screening Instruments for Alcohol Misuse

AUDIT – Alcohol Use Disorders Identification Test

- How often do you have a drink containing alcohol?
- How many standard drinks containing alcohol do you have on a typical day when drinking?
- How often do you have six or more drinks on one occasion?
- During the past year, how often have you found that you were not able to stop drinking once you had started?
- During the past year, how often have you failed to do what was normally expected of you because of drinking?

Screening Instruments for Alcohol Misuse

- During the past year, how often have you needed a drink in the morning to get yourself going after a heavy drinking session?
- How often during the last year have you had a feeling of guilt or remorse after drinking?
- How often during the last year have you been unable to remember what happened the night before because you had been drinking?
- Have you or someone else been injured as a result of your drinking?
- Has a relative, friend, doctor or other health worker been concerned about your drinking or suggested you cut down?

Reluctance to Disclose Alcohol Use in IDC Clinics

- A patient may be reluctant to disclose alcohol use in the IDC clinic:
 - He or she may not see alcohol use as a 'problem' or feel it is not worth mentioning
 - Alcohol use is normative and socially accepted in several parts of the country
 - Stigma, embarrassment, and fear of being judged for alcohol use

Overcoming Reluctance to Disclose Alcohol Use

- The doctor/nurse/counsellor should:
 - Remain non-judgmental, empathetic, genuine
 - Acknowledge that alcohol use can be difficult to talk about
 - Assure confidentiality
 - Obtain patient consent before taking history

It is important to use a straight forward, non judgmental approach that will help obtain a full disclosure by the patient. Trust is required between the user and the treatment professional.

The user must be assured of confidentiality of the information provided to the treatment professional.

Consent must be obtained from the patients before taking their history.

Consequences of Alcohol Use

- Has the patient experienced any problems as a result of using alcohol?:
 - Medical problems
 - Family problems
 - Social relationship problems
 - Employment or financial problems
- How long has the patient experienced these problems?

The consequences of alcohol use on various aspects such as physical health, mental health, family, social relationship, employment and finance must be explored.

The duration of adverse consequences needs to be assessed.

Alcohol Dependence

Three of the following six, in the last year:

- Strong desire or compulsion
- Loss of control over intake
- Tolerance (increasing quantity of alcohol to achieve the same effect)
- Withdrawal state
- Neglect of other interests, priority given to alcohol use
- Persistent use despite evidence of harmful effects

Both WHO ICD-10 and American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, fourth edition, Text Revision (DSM-IV-TR) conceptualise drug use disorders almost similarly with minor differences.

Dependent pattern of use is defined by the presence of three or more of the signs mentioned in the slide, for the last one year.

Intoxication: This diagnosis is made when the patient is under the influence of alcohol, leading to maladaptive behaviours.

Withdrawal: This diagnosis is made when the person experiences a distinct syndrome characteristic of discontinuation of alcohol. The onset is within hours to days of stopping or reducing the intake. Acute withdrawal usually lasts 7 to 14 days for alcohol. Withdrawal delirium (delirium tremens) is more severe form of withdrawal.

Alcohol use: related liver disease and other medical conditions: Physical examination to ascertain signs of diseases.

Alcohol Dependence Assessment Physical Examination

- Signs of intoxication
- Signs of withdrawal
- Signs of drug use-related liver disease and other medical conditions

STEP 3: Presentation and discussion on treatment of alcohol dependence syndrome

The primary goal of treatment is to assist the patient to remain healthy, until, with appropriate care and support he or she can achieve an alcohol free life.

Alcohol dependence is a chronic disorder that may require maintenance treatment, similar to other medical conditions such as hyperlipidemia and diabetes. The ultimate goal for treating patients with alcohol dependence is to achieve abstinence and prevent relapse. Only a third of patients are eventually able to achieve sustainable abstinence.

The five pharmacologic agents that may aid in accomplishing these goals are disulfiram, oral naltrexone, topiramate, acamprosate and baclofen.

Disulfiram inhibits aldehyde dehydrogenase, a key enzyme involved in the metabolism of alcohol. Hence acetaldehyde accumulates after drinking alcohol. This results in negative effects such as dizziness, flushing, nausea, vomiting, hypotension, arrhythmia, convulsions, respiratory depression, and myocardial infarction. The effect of this drug is sufficiently unpleasant to the patient to serve as a deterrent to consuming alcohol. Its efficacy is linked to the fear of these aversive reactions.

Acamprosate, naltrexone, topiramate and baclofen are considered as anti craving medications.

Treatment for Alcohol Dependence

- Abstinence from alcohol is the mainstay of therapy in alcohol-induced diseases
- As few as 30% of patients with alcohol dependence eventually achieve sustainable abstinence

Pharmacological Drugs Used in the Treatment of Alcohol Dependence

- Disulfiram
- Acamprosate
- Naltrexone
- Topiramate
- Baclofen

Dose of Drugs Used in Alcohol Dependence

Drug	Dose
Naltrexone Oral Intramuscular injection	50-100 mg per day 380 mg per month
Acamprosate	666 mg three times per day
Naltrexone+acamprosate	Same doses as above
Disulfiram	250 mg per day
Topiramate	300 mg per day

The drugs act differently on alcohol intake.

Disulfiram: Triggers aversion

Naltrexone: Acts on μ -Opiate receptors that modulate the release of dopamine in the reward system

Acamprosate: Interferes with conditioned responses and inhibits NMDA glutamate receptor hyperactivity that occurs during protracted withdrawal.

Topiramate: Inhibits corticosterone release from the solimbic dopamine system, decreases alcohol reinforcement and the propensity to drink

Baclofen: Potent GABA-B receptor agonist and suppresses alcohol craving

The doses of these five drugs are given in the slide.

- ### Non-medical Treatment for Alcohol Dependence
- Motivational enhancement therapy
 - Cognitive behaviour therapy
 - Family therapy
 - Group therapy
 - Self help groups – Alcoholic Anonymous or AA

Psychosocial interventions are important in alcohol dependence management. Some of the key psychosocial interventions are mentioned in the slide.

Motivational enhancement therapy may facilitate entry and retention into treatment. Cognitive behaviour therapy may be helpful in relapse prevention strategies. Family therapy addresses many of the interpersonal factors that need to be addressed and resolved. Group therapy is efficient as well as effective. Several alcohol dependent persons benefit significantly with AA.

STEP 4: Presentation and discussion on diagnosis of alcohol withdrawal syndrome

- ### Diagnostic Criteria for Alcohol Withdrawal
- A. Cessation of (or reduction in) alcohol use that has been heavy and prolonged.
- B. Two or more of the following are present:
- Autonomic hyperactivity (e.g. sweating or pulse rate greater than 100 beats per minute)
 - Increased hand tremor
 - Insomnia
 - Nausea or vomiting
 - Transient visual, tactile or auditory hallucinations or illusions
 - Psychomotor agitation
 - Anxiety
 - Grand mal seizures.
- American Psychiatric association, 2000

The diagnostic criteria for alcohol withdrawal syndrome by the American Psychiatric Association are outlined in the slide.

Alcohol withdrawal occurs over a time period and the three slides show how alcohol withdrawal symptoms emerge over time. It is important to observe that the minor withdrawals occur early in withdrawal compared with severe withdrawals.



Clinical Manifestations of Alcohol Withdrawal

Phase	Symptoms	Onset after last drink	Duration
Early withdrawal	Tremulousness Anxiety Palpitations Nausea Anorexia	6-8 h	1-2 d
Withdrawal seizures	Generalized tonic-clonic seizures	6-48 h	2-3 d

Clinical manifestations of alcohol withdrawal

Phase	Symptoms	Onset after last drink	Duration
Alcoholic hallucinosis	Hallucinations Visual Tactile Auditory	12-48 h	1-2 d
Delirium tremens	Tachycardia Hypertension Low-grade fever Diaphoresis Delirium Agitation	48-96 h	1-5 d

It is a common medical problem with about eight percent of the hospitalised patients at risk for development of alcohol withdrawal syndrome. The mortality of alcohol withdrawal can be high (up to 15 percent).

Alcohol withdrawals may develop in surgical, trauma, and other medical wards when dependent persons get admitted for other surgical/medical conditions and suddenly cease to use alcohol.

Patients may present to emergency rooms in a confused state (altered sensorium plus disorientation).

- ### Why is it so Important?
- Common medical problem (8% of hospitalised in-patients at risk for alcohol withdrawal)
 - Mortality of alcohol withdrawal can be high (up to 15%)
 - May develop in patients admitted to hospital for an unrelated illness (e.g. for an operation)
 - Patients may present in a confused state to the emergency department, due to the onset of the withdrawal syndrome

Alcohol withdrawal management involves a thorough awareness of any illness in the patient, careful selection of pharmacological agents, education and reassurance.

How to Recognize the Syndrome?

- Tremor of extended hands, tongue or eyelids
- Sweating
- Nausea and/or vomiting
- Sinus tachycardia
- Psychomotor agitation
- Insomnia
- Anxiety

How to Recognize the Syndrome?

- Headache
- Fever
- Decreased attention
- Disorientation
- Clouding of consciousness
- Hallucinations (which may be visual, tactile or auditory)
- Withdrawal seizures
- Delirium

STEP 5: Presentation and discussion on management of alcohol withdrawal syndrome

How to Manage the Syndrome?

- The aims of detoxification are to:
- provide safe withdrawal from alcohol and enable the patient to become alcohol free
- provide withdrawal that is humane, thus protecting the patient's dignity
- prepare the patient for ongoing treatment for their dependence on alcohol

The aims of detoxification are: to provide safe withdrawal from alcohol and enable the patient to become alcohol free; to provide withdrawal that is humane, thus protecting the patient's dignity; and to prepare the patient for ongoing treatment for their dependence on alcohol. The key issues in alcohol detoxification are:

It is essential to conduct a thorough physical examination as an illness markedly increases the chances of convulsions or delirium. During detoxification, avoid intravenous fluids unless there are medical indications for this. Educating and reassuring the patient is extremely

important. The patient is likely to benefit from a brain depressant (such as any benzodiazepine) in adequate doses to markedly diminish symptoms. Withdrawal treatment does not usually require an anticonvulsant unless the patient has a seizure disorder.

Patients should be treated with regimens which are individual-specific and flexible to respond to changes in severity of withdrawal (symptom-triggered).

Fixed treatment schedules, where the patient is given a standard regimen irrespective of their symptoms, are inappropriate.

The revised Clinical Institute Withdrawal Assessment for Alcohol (CIWA-Ar) scale is a validated 10-item assessment tool that can be used to quantify the severity of alcohol withdrawal syndrome, and to monitor and medicate patients going through withdrawal.

Fixed Schedule or Symptom-triggered Regimens?

- Patients should be treated with regimens which are patient-specific and flexible to respond to changes in severity of withdrawal (symptom-triggered)
- Fixed treatment schedules, where the patient is given a standard regimen irrespective of their symptoms, are inappropriate

Patients will often complain of withdrawal symptoms but have no objective evidence of withdrawal.

Treatment is better with a symptom triggered regimen.

While mild to moderate alcohol withdrawal symptoms can be managed on an out-patient basis in the drop-in-centre, severe alcohol withdrawal symptoms (seizures, delirium) need to be treated in a hospital.

When to Treat?

- Treatment should be initiated using a symptom-triggered regimen
- Mild to moderate symptoms can be treated on an outpatient basis
- Severe symptoms (seizures, delirium) warrant inpatient admission and treatment

Longer-acting (long half life) benzodiazepines (e.g. diazepam, chlordiazepoxide) may be more effective in preventing seizures. Long acting benzodiazepines may produce a smoother withdrawal course with less breakthrough or rebound symptoms than short acting (short half life) agents. Benzodiazepines with a rapid onset of action may have a higher abuse potential than those with slower onset of action.

Which Drug to Use?

Benzodiazepines

- Longer acting benzodiazepines (e.g. diazepam) may be more effective in preventing seizures
- May produce a smoother withdrawal course with less breakthrough or rebound symptoms than shorter acting agents
- Benzodiazepines with a rapid onset of action may have a higher abuse potential than those with slower onset of action

Which Drug to Use?

Anti-psychotics

- In those patients who are still manifesting the signs of severe withdrawal despite appropriate doses of diazepam, haloperidol 5 mg IV or IM should be administered, repeated once, as appropriate

In those patients who are still manifesting the signs of severe withdrawal despite appropriate doses of diazepam, haloperidol 5mg IV or IM should be administered, repeated once, as appropriate.

Which Drug to Use?

β-adrenoceptor blocking drugs

- Reduce the autonomic features of withdrawal
- No anticonvulsant activity
- These drugs are known to cause delirium

Clonidine

- Ameliorates mild to moderate withdrawal
- No efficacy in preventing seizures or delirium

β-adrenoceptor blocking drugs: These drugs reduce the autonomic features of withdrawal but have no anticonvulsant activity. The disadvantage is that these drugs are known to cause delirium.

Clonidine: Though clonidine ameliorates mild to moderate withdrawal, it has no efficacy in preventing seizures or delirium.

Which Drug to Use?

What is an ideal drug for alcohol withdrawal?

- Few significant side effects
- Wide margin of safety
- A metabolism not dependent on liver function
- Absence of abuse potential

An ideal drug for management of withdrawal syndrome is that with few significant side effects, wide margin of safety, a metabolism not dependent on liver function and absence of abuse potential.

Thiamine: Alcohol interferes with absorption of B-vitamins and hence all patients should receive oral vitamins including thiamine (which is not well stored in the body) 100 mg bd orally. When Wernicke's encephalopathy or Korsakoff's psychosis is suspected, parenteral administration of B-vitamins is appropriate.

Role of Thiamine

Thiamine

- All patients should receive thiamine 100 mg bd orally, unless Wernicke's encephalopathy or Korsakoff's psychosis is suspected, when parenteral administration of B-vitamins is appropriate

STEP 6: Conclusion

- Conclude the session by giving the key messages

Key messages

Alcohol use related problems are enormous in India.

Alcohol dependence is a chronic brain disorder with many adverse consequences.

A comprehensive and holistic approach is needed to treat alcohol dependence.

Detoxification, anti-craving medication, psychological therapies, self-help groups constitute the holistic care.

Symptom-triggered regimens have been shown to lessen the need for total medication and shorten the duration of treatment.

In most patients with mild to moderate withdrawal symptoms, outpatient detoxification is safe and effective and costs less than inpatient treatment.

Long acting benzodiazepines have been shown to be safe and effective, particularly for preventing or treating seizures and deliriums and are preferred for treating alcohol withdrawal syndrome.

Benzodiazepine Use Disorder

OBJECTIVE

To make participants understand about benzodiazepine dependence and management of benzodiazepine withdrawals.

EXPECTED OUTCOME

By the end of the session the participants would be able to:

- Understand the consequences of sudden withdrawal of benzodiazepines in dependent persons
- Know the key principles in the management of benzodiazepine withdrawals

DURATION

60 minutes

SESSION CONTENT

- Benzodiazepine dependence
- Sudden stopping of benzodiazepines and its withdrawals
- Managing benzodiazepine withdrawals

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

MATERIALS / PREPARATION REQUIRED

- Projector
- Laptop
- PowerPoint presentation
- White board/flip chart
- Marker pen

PROCESS

STEP 1: Presentation and discussion on benzodiazepine dependence and the practical issues involved in prescribing benzodiazepines

- Open the session by asking the participants to brainstorm on various benzodiazepines that are available in the Indian market and commonly utilized by drug users.
- Inform participants on the diagnosis of benzodiazepine dependence.

The dependence criteria for substance dependence syndrome in WHO ICD 10 are outlined in the two slides. Dependence is indicated by the presence of three or more features, for a year or more.

Benzodiazepine dependence is relatively common among injecting drug users, particularly those who consume benzodiazepines. The syndrome can be mild and short-lived or severe and sometimes protracted among injecting drug users.

WHO - ICD 10 Criteria for Drug Dependence

A definite diagnosis of dependence syndrome should usually be made only if three or more of the following have been present together at some time during the previous year:

- Evidence of tolerance
- A physiological withdrawal state when drug use has ceased or reduced

In DSM IV of American Psychiatric Association, dependence is defined as maladaptive pattern of drug use leading to clinically significant impairment or distress with three or more of the following conditions during the last one year:

1. Withdrawal syndrome
2. Excess use
3. Tolerance
4. Time spent in acquiring and using the drug
5. Interference with social, occupational and recreational activities
6. Inability to cut down use
7. Continued use despite knowledge of harm due to drugs.

WHO - ICD 10 Criteria for Drug Dependence

- A strong desire or sense of compulsion to take the drug
- Difficulties in controlling drug-taking behaviour in terms of its onset, termination or levels of use
- Progressive neglect of alternative pleasures or interests
- Persisting with drug use despite clear evidence of overtly harmful consequences

In several settings, injecting drug users administer a combination of pharmaceutical preparations that contain synthetic opioids and benzodiazepines. Diazepam is often used in combination with injectable buprenorphine, injectable pentazocine and other opioids including heroin.

Commonly Used Benzodiazepines in Injecting Drug Use Settings

- Diazepam
- Alprazolam
- Nitrazepam
- Clonazepam
- Lorazepam
- Chlordiazepoxide

In addition, drug users consume oral benzodiazepines in large quantity and the two commonly used drugs across the country are alprazolam and nitrazepam. Reasons given for taking benzodiazepines recreationally are that they enhance the 'high' obtained from illicit drugs, alleviate withdrawal effects and also produce a 'kick' when taken alone in high doses or injected intravenously.

Consequences of Benzodiazepine Dose Escalation

Escalation of dosage and chronic use of benzodiazepines cause adverse effects:

- Depression
- Excessive sedation leading to falls and fractures
- Road traffic and other accidents (especially when combined with alcohol)
- Insidious development of increasing psychological and physical symptoms
- Lethal in overdose

Escalation of dosage and chronic use of benzodiazepines cause additional adverse effects including depression, excessive sedation leading to falls and fractures, road traffic and other accidents (especially when combined with alcohol), and the insidious development of increasing psychological and physical symptoms. Furthermore, benzodiazepines can be lethal in overdose.

The practical points for consideration by the physicians in the usage of benzodiazepines are mentioned in the two slides. These considerations will help in reducing the emergence of benzodiazepine misuse and dependence.

Practical Issues of Benzodiazepine Usage

1. Do not prescribe benzodiazepines in someone with a history of drug misuse and dependence
2. Prescribe the lowest possible doses for only 2-4 weeks. It is important to remember that patients can get withdrawal symptoms between doses if they are given short-acting benzodiazepines
3. Use only for severe or disabling anxiety or insomnia

Practical Issues of Benzodiazepine Usage

4. Try alternatives to benzodiazepines, such as relaxation techniques. Low-dose tricyclic antidepressants are used for the short-term treatment of insomnia
5. Advise patients about the risk of dependence and impaired reaction times
6. Elderly patients are particularly prone to adverse effects of benzodiazepines and, therefore, need to be careful

STEP 2: Presentation and discussion on sudden stopping of benzodiazepines and the common withdrawal symptoms

On stopping benzodiazepines abruptly, the original disorder for which the drug was taken (such as anxiety disorder) usually recurs. The rebound symptoms after stopping benzodiazepines can last for a few days.

The withdrawal syndrome could be mild or more at times. In severely dependent persons, the withdrawals can be debilitating and dangerous. The serious symptoms include confusion, seizures and delirium and may be a medical emergency.

Symptoms include many that are common to anxiety states in general, as well as some that are characteristic of benzodiazepine withdrawal (see slide). Severity is often associated with prolonged or high-dose use, short-acting potent benzodiazepines, certain personality types and anxiety/neuroticism. Withdrawal symptoms prolong benzodiazepine use, which often continues for years after the initial indication for the drug has passed. Many illicit benzodiazepine users become dependent and show typical withdrawal symptoms, which can be severe. The tragedy of recreational benzodiazepine abuse is that it is largely iatrogenic, resulting from wide spread over-prescription of benzodiazepines by general practitioners, which has increased their availability.

Abrupt discontinuation of benzodiazepines in dependent persons can have serious adverse consequences, including death, delirium, seizures and confusion.

With short-acting benzodiazepines (e.g. oxazepam, alprazolam), withdrawal symptoms typically begin 12–24 hours after the last dose and peak in intensity between 24 and 72 hours.

With long-acting drugs (e.g., diazepam and chlordiazepoxide) withdrawal symptoms peak after 5–8 days. Symptoms develop slowly in people with liver disease and the elderly because of slow drug metabolism.

Consequences on Stopping Benzodiazepines

- Recurrence of original disorder
- Rebound symptoms - last a few days
- Withdrawal syndrome:
 - Common symptoms (e.g., increased anxiety, tremor, irritability)
 - Serious symptoms (e.g., seizures, delirium, confusion)
 - Other symptoms: anorexia, nausea, tinnitus, excessive sensitivity to light and sound, depersonalisation and derealisation

Common Symptoms of Benzodiazepine Withdrawal

- Anxiety
- Anorexia (loss of appetite)
- Tremors
- Irritability
- Restlessness
- Tachycardia
- Nausea
- Nightmares
- Dizziness
- Depression
- Vomiting
- Sweating
- Postural hypotension
- Increased body temperature

Abrupt Discontinuation of Benzodiazepines

- Abrupt discontinuation can have serious adverse consequences, including death, delirium, seizures and confusion.
- With short-acting benzodiazepines, withdrawal symptoms begin 12–24 hours after the last dose and peak between 24 and 72 hours.
- With long-acting drugs, withdrawal symptoms peak after 5–8 days.
- Symptoms develop slowly in people with liver disease and the elderly.

STEP 3: Presentation and discussion on management of benzodiazepine withdrawals

Aims of Management in Benzodiazepine Dependence

- Safe withdrawal
- Cessation of use

Benzodiazepine withdrawal could be challenging for the patient as well as the physician. The aim of treatment is to offer safe withdrawal from benzodiazepines and to ensure cessation of use. It should be carried out judiciously.

The key principles involved in the management of benzodiazepine dependence are mentioned in the two slides. The key strategies for successful discontinuation are gradual dosage tapering and psychological support if necessary. Various authors have suggested optimal times of 6–8 weeks for withdrawal but some patients may require a year or more.

Managing Persons with Benzodiazepine Problems

- Confirm that the patient has a problem - use the diagnostic criteria for dependence
- Does the patient abuse other drugs, e.g. alcohol, cannabis?
- Educate the patient - detail the problems with abusing benzodiazepines, offer support and assistance, advise them on methods available to stop abusing benzodiazepines

Managing Persons with Benzodiazepine Problems

- Alternative therapy, such as relaxation therapy or stress reduction, for insomnia.
- If the patient agrees to reduce benzodiazepines then a signed contract may help them to commit.
- Educate the patient about the withdrawal syndrome and how to counteract it.
- Reduce the dose of benzodiazepine, e.g. 10% reduction in dose every 7-10 days.
- Regular follow-up: this will be based on how each individual patient does.

Dose Conversion Table

Benzodiazepine	Dose Equivalent to Diazepam 10 mg
Chlordiazepoxide	25 mg
Clonazepam	0.5 mg
Lorazepam	1 mg
Alprazolam	0.5 mg
Nitrazepam	10 mg
Oxazepam	20 mg

For some patients, particularly those taking benzodiazepines for anxiety or using potent benzodiazepines (lorazepam, alprazolam, clonazepam) there are advantages in conducting the withdrawal by using diazepam. The slow elimination of this drug ensures a gradual fall in blood concentration and its availability in low-dosage forms permits small dosage reductions. Conversion from other benzodiazepines to diazepam can be conducted using equivalent potencies between different benzodiazepines.

The gradual dosage tapering schedule for those taking less than 50 mg daily equivalent of diazepam is presented in the slide.

Benzodiazepine dose-reduction schedule (<50 mg/day diazepam equivalent)

Reducing doses*	Daily dose
Starting dose	15.0 mg (5.0 mg 3 times daily)
First reduction	12.5 mg 3 times daily (5.0 mg, 2.5 mg, 5.0 mg)
Second reduction	10.0 mg twice daily (5.0 mg, 5.0 mg)
Third reduction	7.5 mg twice daily (2.5 mg, 5.0 mg)
Fourth reduction	5.0 mg (once at night)
Fifth reduction	2.5 mg (once at night)

*The interval between dose reductions should be at least 1 week

The gradual dosage tapering schedule for those taking more than 50 mg daily equivalent of diazepam is presented in the slide.

Ideally, after receiving advice and information from the physician and giving full consent, the patient should be in control of his/her own personal reduction rate and proceed at whatever pace is tolerable. A personalised approach is likely to result in fewer patients dropping out or declining to participate in withdrawal trials.

The development of convulsions can usually be prevented by moderate doses of diazepam (10 mg), but some authors report benefit from carbamazepine or sodium valproate.

Benzodiazepine dose-reduction schedule (<50 mg/day diazepam equivalent)

Reducing doses*	Daily dose
Starting dose	40 mg (10 mg four times daily)
First reduction	30 mg four times daily (10 mg, 5 mg, 5 mg, 10 mg)
Second reduction	20 mg three times daily (5 mg, 5 mg, 10 mg)
Third reduction	10 mg (once at night)
Fourth reduction	5 mg (once at night)

*The interval between dose reductions should be at least 1 week

The degree of psychological support required during withdrawal is variable and may range from a single brief consultation to more formal cognitive, behavioural or other therapies directed towards anxiety management and stress-coping strategies. Support when needed should be available both during and after withdrawal since patients may remain vulnerable to stress for some months. Information about withdrawal symptoms should be supplied and referral to a support organisation (e.g. NA groups) is often helpful.

Psychological Support During Withdrawal

- The degree of psychological support required during withdrawal is variable. It may require:
- Brief consultation
- Cognitive, behavioural or other therapies directed towards anxiety management and stress-coping strategies
- Support after withdrawal for stress management
- Referral to a support organisations (NA groups) is often helpful

STEP 4: Conclusion

- Conclude the session by giving the key messages

Key messages

Prevention of benzodiazepine dependence can be achieved by adherence to short-term use.

Particular care should be taken in prescribing benzodiazepines for vulnerable patients such as those with alcohol or drug dependence.

Abrupt discontinuation of benzodiazepines in dependent persons can lead to confusion, seizures, delirium and death.

The aim of management of benzodiazepine dependence is safe withdrawal (graded reduction) and cessation of use.

Opioid Withdrawals

OBJECTIVE

To educate the participants on effective management of opioid withdrawals.

EXPECTED OUTCOME

By the end of the session the participants would be able to understand:

- The withdrawal symptoms of opioids
- How to provide relief from distressing withdrawal symptoms of opioids
- The importance of linking people to comprehensive drug treatment services following treatment for withdrawal

DURATION

75 minutes

SESSION CONTENT

- What is detoxification?
- Withdrawal symptoms of opioids
- Management of opioid withdrawal symptoms
- Linking with drug treatment and rehabilitation services following detoxification

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation

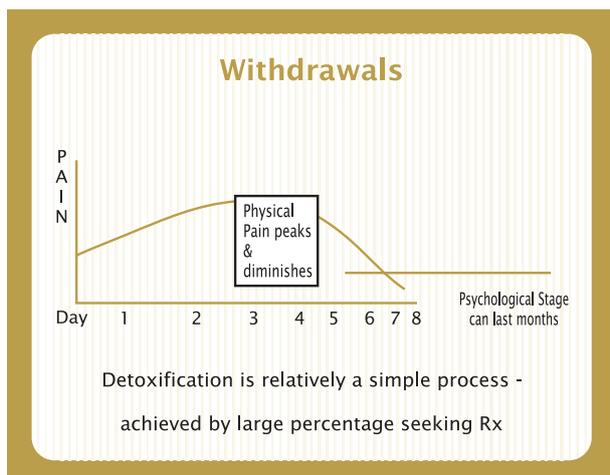
MATERIALS / PREPARATION REQUIRED

- Projector
- Laptop
- PowerPoint presentation
- White board/Flip chart
- Marker pen

PROCESS

Step 1: Discussion on opioid withdrawals

- Generate a discussion on the signs and symptoms of opioid withdrawal. Sum up by presenting the following slides



Opioid receptors are present in most parts of the body and so withdrawal from opioids affects nearly the entire systems. Physical symptoms and signs of opioid withdrawal generally appear after six hours to one day and peak 36-72 hours after the last dose of heroin or other opioids.

Psychological symptoms continue for weeks and sometimes months afterwards. Neurobiological changes to the brain resulting from long-term opioid dependence may persist even longer, making these individuals always at risk for relapse.

- ### Opioid Withdrawal
- Sweating
 - Watering eyes
 - Running nose
 - Yawning
 - Hot and cold flushes
 - Goose bumps
 - Tremors (shakes)
 - Loss of appetite
 - Abdominal cramps
 - Nausea and vomiting
 - Diarrhoea
 - Increased bowel sounds
 - Sleep disturbance
 - Restlessness
 - Generalised aches and pains
 - Rapid heart rate
 - Elevated blood pressure
 - Dilated pupils

The physical signs/symptoms include:

Lacrimation, rhinorrhea, yawning, dilated pupils, nausea/vomiting, diaphoresis, chills, piloerection, mild tachycardia and/or hypertension, myalgias, abdominal cramps, diarrhea

The psychological symptoms include:

Anxiety and dysphoria Craving for opioids restlessness, insomnia, fatigue

Severity of withdrawal symptoms can also be quantified with Clinical Opiate Withdrawal Scale (COWS).

- ### Opioid Withdrawal Syndrome
- Peaks between 36-72 hours
 - **Anticipatory phase (3-6 hrs):** fear of withdrawal, irritability, inability to concentrate, drug seeking and anxiety
 - **Early phase (8-10 hrs):** restlessness, yawning, nasal stuffiness, rhinorrhea, lacrimation, dilated pupils, stomach cramps, craving
 - **Fully developed (1-3 days):** goose pimples (pilo erection), vomiting, diarrhea, muscle spasm, muscle aches, high blood pressure, tachycardia, fever, chills, intense craving
 - **Abstinence:** Low blood pressure, bradycardia, insomnia, lack of energy, lack of appetite, craving

Withdrawal generally appears after 6-24 hours and peaks at 36-72 hours after the last dose of heroin or morphine-related opioids.

There are different phases during opioid withdrawal and they are shown in the slide

The intensity, peak and course of withdrawal can differ between short-acting and long-acting opioids

Important points to note are:

Methadone withdrawal may take longer to manifest clinically (36–72h from last dose) than withdrawal from other opioids, but may persist for 2–3 weeks or even longer.

Physical withdrawal symptoms from heroin generally resolve by 7–10 days.

Psychological withdrawal symptoms (dysphoria, insomnia) may last weeks to months.

Drug	Duration of effects	Onset of withdrawal from the last dose	Peak withdrawal effects	Duration of withdrawal
Heroin	4 hours	8–12 hours	36–72 hours	7–10 days
Morphine	4–5 hours	8–12 hours	36–72 hours	7–10 days
Codeine	4 hours	8–12 hours	36–72 hours	7–10 days
Methadone	8–12 hours	36–72 hours	96–144 hours	10–20 days

Step 2: Discussion on opioid withdrawals treatment

- Discuss and present the following slides on management of opioid withdrawal.

Opioid withdrawal is not life threatening in otherwise healthy individuals. However, the risk of serious medical complications is higher in pregnant women. The pregnancy-associated risks are spontaneous abortion and pre-term labour.

Patients should drink plenty of fluids during withdrawal to replace the fluids lost due to excessive sweating and diarrhoea (health workers should be aware of the possibility of compromised renal function). Vitamin supplements can also be provided. For mild opioid withdrawal, supportive care and symptom management suffice. For moderate and severe withdrawal, pharmacological treatment is required.

When opioids are stopped, the severity of withdrawal symptoms depends on a number of factors:

- Amount of opioids used daily: In general, the more opioids ingested daily, the more severe the withdrawal syndrome.
- Duration and regularity of use: In general, the more intermittent the drug use, the less severe the withdrawal. Consistent use over a longer duration appears to produce more severe symptoms.
- Psychological and individual factors: Personality and state of mind can influence the severity of withdrawal, as can general physical health and ability to cope with stress.

<ul style="list-style-type: none"> Both methadone and buprenorphine are listed on the WHO Essential Medicines List They are highly effective in the management of opioid dependency as part of a maintenance regime Evidence of effective opioid withdrawal management also exists for methadone and buprenorphine Opioid withdrawal is not a life-threatening condition, but untreated opioid toxicity can be fatal
--

<ul style="list-style-type: none"> Opioid type Opioid dose Duration of regular opioid use Prior experience of withdrawal and expectancy Concomitant medical or psychiatric conditions Setting

Withdrawal Services Objectives

- Alleviate the discomfort of heroin withdrawal
- Prevent the development of complications
- Interrupt a pattern of heavy and regular use
- Facilitate linkages to post withdrawal services

The withdrawal services (detoxification) have the following objectives:

They help to: Alleviate the discomfort of heroin withdrawal by providing support and appropriate medication

Prevent the development of complications

Interrupt a pattern of heavy and regular use of heroin and other opioids

Facilitate linkages to post withdrawal services such as drug dependence treatment and rehabilitation services

Setting

- Outpatient services
- In-patient services in a general hospital
- In-patient services in a psychiatric facility
- Residential settings
- Home based withdrawal settings
- Community withdrawal unit
- Community detoxification camps

The detoxification can be organised many settings. The settings include outpatient services, drop-in-centres, homes, community withdrawal unit and detoxification camps.

It is cost effective to provide outpatient services and community based withdrawal services.

In-patient withdrawal is recommended in the following circumstances:

- Poly drug use
- Psychiatric co-morbidity
- Poor social support
- Previous unsuccessful outpatient withdrawals
- Patient preference

Supportive Care

- Information relating to nature and duration of withdrawals
- Strategies for coping with symptoms
- Role of medications
- Supportive counselling
- Defer addressing complex personal issues
- Crisis intervention addressing accommodation, personal safety, welfare issues

It is necessary to organise supportive care during the withdrawal treatment. The nature of opioid withdrawals and the duration of the same must be adequately explained to the patients. The various strategies that would be adopted to alleviate the distressing symptoms should be clearly communicated to the patient. The role of medication(s) in alleviating the withdrawal symptoms needs to be informed to the patients. Additionally, supportive counselling and family support need to be provided. While complex personal problems are not addressed at this stage, it is relevant to focus on crisis interventions addressing issues related to housing, personal safety, medical care, nutrition and welfare.

The three pharmacological approaches to assisting withdrawal from opioids are:

- Tapered sub lingual buprenorphine
- Tapered oral methadone
- Tapered oral adrenergicalpha-2 agonists

The evidence for symptomatic treatment is lacking.

In some settings, opioid withdrawal is managed with the help of anti-psychotics. There is lack of evidence to support this strategy. Use of antipsychotics can result in the following: confusion, drowsiness, rigidity, fall in blood pressure, parkinsonian type tremors, “robot”-like reduced movements and delirium.

Clonidine is α - adrenergic drug, used in the treatment of hypertension. It is effective in alleviating distressing autonomic features in opioid withdrawal syndrome. They include: diarrhoea, nausea, abdominal cramps, sweating, rhinorrhoea. They are less effective in controlling symptoms such as sleep disturbance, body aches, pain and craving for heroin/opioids. There is a need to limit access to the medication as overdose of this medication can be dangerous.

Management of Opioid Withdrawal

- Pharmacological treatment
 - Opioids: Buprenorphine and methadone
 - Non-opioids: Clonidine
- Symptomatic treatment
 - Pain and muscle cramps: NSAID
 - Abdominal cramps: Dicyclomine
 - Nausea or vomiting: Prochlorpromazine, Ondansetron
 - Diarrhoea: Loperamide

Symptomatic Medications for Opioid Withdrawal: Use of Anti Psychotics

- Confusion
- Drowsiness
- Rigidity
- Fall in blood pressure
- Tremors
- “Robot”-like reduced movements
- Delirium

Symptomatic Medications for Opioid Withdrawal: Clonidine

- α - adrenergic drug
- Effective in reducing ‘autonomic’ features
- (diarrhoea, nausea, abdominal cramps, sweating, rhinorrhoea)
- Less effective in sleep disturbance, aches, cravings
- Limit access to large amounts of medication (overdose)

Clonidine

Precautions

- Use only if patient is closely monitored
- Use with caution in depression, cardiovascular disease, renal disease
- Use with caution along with CNS sedatives

Contraindications

- Severe brady-arrhythmia
- Hypersensitivity

Clonidine is used when it is possible to closely monitor the patient.

The drug should be used cautiously in persons with depressive disorders, cardiovascular disease and renal disease. Caution should be exercised in prescribing along with other CNS sedatives.

The contraindications for the drug are: severe brady-arrhythmia and hypersensitivity.

Clonidine is anti-hypertensive drug and can cause significant reduction blood pressure.

Clonidine

Side Effects

- Hypotension
 - Dizziness, fainting, light-headedness
- Fatigue
- Lethargy
- Sedation
- Dry mouth
- Severe arrhythmia (overdose)

Monitoring of blood pressure (BP) is required when administering clonidine. If the BP falls below 90/60 mm Hg, then the dose of the drug should be reduced or even stopped. If the heart rate reaches <60, it is advised not to prescribe it further.

Other side effects of the drug include: fatigue, lethargy, sedation, dry mouth and severe arrhythmia (in overdose).

Where available, lofexidine should be used in preference to clonidine, particularly in outpatient settings, because it has less adverse effects.

Clonidine

Dosing regimes

- Upward dose titration according to severity of withdrawals
- Maximum daily dose = 12 mcg/kg/day, given in 3 or 4 divided doses
 - Days 1-3: 300-400 mcg/day (<60 kg)
 - Day 4: 75% of day 3 dose
 - Day 5: 50% of Day 3 dose
 - Day 6: 25% of Day 3 dose

The dosing regime for clonidine is presented in the slide.

Naltrexone is an opioid antagonist and in opioid dependent persons, this can precipitate withdrawals. At times clonidine and naltrexone are combined together. As naltrexone accelerates the withdrawals, combination of these drugs helps to reduce the duration of withdrawal treatment.

Clonidine plus Naltrexone in Detoxification

- Naltrexone, an opioid antagonist, precipitates withdrawals
- Naltrexone accelerates the withdrawal period
- Combination helps to reduce the duration of detox treatment

Tapered buprenorphine is used in the management of opioid withdrawal. An important aspect of buprenorphine's pharmacology is its high affinity for opioid receptors. As a result it prevents heroin and other opioids from binding to the receptors and thus attenuates their effects. This is more pronounced at higher doses of buprenorphine and many patients even refer to it as a 'blocker'. The other major implication of its high affinity is that it will displace any opioid from the receptor when it is started as a treatment. As a partial antagonist, it activates receptors less than a full antagonist, resulting in a relative drop in receptor activation and therefore a degree of 'precipitated opioid withdrawal'. This can be prevented by delaying starting buprenorphine until the individual is in opioid withdrawal. Precipitated withdrawal is more likely to occur during treatment with withdrawal from long acting opioid such as methadone.

Buprenorphine in Opioid Withdrawal Management

- Tapered buprenorphine is used in the management of opioid withdrawal.
- Buprenorphine has strong affinity for opioid receptors and can displace any opioid from the receptor when it is started as a treatment
- Thus precipitated withdrawal can occur if treatment is initiated too early
- Precipitated withdrawals are more likely to occur when used in treatment of long acting opioids such as methadone

The tapered buprenorphine dose is shown in the slide.

There could be variations to the taper length and dosage depending on the individual. In some cases, it is preferable to taper over 14 days.

The doses from day 1– 14 are 4, 8, 12–16, 12–16, 12, 10, 8, 6, 4, 4, 2, 2, 1 and 0.5 mg respectively

Buprenorphine for Heroin Withdrawal

Partial opioid agonist useful in managing heroin withdrawal.

- Day 1: 4 to 8 mg
- Day 2: 4 to 12 mg
- Day 3: 4 to 16 mg
- Day 4: 2 to 12 mg
- Day 5: 0 to 8 mg
- Day 6: 0 to 4 mg
- Day 7: 0 to 2 mg
- Day 8: 0 to 1 mg

For the management of opioid withdrawal, tapered doses of opioid agonists? should generally be used, although alpha-2 adrenergic agonists may also be used.

Evidence Based Opioid Withdrawal Management

- For the management of opioid withdrawal, tapered doses of opioid agonists should generally be used
- Buprenorphine and methadone are both recommended
- Buprenorphine has the best pharmacological profile for use in withdrawal
- It reduces the risk of rebound withdrawal when opioids are ceased
- While buprenorphine is probably slightly more effective, it is more expensive

WHO: Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence, 2009

- Strength of recommendation – standard
- Quality of evidence – moderate
- Remarks – Buprenorphine and methadone are both recommended in the management of opioid withdrawal. As a partial antagonist?with slow receptor dissociation, buprenorphine has the best pharmacological profile for use in withdrawal and reducing the risk of rebound withdrawal when opioids are ceased. While buprenorphine is probably slightly more effective, it is more expensive.

Frequent Monitoring and Review

Review by health worker daily

Monitor:

- General progress, ongoing motivation, complications or difficulties encountered
- Severity of withdrawal
- Reasons identified by the patient for drug use
- Response to medications, side effects

While on treatment for withdrawal, it is necessary to monitor and review the progress.

Monitoring is done by the healthcare worker to evaluate the general progress made, the ongoing motivation of the individual to stay away from the drug and the challenges faced during the phase. The assessment of severity (using COWS) will help to decide on the strategy as well as the dose of the medication employed. It is also important to review the side effects and the response to the medication. If the person has relapsed, it is important to identify the reasons for it.

Limitations of Drug Detoxification

- Not treatment by itself
- Initiation to treatment
- Need to be connected to post withdrawal services
- Relapse following detox only is fairly common

All forms of detoxification as treatment for opioid dependence have high relapse rates.

Detoxification by itself is not treatment and majority will relapse immediately following detoxification. It should be considered as initiation to treatment and in all cases should be linked with post withdrawal services.

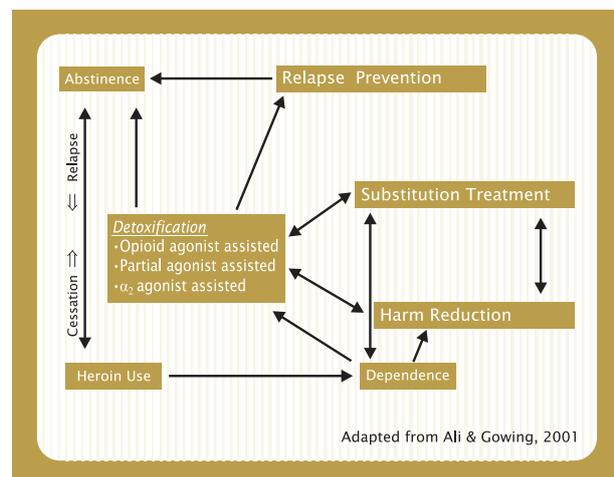
STEP 3: Discussion on post-detoxification care and treatment

- Begin the discussion by repeating that effective detoxification includes not only medical stabilisation of the patient and safe and humane withdrawal from drugs or alcohol, but also the entry into treatment.
- All patients completing detoxification must be connected to after-care psychosocial support services. Following the acute withdrawal phase, protracted withdrawal can last for a few months. This phase is characterised by significant craving for the preferred opioid and a diminished sense of well-being. Relapse is extremely common following detoxification in those not provided with adequate psychosocial support.

All drug dependent persons require long-term care and support and they can benefit immensely with psychosocial interventions, including relapse prevention. Those with moderate to severe opioid dependency and a history of injecting should be considered for opioid substitution therapy with methadone or buprenorphine.

It is necessary to connect persons who have been successfully detoxified to drug treatment services such as relapse prevention and abstinence oriented approaches.

For those who fail with attempts to detoxify, it is better to refer them to substitution therapy or other harm reduction services.

**STEP 4: Conclusion**

- Conclude the session by giving the key messages

Key messages

Opioid withdrawal, though very distressing is not life threatening in otherwise healthy individuals.

For the management of opioid withdrawal, tapered doses of opioid agonists (with buprenorphine or methadone) should generally be used, although alpha-2 adrenergic agonists may also be used.

Buprenorphine has the best pharmacological profile for use in withdrawal, reducing the risk of rebound withdrawal when opioids are ceased

All forms of detoxification as treatment for opioid dependence have high relapse rates and hence post withdrawal services are critical.

Networking and Referrals

OBJECTIVE

To enable the participants to understand the objectives of establishing referrals/networking and the process of building linkages.

EXPECTED OUTCOME

By the end of the session the participants will be able to:

- Know the multiple needs of IDUs
- Understand the importance of referral for various services

DURATION

30 minutes

SESSION CONTENT

- Multiple problems faced by IDUs
- Referral linkages

SUGGESTED TRAINING METHOD

- Discussion
- PowerPoint presentation
- Activity

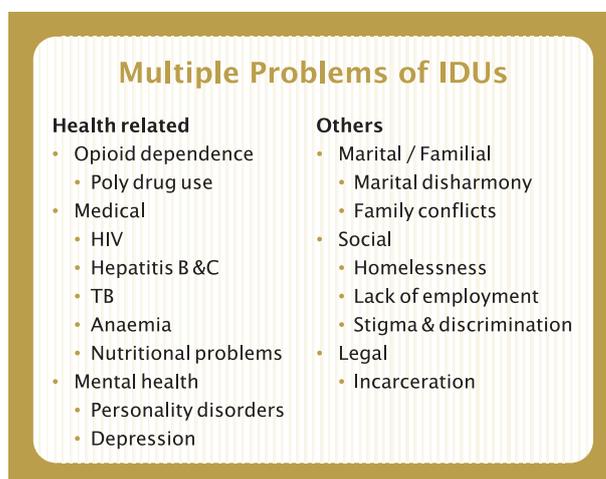
MATERIALS / PREPARATION REQUIRED

- Projector
- Laptop
- PowerPoint presentation
- Whiteboard/Flipchart
- Marker pens

PROCESS

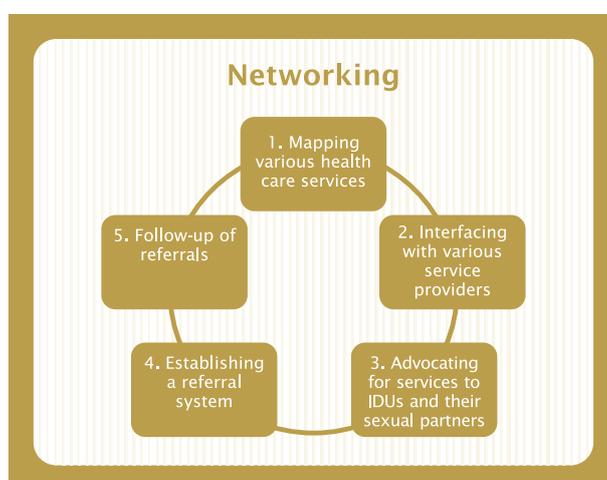
Step 1: Multiple Problems of Drug Users

- Ask the participants to recall the session on harms related to drug use and list the multiple problems faced by drug users. While noting down the responses, arrange the problems under various headings as shown in the following slide.



Step 2: Networking for Good Referral System

- Ask the participants which among the above noted problems can or cannot be taken care of in the IDU TIs where they work. List them separately on a chart paper. Then ask them how these services can be provided. In this manner, lead them to the concept of referral systems.
- Now ask the participants whether a simple referral to various services would be enough and why they think so. Emphasise the following points:
 - Mere referrals would not help, as most of these referrals would not be honoured.
 - As the clients are IDUs, the referred agency may not be sufficiently interested/caring to provide services. A strong networking would be required to establish a successful referral system.



- The facilitator should make use of the following notes to explain the above slide:

NOTES:

The importance of strong referral systems cannot be overemphasised. An inventory of local services for referral relevant to the needs of persons who are injecting drug users should be conducted by the TI team. The staff should be aware of all the services so that they can pass on this information on to the patients attending the TI. Relevant services include most health (including mental health) and welfare agencies, including those providing emergency services. Contact details of the agencies providing such help should be readily available to the peer workers to facilitate referral. It is better to establish formalised linkages with the other services through a memorandum of understanding.

An assessment of opioid dependent individuals should reveal the various needs of the IDUs. After assessing the needs, it is important to prioritise and arrange for linking with most needed services. As drug users feel marginalised, they would be more comfortable if accompanied by peers while accessing such services. Also, since many conditions require long-term help, follow-up with these agencies is important. The peers need to ensure that the drug users continue with the advice, care and support provided by these agencies.

Step 3: Referral Linkages

Referral Linkages

- Mental health services
- Drug use treatment facilities (detoxification and rehabilitation)
- Nutritional support
- Tuberculosis treatment services (TB-DOTS)
- Health services such as secondary and tertiary care hospitals
- Opioid substitution therapy programmes

The key services for which referral linkages need to be established include: Mental health services, drug use treatment facilities (detoxification and rehabilitation); nutritional support; tuberculosis treatment services (TB-DOTS); health services such as secondary and tertiary care hospitals; opioid substitution therapy programmes; and ART centre.

STEP 4: Activity

- The facilitator discusses with the participants various measures that need to be taken in order to ensure that drug users' needs are addressed adequately for co-morbid issues.
 - A) Brainstorm with the participants and ask them to list all the problems that drug users encounter. Tell the participants to list the problems in the order of priority.
 - B) Ask them how these problems can be effectively addressed
 - What can be done at the individual level? (e.g. positive living, reduce smoking, exercise)
 - What can be done at the family level? (e.g. food, cooperation by the family)

- What can be done at the peer support level? (e.g. emotional and social support)
- What can be done at the TI clinic? (e.g. addressing common medical problems)
- What can be done at the OST clinic? (e.g. withdrawal treatment)
- Which ailments or tests require attention in a specialised clinic or agency or service? (e.g. TB, depression, HCV testing)

C) Ask the participants to list the names of the agencies/services in their geographical location that have the potential to offer services for IDUs.

Name of the Agencies	Type of Services Offered
.....
.....
.....
.....

- D) Ask the participants to list the barriers and obstacles in accessing these services.
- E) Ask the participants to brainstorm on the ways to ensure that referral linkages are effectively made and list them.
- F) Ask the participants how they would ensure follow-up with these services

The facilitator elicits responses from the participants on all of the above, clarifies them and concludes by summarising on the flip chart.

STEP 5: Conclusion

- Conclude the session by giving the key messages

Key messages

Comprehensive care and support for co-morbidities among injecting drug users can be achieved through proper networking for good referral system.

The key services for which referral linkages need to be established include: Mental health services, drug use treatment facilities (detoxification and rehabilitation), nutritional support, tuberculosis treatment services, health services such as secondary and tertiary care hospitals

The clinical staff should be familiar with the names of the agencies/services in their geographical location that have the potential to offer services to IDUs to address the co-morbid issues

Evaluation and Conclusion

OBJECTIVE

- To help the facilitator and participants assess the knowledge acquired and change in attitude after the workshop
- To conclude the training programme

EXPECTED OUTCOME

At the end of the session, the participants would be able to:

- Clarify their doubts, if any
- Provide comments, suggestions or inputs
- To give feedback on the workshop – methods and content

DURATION

60 minutes

SESSION CONTENT

- Clarifications on questions from participants
- Comments, suggestions and inputs from participants
- Feedback on the workshop

MATERIALS / PREPARATION REQUIRED

- Before the session, ensure that adequate copies of the questionnaire (given in Annexure 1) for conducting the post-training evaluation are available. The answers to the questions are also provided therein.
- Feedback forms –Day 3
- Training feedback forms

PROCESS

Step 1: Post-training

- Remind the participants that at the beginning of the training workshop they had answered a questionnaire
- State that the 3–day training has added to their knowledge and has enhanced their skills in working on outreach for IDUs.
- Inform the participants that before concluding the workshop they need to answer the same questionnaire again.
- Distribute the questionnaire – one for each participant. Give them 15 minutes to complete it, at all times ensuring that they participants are answering individually and not with assistance from their peers.
- Collect the filled–in questionnaires and thank the participants.

Step 2: Conclude

- Encourage some of the participants to say a few words about their experience at the workshop and their learning.
- Thank the participants for their active participation in the workshop.

As this is the last session of Day 3, distribute the feedback forms (Feedback Form – Day 3) and ask the participants to provide feedback on the sessions conducted during the day.

Annexures

1. Pre and Post-training Questionnaire
2. Training Agenda
3. Day-wise Feedback Forms

Annexure 1

Pre and Post-training Questionnaire

Instructions: Please choose the correct response or responses from the options provided.

Remember: There may be more than one correct option!

1. **Of the following, which one of the mental mechanisms is not healthy?**
 - a. Altruism
 - b. Humour
 - c. Sublimation
 - d. Intellectualisation

2. **Why do drug use disorders and mental (psychiatric) disorders co-occur?**
 - a. Overlapping genetic vulnerabilities
 - b. Overlapping environmental triggers
 - c. Drug use disorders and psychiatric disorders are developmental disorders
 - d. All of the above

3. **The important components in clinical assessment that help to arrive at a psychiatric diagnosis are -**
 - a. Psychiatric history and mental state examination
 - b. Mental state examination and psychological investigations
 - c. Psychiatric history, mental state examination and physical examination
 - d. Physical investigations and psychological tests

4. **Withdrawal from substance (alcohol and drugs) use can cause:**
 - a. Psychotic episode
 - b. Anxiety
 - c. Delirium
 - d. All of the above

- 5. The following are risk factors for suicide in depressed persons except**
- Drug use
 - Hopelessness and guilt
 - Middle age
 - Prior attempts
- 6. The following personality disorders are prone for drug use**
- Antisocial personality disorder
 - Obsessive-compulsive personality disorder
 - Borderline personality disorder
 - Schizoid personality disorder
- 7. The key feature of panic anxiety is**
- Inability to relax
 - Trouble attending to the surroundings
 - The only concern is to escape from the place where the anxiety is occurring
 - Muscle tension
- 8. Depression commonly co-exists with**
- Obsession
 - Delusion
 - Anxiety
 - Dementia
- 9. Which of the following statements is not true about Tuberculosis?**
- The vast majority of TB cases can be cured when medicines are provided and taken properly
 - Tuberculosis is uncommon amongst HIV uninfected drug users
 - Active, drug-sensitive TB disease is treated with a standard six-month course of four antimicrobial drugs
 - Diagnosis of TB is based on sputum smear microscopy

- 10. Which of the following is TRUE about nutrition and drug use?**
- a. Only HIV infected drug users have malnutrition
 - b. Co-morbid conditions such as Hepatitis C do not contribute to poor nutritional status
 - c. Drug dependence affects access to food and food selection
 - d. Poor nutritional status at the start of ART is not a predictor of mortality among HIV-positive injecting drug users
- 11. Which of the following substance withdrawal is most dangerous leading to adverse consequences?**
- a. Cannabis withdrawal
 - b. Benzodiazepine withdrawal
 - c. Heroin withdrawal
 - d. None of the above
- 12. Which one of the drugs mentioned below is the safest and most effective treatment for opioid withdrawal?**
- a. Clonidine
 - b. Dextropropoxyphene
 - c. Buprenorphine
 - d. Methadone
- 13. Which of the following drugs is ideal in the management of alcohol withdrawal?**
- a. Short acting benzodiazepines
 - b. Haloperidol
 - c. Long acting benzodiazepines
 - d. Thiamine
- 14. All of the following statements regarding benzodiazepine dependence are true, except:**
- a. Benzodiazepines should not be prescribed to someone with a history of drug misuse and dependence
 - b. Abrupt withdrawal of benzodiazepines can be serious with complications such as seizures and death
 - c. Long acting benzodiazepines produce peak withdrawals within 6–12 hours after stopping
 - d. Anxiety is a symptom of benzodiazepine withdrawal

15. Which of the following is easily caused by needle stick injury?

- a. Hepatitis C
- b. Hepatitis B
- c. HIV
- d. All of the above

16. Which of the following statements are TRUE?

- a. It is beneficial for HCV infected opioid injectors to receive OST
- b. Drugs like interferon and riboverin are used to treat HCV
- c. ART delays the progression of HCV liver disease in HCV-HIV co-infection
- d. All Hepatitis C infected persons develop symptoms within 5–10 years

For Facilitator: Answers to Pre- and Post-training Questionnaire

1. d	7. c	13. c
2. d	8. c	14. c
3. c	9. b	15. b
4. d	10. c	16. d
5. c	11. b	
6. a and c	12. c	

Annexure 2

Management of Co-morbid Conditions Among Injecting Drug Users

(Doctors, nurses and counsellors)

Time	Topic	Issues to be Covered	Methodology of Training
DAY ONE			
9.00 – 9.30 am	▪ Registration of the participants		
9.30 – 10.15 am	Inaugural ceremony		
10.15 – 10.30 am	<i>Health break</i>		
10.30 – 11.00 am	<ul style="list-style-type: none"> ▪ Introduction to the training programme ▪ Expectations from the training workshop 	<ul style="list-style-type: none"> ▪ Discuss the agenda with the participants ▪ Feedback from the participants on the agenda 	
11.00 – 11.15 am	Pre training test		Questionnaire
11.15 – 12.00 pm	Co-morbidities among IDUs (Overview)	<ul style="list-style-type: none"> ▪ What is co-morbidity? ▪ Why IDUs are more vulnerable to co-morbidities? ▪ What are the common co-morbidities in IDUs? 	Presentation followed by discussion
12.00 – 1.00 pm	Mental Health and Mental Illness (Psychiatric Disorder)	<ul style="list-style-type: none"> ▪ What is mental health? ▪ Defence mechanisms ▪ What is Mental illness? 	Presentation followed by discussion
1.00 – 2.00 pm	<i>Lunch break</i>		
2.00 – 3.00 pm	Mental Illnesses (Psychiatric Disorders) – Clinical Assessment	<ul style="list-style-type: none"> ▪ Steps of assessment, and diagnose mental illnesses ▪ Overview of management 	Presentation followed by discussion
3.00 – 4.00 pm	Mental Illnesses (Psychiatric Disorders) – Signs and Symptoms	<ul style="list-style-type: none"> ▪ Signs and symptoms of mental illness ▪ Types of mental disorders 	Presentation followed by discussion
4.00 – 4.15 pm	<i>Health break</i>		
4.15 – 5.15 pm	Depression and Drug use	<ul style="list-style-type: none"> ▪ Diagnosis of depression ▪ Management approaches to depression 	Presentation followed by discussion
5.15 – 5.45 pm	Question/answer		
DAY TWO			
9.00 – 9.15 am	Recap of Day one sessions		
9.15 – 10.15 am	Anxiety Disorder and Drug use	<ul style="list-style-type: none"> ▪ Diagnosis of anxiety disorder ▪ Management approaches to anxiety disorders 	Presentation and discussion
10.15 – 11.15 am	Psychotic disorders and Drug use	<ul style="list-style-type: none"> ▪ Diagnosis of psychotic disorders in IDUs ▪ Management approaches to psychosis 	Presentation and discussion
11.15 – 11.30 am	<i>Health break</i>		
11.30 – 12.00 pm	Personality Disorder and Drug use	<ul style="list-style-type: none"> ▪ Personality disorder in relation to IDU ▪ Management approach 	Presentation and discussion

A Manual to Train Clinical Staff on Co-morbidities Associated with Injecting Drug Use

Time	Topic	Issues to be Covered	Methodology of Training
12.00 –12.30 pm	Other Psychiatric Disorders and Drug use	<ul style="list-style-type: none"> ▪ Sleep disorder – Insomnia ▪ Psychosexual dysfunction 	Presentation and discussion
12.30 – 1.30 pm	Infective Hepatitis: Hepatitis C & B	<ul style="list-style-type: none"> ▪ Overview ▪ Signs and symptoms ▪ Diagnosis of Hepatitis 	Presentation and discussion
1.30 – 2.30 pm	<i>Lunch break</i>		
2.30 – 3.30 pm	Infective Hepatitis: Hepatitis C & B	Prevention and Management of Hepatitis B and C	
3.30 – 4.30 pm	Understanding and Educating the Client on TB	<ul style="list-style-type: none"> ▪ Signs and symptoms ▪ Management of TB ▪ Special issues with IDU 	Presentation and discussion
4.30 – 4.45 pm	<i>Health break</i>		
4.45 – 5.15 pm	Other Physical Conditions (Anaemia and Nutrition)	<ul style="list-style-type: none"> ▪ Educating the client on the prevention of anaemia and nutrition ▪ Management issues 	Presentation and discussion
5.15 – 5.30 pm	Other Common Physical Symptoms (Constipation, Pain and Poor Oral Health)	<ul style="list-style-type: none"> ▪ Educating the client on the prevention of constipation and poor oral health ▪ Management of acute pain 	Presentation and discussion
DAY THREE			
9.00 – 9.15 am	Recap of Day two sessions		
9.15 – 10.30 am	Alcohol Use Disorder	<ul style="list-style-type: none"> ▪ Assessment and diagnosis ▪ Management of alcohol withdrawals 	Presentation and discussion
10.30 – 10.45 am	<i>Health break</i>		
10.45 – 11.45 am	Benzodiazepine Use Disorder	<ul style="list-style-type: none"> ▪ Assessment and diagnosis ▪ Management of benzodiazepine withdrawals 	Presentation and discussion
11.45 – 1.00 pm	Opioid Withdrawals	<ul style="list-style-type: none"> ▪ Signs and symptoms ▪ Management of opioid withdrawals 	Presentation and discussion
1.00 – 2.00 pm	<i>Lunch break</i>		
2.00 –3.00 pm	Networking Referral and Linkages		Presentation and discussion
3.00 – 3.30 pm	Evaluation/Post-training test		
3.30 –3.45 pm	<i>Health break</i>		
3.45 – 4.30 pm	Clarifications/ Comments		
4.30 – 5.30 pm	Valedictory Session		

Annexure 3

Day-1 Feedback Forms

Session	Particulars	Feedback			Remarks*
		 Good	 Ok	 Poor	
Overall response to sessions					
1	Introduction to the workshop agenda and expectations from the workshop				
2	Co-morbidities amongst Injecting Drug Users - Overview				
3	Mental Health and Mental Illness (Psychiatric Disorder)				
4	Mental Illnesses (Psychiatric Disorders) - Clinical Assessment				
5	Mental Illnesses (Psychiatric Disorders) - Signs and Symptoms				
6	Depression and Drug use				

Most useful topics

.....

Topics not very useful

.....

Any other comments

.....

Please comment on the duration, content and methodology

Day-2 Feedback Forms

Session	Particulars	Feedback			Remarks*
		 Good	 Ok	 Poor	
Overall response to sessions					
1	Anxiety Disorder and Drug use				
2	Psychotic Disorders and Drug use				
3	Personality Disorders and Drug use				
4	Other Psychiatric Disorders and Drug use				
5	Infective hepatitis: Hepatitis band C				
6	Understanding and Educating the Client on TB				
7	Other Physical Conditions (Anaemia and Nutritional Disorders)				
8	Other Common Physical Symptoms (Constipation, Pain and Poor Oral Health)				

Most useful topics

.....

Topics not very useful

.....

Any other comments

.....

Please comment on the duration, content and methodology

Day-3 Feedback Forms

Session	Particulars	Feedback			Remarks*
		 Good	 Ok	 Poor	
Overall response to sessions					
1	Alcohol Use Disorder				
2	Benzodiazepine Use Disorder				
3	Opioid Withdrawals				
4	Networking Referral and Linkages				
5	Evaluation/Post-training test				
6	Conclusion and Valedictory function				

Most useful topics

.....

Topics not very useful

.....

Any other comments

.....

Please comment on the duration, content and methodology

Further Reading Material

- 1) Pocket Essentials of Psychiatry 3rd Edition. Basant K Puri. Series Editors: Parveen Kumar and Micael Clark. Saunders, Elsevier, 2008.
- 2) Kaplan and Sadock's Synopsis of Psychiatry: Behavioral Sciences, Clinical Psychiatry. Sadock BJ (Author), Kaplan HI (Editor). Lippincott Williams & Wilkins,US; 8th edition
- 3) Schuckit MA. Alcohol-use disorders. Lancet. 2009;373:492-501
- 4) Treatment Action Group. Guide to Hepatitis C for people living with HIV: testing, co-infection, treatment, and support. Treatment Action Group, New York, 2009
- 5) World Health Organization. Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence, World Health Organization, 2009.

