



Ministry of Health



# Management of Mental Health Problems

A Guide for the Doctor in the Community

A compilation of the materials used in the Continuing Professional Development Programs in Northern, Eastern & Sabaragamuwa Provinces



The Asia Foundation



World Health  
Organization

World Health Organization  
Sri Lanka

# **Management of Mental Health Problems A Guide for the Doctor in the Community**

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A compilation of the materials used in the  
Continuing Professional Development Programs

*Organized by*

the Sri Lanka College of Psychiatrists in collaboration with Ministry of Health,  
The Asia Foundation, Voluntary Service Overseas & the World Health Organization  
in Northern, Eastern & Sabaragamuwa Provinces

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## **Forward**

A holistic approach to health should always include mental health. The Ministry of Health therefore gives due priority to this important aspect of health care that benefits the health of the nation.

The focus is on providing this care in the community. The services should be easily accessible and have a wide acceptance in the community. The medical officers of mental health appointed by the Ministry of Health are the primary doctors providing this care under the supervision of Consultant Psychiatrists.

I am pleased that the Sri Lanka College of Psychiatrists has organized the Continuing Professional Development (CPD) Programme to particularly address the educational needs of this group of doctors.

I am told that at all stages of development of the Programme, the medical officers in the provinces were consulted: The topics and the resource persons were selected by them. A mix of consultants from the provinces and from the Centre conducted the teaching.

The Ministry of health has been happy to collaborate with the World Health Organization, The Asia Foundation, Voluntary Services Overseas ( Sri Lanka) and The College of Psychiatrists to bring this opportunity to these medical officers in the provinces.

I wish this initiative, which has been conducted in the Northern, Eastern and Sabaragamuwa provinces, all success. It is my fervent hope that it will be extended to all the other provinces as well.

**Dr. Palitha G. Mahipala**

Director General of Health Services  
Ministry of Health



## **Introduction**

This book is the result of a collaborative effort between the College of Psychiatrists, the Asia Foundation (TAF), Voluntary Services Overseas- Sri Lanka (VSO), and the World Health Organization (WHO), endorsed by the Ministry of Health. This is to be part of a resource pack made available to the participants of the Continuing Professional Development (CPD) in Psychiatry for Medical Officers in Mental Health (MOMH) and Diploma Holders of Psychiatry. This book consists of material discussed at the various CPD programmes as requested by the participants at a district level. The programme was held in Batticaloa, Jaffna and Rathnapura between April 2012 to November 2012 with participation of Consultant Psychiatrists, MOMHs and Diploma holders in Psychiatry.

This book however is not meant to be a comprehensive guide to psychiatry in anyway. However it summarizes some of the core concepts of psychiatry and provides many practice points highlighted by the experts who conducted the CPD programmes in the various provinces. Thus this volume may be considered a companion to the material presented and discussed at the CPD programme in Psychiatry.

The topics included in this volume are anxiety spectrum disorders, substance abuse, old age psychiatry, child psychiatry, psychopharmacology, suicide and prevention and history of psychiatry in Sri Lanka. The book includes a CD containing selected PowerPoint presentations useful for the MOMHs and Diploma holders in Psychiatry when conducting their own training programs. The topics contained in the CD include: (1). Child and Adolescent Mental Health, (2). Aging Brain and Dementia in 21st Century; Sri Lanka: points to ponder (3). GBV Unit – Trincomalee (4). Sense and Sensibility of Pharmacology (5). Substance use problems: Pathophysiology, diagnostics, treatment and prevention (6). The Difficult Child and (7). Torture.

The purpose of the book is similar to the objectives of the CPD programme, namely the development of the knowledge base of primary care mental health staff and the development of their ability to use this knowledge in day to day practice. While workshops and the training programmes helps to build the skills of the participants through the sharing of information with experts in the field of psychiatry, this book attempts to concisely put together the knowledge base that the various experts thought suitable to be put in to the resource pack.



The College of Psychiatrists hopes that this book will be a useful tool for the various primary care mental health workers in the community.

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## MODULE 1

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# 1. PSYCHIATRY IN SRI LANKA: THE PAST, THE PRESENT AND THE FUTURE

## The past:

In the era prior to British rule it is considered likely that people with mental illness would have been cared for within the community using the many forms of traditional healing.

It was during the British rule that formal mental health services commenced in Sri Lanka and came under the purview of the Lunacy Ordinance of 1873.

Although there were several hospitals that treated mentally ill patients, it was not until over fifty years later that a major hospital was dedicated to the care of the mentally ill. That was with the commissioning of the hospital at Angoda which catered to the ‘asylum’ concept of treating the mentally ill which prevailed at the time. It was built to relieve the overcrowding at the other institutions, and had a bed strength of 1728.

Overcrowding which became a significant problem at the Angoda asylum resulted in the establishment of the ‘noisy ward’ in 1929, which housed the most disturbed patients. The overcrowding led to a significant number of deaths due to dysentery and tuberculosis. The Mapother report (1937) published by Professor Edward Mapother, on the state of mental health in Ceylon, compares the Angoda asylum to a rundown prison.

Newer forms of treatment were introduced to Angoda asylum by 1940. Prior to this sedation was the only form of treatment available. Antipsychotics were introduced to Sri Lanka in the 1950s, and the care of the mentally ill was revolutionized by these drugs. Lithium and depot neuroleptics were introduced in the 1970s.

An out-patient psychiatric clinic was established at the Colombo General Hospital in 1939 and clinics to provide psychotherapy and follow-up services were started in 1941.

The Mulleriyawa hospital which also housed the mentally ill was built in the late 1950s and currently serves as a Halfway Home for the mentally ill.

Although the hospital provided a centrally located treatment facility that catered exclusively for the mentally ill and offered in-patient treatment, it had many drawbacks. Standard of care was less than ideal and there was significant overcrowding after only a few years.

While the central location was convenient it also led to much stigma being attached to the hospital with 'Angoda' becoming synonymous with mental illness, a phenomenon that exists to this day. There was also a tendency to refer most patients to this hospital and the development of regional centres for treatment was not a priority. As the hospital was built on the 'asylum' model, there was also no provision for community based care.

The Lunacy Ordinance, enacted nearly a hundred and forty years ago has been amended on several occasions, most recently in 1956, over fifty years ago. As such, a comprehensive change to this archaic legislation is now long overdue.

### **The present:**

Despite the lack of progress in mental health legislation, service provision in mental health care in Sri Lanka has kept pace and has seen remarkable developments over the past few decades.

The Mental Hospital at Angoda has undergone a phase of redevelopment and is now the National Institute of Mental Health (NIMH), a tertiary care centre for the mentally ill providing specialised services, post-graduate training and treatment for mentally ill offenders. WHO also contributed to the infrastructure (independence home) and service development of this institution after 2004.

Its capacity for service provision has been enhanced considerably, being better resourced with designated physicians and dental surgeons as well as over eighty medical officers. As its services expanded it has attracted staff from overseas as well, with the Voluntary Services Overseas (VSO) organisation regularly sending its volunteers to work at the Institute.

Its specialised services include a peri-natal unit, a psycho-geriatric unit, a psychiatric intensive care unit, learning disability unit and a gender based violence unit, some of these services not being available elsewhere in Sri Lanka. The institute received the award for the best director and hospital in 2008-2009 and received the bronze medal for quality of services among the large scale institutions in Sri Lanka (2010-2011).

In more recent years, regional services in Sri Lanka have also made noteworthy progress. At present, in-patient units have been set up in twenty hospitals and include six professorial units in teaching hospitals as well as units in distant regional centres such as Anuradhapura, Badulla and Batticaloa. In addition, the country has 16 fully functional intermediate stay rehabilitation units, compared to five units in 2004. Establishment of acute care units and intermediate care facilities has helped to expand the delivery of basic and specialized mental health services in the country. Meanwhile, mental health outreach clinics have been

established in most parts of remote and rural areas of the country, enabling people with mental disorders to live and be treated close to their homes. This has contributed to the reduction in readmissions to acute care units.

WHO contributed to the development of mental health services - particularly in six districts, and played a catalytic role in convening health partners and donor agencies to support mental health reform. Other recent developments include the provision of services in child psychiatry in Colombo and Galle.

Although a significant percentage of psychiatrists trained in the country continue to emigrate overseas in response to offers of better remuneration, at present there are 48 board certified psychiatrists in Sri Lanka. They work in conjunction with Diploma Holders in Psychiatry and Medical Officers of Mental Health, two categories of doctors trained in Psychiatry to counter the dearth of specialists in remote areas.

With the increase in the number of psychiatrists in the country, research and professional development in the discipline have become a priority. A recently developed research tool has been the 'Peradeniya Depression Scale' at the University of Peradeniya while another research instrument for neuropsychological testing in the elderly is being developed at the University of Ruhuna in Karapitiya.

Meanwhile, the Sri Lanka Association of Psychiatrists was incorporated as the Sri Lanka College of Psychiatrists in 2003 has become a focal institution for all aspects related to the specialty.

The College has also been responsible for an academic renaissance in the specialty, mostly through well attended Annual Academic Sessions which are held in collaboration with the Sri Lanka Psychiatric Association of the United Kingdom and WHO. It is also the publisher of the Sri Lanka Journal of Psychiatry, a publication aimed at fostering research and academic interest within the specialty.

### **The future:**

While there has been an almost exponential increase in the provision of mental health care services, more remains to be done for the improvement of mental health services in the country.

It has been estimated that a total of 200 Diploma Holders in Psychiatry and MOMH would be required to provide satisfactory medical coverage of the entire island in Mental Health. Ongoing training programmes are working towards this target.

A complete revision of current Mental Health legislation has been undertaken for some years now but the draft legislation has yet to be passed into law. This has serious implications for the development of services and is arguably the top priority in Mental Health at present.

The development of a community based Mental Health Care Model is also a target. This remains an ambitious objective because of the costs involved but training of community psychiatric nurses have already commenced. When implemented, this will signal a landmark change in the provision of Mental Health Services in the county and will bring it on par with the community care model used in developed countries.









## **MODULE 2**

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## 2. ANXIETY DISORDERS

### Objectives

- To have an understanding of anxiety.
- To know the different disorders grouped under anxiety disorders.
- To be able to identify the different types of anxiety disorders.
- To be able to manage anxiety disorders in the community.

### What is anxiety?

It is an adaptive response to threat. It is a common psychiatric symptom. It consists of

- A set of psychic symptoms, which includes a feeling of apprehension, pessimism, feeling on edge and;
- A set of physical symptoms which includes dry mouth, tremor, sweaty palms and feet, feeling lightheaded, butterflies in the stomach and palpitations.

In anxiety there is activation of the sympathetic branch of the autonomic nervous system. It is considered maladaptive when there are severe symptoms, or when the symptoms are out of proportion to the threat.



### Practice point

People with anxiety disorders may present to primary care doctors (OPD, GPs) complaining of various physical conditions and are commonly misdiagnosed and sometimes unnecessarily investigated.

### Anxiety disorders

They are a group of illnesses where anxiety is the most prominent symptom. It consists of the following disorders;

1. Generalized Anxiety Disorder (GAD)
2. Phobic Anxiety Disorder
3. Agoraphobia with or without Panic Disorder
4. Social Phobia
5. Obsessive Compulsive Disorder
6. Post-Traumatic Stress Disorder

## How common is anxiety?

Very common, especially in the primary care setting - 20%. It is considered one of the most common mental health problems in the community setting. It is more common in females than males. (Except Social Phobia which is of similar incidence in both sexes).

More common in the young than in the elderly.

## How to recognize anxiety?

Anxiety is the most prominent symptom. Anxiety may wax and wane.

Depending on the way anxiety is present the Anxiety Disorders are classified.



**Remember** to exclude medical conditions that can give rise to symptoms that can mimic an Anxiety Disorder. E.g. Thyrotoxicosis, Hypoglycemia, Alcohol and drug withdrawal, drug side effects and vestibular disorders

## Generalized Anxiety disorder (GAD)

There is free floating anxiety, i.e. anxiety is present all the time. There are no specific triggers. They feel restless, tire easily, have trouble concentrating, are irritable, have increased muscle tension and initial insomnia with unrefreshing sleep. Symptoms need to be present for more than 6 months.

## Phobic Anxiety Disorders

Anxiety is present only in the presence of a certain object or situation. The most commonly recognized are phobias relating to animals, blood, heights and airplane travel. Usually do not seek professional help.

## Agoraphobia

Literally means fear of the market place. For the person who is experiencing agoraphobia, the fear is of being in a situation/place from which sudden escape is unlikely or being in a place/situation where help is unlikely to come if experiencing panic attack or symptoms of Anxiety. Agoraphobic fears typically involve situations such as being outside the home alone, being in a crowd or standing in a queue, and travelling in a train, bus or car. In some this results in inability to leave his or her home (unless accompanied by someone). There is avoidance and anticipatory anxiety. May or may not be associated with panic attacks



### Practice point

Agoraphobia may be precipitated by a panic attack that took place in a public place, a sudden unexpected death of friend or family member or as part of an established depression.

## Social Phobia

Fear of being in situations in which the person may be negatively scrutinized by others. There is a recurring fear of social performance, situations that involve facing strangers or being watched by others. There is avoidance and anticipatory Anxiety.



### Practice point

Agoraphobia and social phobia sometimes are difficult to differentiate. It is important to inquire in to the reason as to why the person fears being in a particular situation, whether it is fear of negative scrutiny by others (social phobia) or if it is due to fear of not being able to escape if a panic attack occurs (agoraphobia).

## Obsessive Compulsive Disorder

Where Anxiety occurs as result of obsessional thinking and associated compulsions. Obsessions are recurrent intrusive thoughts/doubts/images that are highly distressing to the person. They are unsuccessfully resisted. The compulsive acts or rituals are stereotyped behaviours that are repeated again and again. The patient tries to reduce Anxiety by engaging in overt (rituals – hand washing, checking etc) or covert (counting, thinking neutralizing thoughts etc) compulsions.



### Practice point

Even though compulsions such as hand washing may reduce anxiety associated with an obsession, over time they tend to increase Anxiety and increase the severity of obsessions.

## PTSD

Anxiety occurs when exposed to cues reminding the person of previous traumatic experiences of catastrophic nature. Anxiety also occurs spontaneously as a result of reliving

experiences in the form of intrusive memories (flashbacks) or nightmares and dreams, of previous traumatic experiences. It is considered a delayed and prolonged reaction to an exceptionally traumatic experience.

The onset often follows a latency period, which may range from a few weeks to months after the traumatic event. The course is fluctuating but recovery can be expected in the majority of cases.



### Practice point

More common in ex-service personnel, victims of torture (refer presentation No. 7 in the CD for more details on torture), rape, kidnappings, in people who are subject to natural or man-made disasters and in those who reside in and experiencing conflicts.

## How do you manage people with Anxiety?

### General management principles

1. Education of patient and the family members  
In Sri Lanka Mental Health literacy is low, there is a high risk of Anxiety Disorders being mismanaged. Education helps to relieve Anxiety and makes it more likely that the patient engages in treatment.
2. Always try to manage in primary care and refer only in the following situations
  - a. When diagnosis is in doubt
  - b. When the patient is not responding to recommended treatment
  - c. When complicated by substance use, personality disorder, or unstable medical illness
3. In almost all Anxiety Disorders the treatment is long term and requires pharmacological and non-pharmacological treatment
4. Regular exercise helps in managing Anxiety
5. Promote self help
6. Most patients have maladaptive coping mechanisms (e.g. psychoactive substance use, aggression) identify and address these issues separately
7. Range of medications are available including beta blockers, benzodiazepines, buspirone in addition to the main treatment of antidepressants
8. Despite treatment some patients with Anxiety Disorders will have a chronic debilitating illness

## Pharmacology

### Short term management

- Benzodiazepines (BDZ) may be used. Risks associated with use include abuse of benzodiazepines and benzodiazepine withdrawal which may make the Anxiety symptoms worse.
- For short term use only.
- Better to use long acting preparations (e.g.Diazepam) instead of short acting preparations (e.g.lorazepam).
- Used in the initial period to relieve symptoms rapidly and to achieve symptom reduction until other medications start acting (e.g. antidepressants)

### Long term management

Definitive treatment is with antidepressants. SSRIs, Low dose TCAs, and SNRIs can be used

## Psychotherapy

- Relaxation exercises – Breathing exercises, progressive muscular relaxation, guided imagery
- Cognitive Behavioural Therapy

## Other therapies

Peer support groups are useful when the illness is long term and showing poor response to treatment

## Management Principles in specific Anxiety Disorders

### Generalized Anxiety Disorder

- Drug treatment – SSRI (Escitalopram, Paroxetine)
- Regular exercise
- Cognitive Behavioural Therapy
- Peer support groups
- Identify maladaptive coping strategies such as substance abuse and apply remedies

### Specific Phobic Anxiety Disorders

Graded exposure to feared object or situation

Medication is unhelpful



## **Social phobia**

- Medication is usually necessary.  
Antidepressants –SSRI (Escitalopram, Paroxetine)
- Graded exposure to situations being avoided
- Support group of people with Social Phobia
- Modeling the feared behaviour with the patient also helps
- Cognitive Behavioural Therapy – in which the patient’s cognitive errors will be identified and challenged.

## **Agoraphobia**

- Medication is necessary to control panic attacks. Usually higher doses of antidepressant is necessary SSRI – (Escitalopram, Paroxetine)
- Graded exposure to situations that are being avoided
- Support group of people with Agoraphobia
- Modeling the feared behaviour with the patient also helps – accompanying the patient to public areas such as a shopping mall.
- Cognitive Behavioural Therapy – in which the patient’s cognitive errors will be identified and challenged.

## **Obsessive Compulsive Disorder**

### **Medication**

- Antidepressants – SSRIs – Fluoxetine – usually at higher dose – 40-60mg, Clomipramine – higher doses with caution
- Antipsychotics – only useful as an augmenting agent – need to be used with care
- Benzodiazepines – do not have a place in the management

### **Psychotherapy**

- Cognitive Therapy – thought stopping, challenging cognitions of responsibility and thought action fusion
- Behavioural Therapy – exposure and response prevention, graded exposure to situations being avoided
- Education of the patient and the caregiver – sometimes the caregivers have become part of the compulsive behaviours of the patient and needs to be educated on the management principles



### Practice point

OCD symptoms may become worse during times of increased anxiety (e.g. close to exams, during the breakup of a relationship etc) and during times where the patient may be depressed.

### Post Traumatic Stress Disorder

- Usually needs pharmacotherapy – Antidepressants – SSRIs – reduces the autonomic activation and the startle response seen in patients with PTSD
- Psychotherapy – Treat avoidance through graded exposure and management of Anxiety in these situations
- Narrative Therapy– helps in the proper deposition of memories and prevents flashbacks and helps to correct cognitive errors about survivor guilt etc.
- Eye movement desensitization may help patients with PTSD

### How to follow up people with anxiety?

Need to continue antidepressants for a variable duration for the different illnesses.

Duration for each type of illness

- GAD – Lifelong
- Social Phobia – 6-8 months
- Agoraphobia with Panic Disorder – 1 – 2 years
- Panic Disorder – 1-2 years of treatment

Cognitive Behavioural Therapy is efficacious in controlling symptoms as well as preventing recurrence thus should be tried in all relevant instances

### Key points

- Anxiety Disorders are common but are frequently misdiagnosed and not properly managed
- Anxiety Disorders commonly overlap with Depression
- Anxiety Disorders commonly present with physical symptoms
- Psychological Therapies and Antidepressants (SSRIs) are first line treatment
- Benzodiazepines should not be used as long term treatment
- Most illnesses are long term illnesses thus follow up is essential

### Further reading

1. Shorter Oxford Textbook of Psychiatry (06th Edition)
2. The Maudsley Prescribing Guidelines in Psychiatry (11th Edition)









## MODULE 3

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### 3. SUBSTANCE USE DISORDERS

#### Learning outcomes

At the end of this module the participant should be able to;

- List psychoactive substance according to ICD10.
- List pharmacodynamics effects of psychoactive substances.
- List learnt behaviours associated with psychoactive substances.
- Appreciate difference between pharmacodynamics effects of and learnt behaviours of psychoactive substances
- Demonstrate how to help others to appreciate above difference using appropriate examples.
  - o pharmacodynamics
- Substance use disorders
- Psychiatric conditions related to substance use
- Treatment in psychiatry setting
- Physical effects of substance use
- Describe what media literacy is.
- Use media literacy as an effective tool in prevention of substance use.
- Plan effective, scientifically designed substance use prevention campaigns.
- Recognize the relevance of above techniques used in prevention in individual counselling of patients and their families.

#### Psychoactive substance according to ICD10

1. Alcohol: Beer, arrack, toddy, kasippu, arishta, whiskey, wine, champagne
2. Opioids: Corex D, heroin, pethidine, tramadol
3. Cannabinoids: Cannabis, modaka
4. Hypnotics: diazepam, sleeping tablets
5. Stimulants: Cocaine, amphetamine, caffeine
6. Hallucinogens like LSD
7. Tobacco
8. Volatile solvents: Petrol, paint, thinner
9. Multiple drug use
10. Other psychoactive substances



## Examples to be used to demonstrate the difference between pharmacodynamics effects and learnt behaviors related to substance use

1. The scientific analysis of the observation of the quicker occurrence of the effects of IV heroin compared to its inhalation using a diagram of the blood circulation of the body.
2. Comparing the popularly known effects of alcohol, which indicate a stimulated brain, to the actual biochemical effects of alcohol as a CNS depressant

Cigarette smoking may be just reducing the withdrawal symptoms of nicotine dependence, which could be interpreted as pleasure, in the dependent smoker rather than inducing actual pleasure or reducing stress.

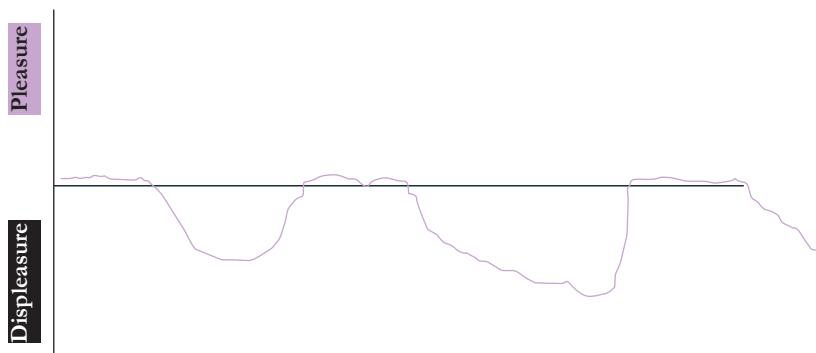


Fig 1 Smoker's pleasure

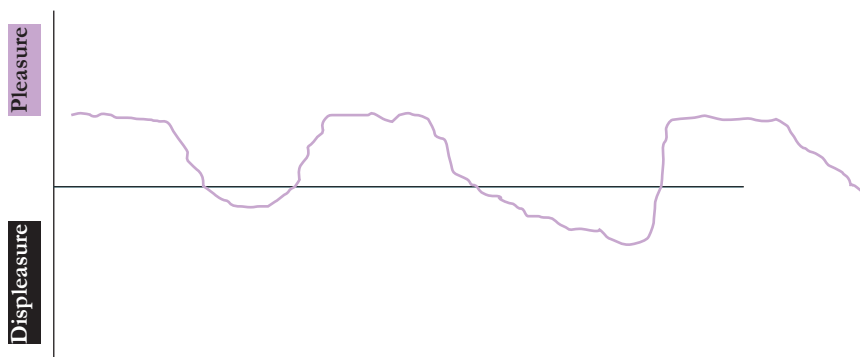


Fig 2 Smoker's pleasure from his/her point of view

## Clinical presentations of major substance use disorders

1. Dependence syndrome
  - a. Compulsion to take the substance.
  - b. Impaired capacity to control substance-taking behaviour.
  - c. A physiological withdrawal state.
  - d. Tolerance to the effects of the substance.
  - e. Preoccupation with substance use.
  - f. Substance use despite clear evidence of harmful consequences.
  
2. Withdrawal state
  - a. Cessation of substance use/ reduction of substance use.
  - b. Characteristic symptoms develop after a certain period of time:
    - i. E.g. Irritability 2 h after last smoke in a nicotine dependent person.
    - ii. E.g. Fits 4 days after last drink in an alcohol dependent person.
  
3. Problem use
  - a. Not meeting criteria for dependence.
  - b. Substance use despite obvious harm.
    - i. E.g. Drinking alcohol at parties despite causing great damage to social reputation in previous similar situations. – Psychosocial harm.
    - ii. E.g. Smoking despite chronic cough/ aged appearance. – Physical health effect.
  
4. Acute intoxication. NB: Review 'learnt behaviour' due to substance use.
  - a. How much is it actual physiological phenomena?
  - b. What proportion is learnt/ conditioned behaviour?

## Clinical presentations of major psychiatric conditions related to substance use

- Psychosis: Notorious with cannabis in Sri Lanka.
- Depression: Commonly with alcohol.
  - o Usually settles with abstinence.
- Dementia: With chronic alcohol use.
  - o May not get better with abstinence.

## Matrix to categories disorders related to substance use

	Dependence syndrome	Withdrawal state	Problem use	Acute intoxication	Substance induced psychiatric disorder
Alcohol	<b>Alcohol dependence</b>	<b>Alcohol withdrawal</b>	<b>Problem drinking</b>	<b>Alcohol intoxication</b>	<b>Alcohol induced depression</b>
Opioids	<b>Opioid dependence</b>	<b>Opioid withdrawal</b>	<b>Harmful use of opioids</b>	<b>Opioid intoxication</b>	<b>Opioid induced psychiatric disorder</b>
Cannabinoids	<b>Cannabis dependence</b>	<b>Cannabis withdrawal</b>	<b>Harmful use of cannabis</b>		<b>Cannabis induced psychosis</b>
Hypnotics					
Stimulants					
Hallucinogens					
Tobacco	<b>Tobacco dependence</b>	<b>Tobacco/ nicotine withdrawal</b>	<b>Harmful use of tobacco</b>		
Volatile solvents					
Multiple drug use					
Other psychoactive substances					

## Principles in treatment of above disorders in a clinical setting

- Withdrawal state: Medical management
- Substance induced psychiatric disorders: Management of specific disorder
- Abstinence therapy:
  - Pharmacotherapy
  - Non-pharmacological therapy
  - Approaches at specialised units/ services
- Harm reduction therapy

### Treatment of alcohol withdrawal

- Admission in significant dependence: Fits may be fatal!
- Careful physical assessment.
- Careful motivational assessment.
- Delay diagnosis of a mental illness.
- Medication:

- o Chlordiazepoxide (or diazepam) as needed to control withdrawal symptoms.
  - If in acute withdrawal give 30mg stat and continue 20mg every one hour until settled.
  - 20 – 40 mg qds + 20 – 40 mg PRN
  - Can give 100 – 200 mg per 24 hours!
  - And you can give more, but you need some specialist input.
  - Start tailing off after 48 hours of reasonable stability in daily steps.
  - E.g. 30 mg qds → 20 mg qds → 10 mg qds → 10 mg tds ...
- o Thiamine:
  - If dependence or withdrawal seem severe;
  - If in doubt;
    - Give IM 100 mg stat; 100 mg daily for three days.
  - Thiamine oral 10mg tds for four weeks.
  - Neurobion is available.
- o IV fluids if needed
- o Rarely domperidone/ metachlorpramide

### Treatment of a planned alcohol withdrawal

- Admission almost always.
  - o Set a date and to drink till date – 1 day.
  - o Admit on date.
  - o Start regular chlordiazepoxide dose from evening.
- Careful physical assessment.
  - o Liver disease
- Careful motivational assessment.
- Delay diagnosis of a mental illness.

### Treatment of other withdrawal states

1. Tobacco:
  - a. No particular intervention usually.
  - b. Clonazepam 1- 2 mg nocte for 3 days if really necessary.
2. Heroin:
  - a. Usually withdrawal symptoms are mild in Sri Lanka due to impurity of street heroin causing mild dependence. Medication may not be necessary.
  - b. PCM 2 tds +/- diclofenac 50 mg bd
  - c. Chlorpheniramine 4 mg bd/ tds
  - d. Loperamide 2 mg tds

## Abstinence therapy

1. Pharmacotherapy
  - a. Craving reduction
  - b. Aversive therapy
    - i. Disulfiram for alcohol
  - c. Replacement therapy
2. Non-pharmacological therapy
  - a. General measures and social interventions
  - b. Group therapy: Alcohol groups
  - c. Specific psychological therapy
  - d. Motivational interview
  - e. Relapse prevention
3. Approaches at specialised units/ services
  - a. Alcoholic anonymous: Check with local church.
  - b. Mel Madura, Sri Lanka Sumithrayo, No 60, Horton Place Colombo 07. Tel: 011 2693460. [www.melmedura.org](http://www.melmedura.org)

## Harm reduction therapy

- **Examples of possible outcomes:**
  - o Man repeatedly beating wife while abusing alcohol → Abusing alcohol but no longer beats wife.
  - o Smoker smokes in front of his children at home → Smoking only when children are not around.
- **Principles:**
  - o Accepting that many substance users do not initially wish to stop.
  - o Engaging the active user in treatment is the primary goal: Relationship is the key.
  - o Any reduction in the harms associated with substance use is seen as valuable.
  - o Mobilizing the client's strengths towards change.
  - o Usually guides, if given effectively, towards meaningful change in the end.

## Harmful health effects of substance use not commonly found in popular literature

- Alcohol:
  - o Acute sexual dysfunction

- Tobacco:
  - Foul smell
  - Leathery skin, older look
  - Erectile dysfunction
  - Repeated withdrawal states
- Heroin and cannabis are much less harmful than tobacco as far as health effects are concerned.

### Methods used by the tobacco and alcohol industry to promote substance use among children, adolescents and adults overtly and covertly

- Addressing emotions in contrast to ideas
 

• Emotions	Ideas	
• Feelings	Information	
• Mood	Vs.	Thoughts
• Motivation		Cognition
• Impluse		Words
- By addressing emotions, one can manipulate the limbic system, which is more powerful than the neocortex, which is concerned with reason.

### Role of hidden messages in concerned communications

- Hidden messages are the messages in a communication which are not readily visible at first glance.
  - E.g. “Alcohol became a panacea for Australian indigenous people’s pain.” – One hidden message is that alcohol can ease psychological pain.
  - E.g. “What a shame! Not even a beer? You’re worse than a woman!” – One hidden message is that men are superior to women, and this particular man who refused beer, is inferior.
  - E.g. One hidden message is that alcohol is really fun, and you should drink it after reaching 21.



## Awarding privileges in relation to substance use

- Intoxicated person is allowed to be violent: “He is a gem of a guy, you know, he only hits me when he is drunk.”
- The intoxicated person is allowed to get away with offenses with none or minor punishment compared to a sober person committing the same offense.

## Examples of methods used by the tobacco and alcohol industry to manipulate research findings and policy making related to substance use and control

International Centre for Alcohol Policies (ICAP) is a well-known “resource for all those interested in alcohol policy worldwide. ICAP promotes dialogue involving the drinks industry, the research and public health communities, government, and civil society, encouraging them to work together.” But what is interesting is that it is a “not-for-profit organization, supported by major producers of beverage alcohol.” <http://www.icap.org/>

1. Many scientific communications stating substance-related ‘facts’ such as ‘tobacco use reduces stress’ without citations to back the statement.

## Evidence based interventions in substance use prevention

- o Monitoring and improving tobacco/alcohol/ drug use and prevention policies/ laws/ regulations. E.g. encouraging Sri Lankan government to effect the inclusion of graphic pictorial warnings on cigarette packs.
- o Offer effective help to quit substance use.
- o Appropriately warn about the real dangers of tobacco/ alcohol/ drug use. NB: Pay attention to addressing emotions such as fear and shame.
- o Enforce bans on tobacco/ alcohol advertising, promotion and sponsorship.
- o Reduce accessibility to substances. E.g. Raise taxes on tobacco.

## Media literacy

- The ability to recognise the hidden motives of media messages.
- Media literacy is important to protect ourselves from the harmful messages coming through media as well as to teach our children to be vigilant about such messages.
- Important related sub-skills:
  - o Ability to read hidden messages.
  - o Ability to see how these messages create a positive/ attractive/ adventurous image about alcohol/ tobacco/ drug use.
  - o Ability to detect product placement in media.

Some examples of scientifically designed media campaigns to prevent substance use  
 Example of addressing emotions in daily patient clerking to motivate people to cease substance use



Doctor : Okay, it seem you need and urgent ECG to exclude a heart attack. Do you smoke?  
 Patient : Yes, doctor.  
 (Doctor stops writing, raises head, looks patient in the eye, appearing alarmed.)  
 Doctor : You do ?  
 Patient : Yes... I know it is bad. Do you think I have a heart attack?  
 Doctor : I don't until the ECG is done. But you certainly have a higher chance.









A water droplet is captured in mid-fall, just above the surface of a body of water. The droplet is elongated and has a small tail. Below it, a series of concentric ripples spread outwards from the point of impact. The entire scene is set against a light blue background.

## MODULE 4

*Compiled by:*

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Consultant Psychiatrist



## 4. SUICIDE

### Objectives

- To be aware of the epidemiological data on suicide in Sri Lanka
- To be able to identify risk factors for suicide
- To be able to assess the degree of suicidal intent
- To be aware of and be able to apply the management principles to a person presenting following suicidal behaviour
- To be aware of the suicide prevention policy of Sri Lanka

### What is Suicide and deliberate self-harm?

- Suicide – ‘the act of deliberately killing oneself’ (WHO, 2007).
  - o Process which ends with death
  - o Process initiated & conducted by the person
  - o With the knowledge & expectation of death
- Deliberate self harm (DSH) – ‘a non fatal act in which an individual deliberately causes self – injury or ingests a substance in excess of any prescribed or generally recognized dosage’ (Kreitman, 1977)



### Practice point

Even though the intension was not to die there is always a risk of dying depending on the method employed. In rural areas in Sri Lanka DSH attempts following pesticide ingestion has resulted in death and thus have contributed to the suicide statistics.

### How common is Suicide?

It is more common in certain countries. Sri Lanka used to be a country with very high number of suicides (21.6 per 100 000 in 1996). There are many factors which affect the suicide rate in a country; these include socio-economic indicators as well as health related indicators.

At present the suicide rate in Sri Lanka is 39 per 100 000 (vs. a global mortality figure of 16 per 100 000) ~ WHO statistics 2007

Suicide is one of the three leading causes of mortality in most countries between the age group of 15-45 years and the leading cause in the age group 15 – 35 years.



#### **Interesting fact**

1997 presidential task force report identified and made recommendations on changing some of these factors. The ensuing changes led to a reduction of suicide rate in Sri Lanka.

### **How to recognize an individual with high risk of suicide?**

The prediction of suicide is a difficult and complicated exercise with poor results. However using risk factor profiles it is possible to identify individuals who are at a higher risk of suicide. These individuals need closer monitoring in clinical practice.

#### **Risk factors**

##### **Demographic**

- Male sex- There is about three male suicides for every female suicide. Females have higher rates of DSH.
- Advancing age
- Those who have never been married, widowed and divorced
- Unemployment
- Unskilled workers and professionals  
(Veterinary surgeons, pharmacists, farmers, doctors etc.)

##### **Psychiatric & medical factors**

- Depression – more likely in the presence of hopelessness and past history of DSH
- Alcohol dependence or abuse – especially older males with a long history of alcohol abuse, history of depression and DSH
- Drug dependence or abuse
- Schizophrenia
- Personality disorders
- Current suicidal ideation, active plans and means for suicide
- Past history of DSH
- Long standing medical illnesses – Epilepsy

### Biological factors

- Family history of suicide
- Reduced activity of brain 5-HT pathways

### Psychological factors

- Hopelessness
- Impulsivity
- Problem solving difficulties
- Ongoing psychosocial stressors

### Social factors

- Social isolation
- Poverty
- Attitude towards suicide and imitation

### Absence of protective factors

- Absence of a social support network
- Absence of strong religious views



#### Remember

The above risk factors have been identified after studying large populations. When assessing suicide risk, each patient must be regarded individually, as a unique person. An awareness of these risk factors, however, can alert health professionals in primary care to look at particular areas of people's lives

### How do you assess a person following a suicidal attempt?

Acts of deliberate self harm can be done with various intentions. It may be a cry for help, to get relief, to change others behaviour or even to die. Therefore it is important to identify the intent and the current precipitant for the act. The Pierce Suicide intent scale can be used as an objective measure of suicide intent.

Information should be sought from the patient and the caregiver about the attempt itself and 48 hours preceding the attempt.



### **A detailed account of the incident**

- The precipitant
- The planning involved
- The method employed to end life ( Methods of higher lethality – hanging, walking in front of a moving train is supposed to reflect higher suicidal intention)
- The presence of a suicide note
- Attempts to put properties and belongings in order (e.g. making a will)
- Precautions taken to conceal discovery of the attempt
- Act done in isolation
- Act done at a time where discovery is unlikely

### **Expectation of outcome**

- Lethality – death was likely with the method used
- Treatment and survival – survival was unlikely if treatment was not received  
(Even if the means of harming oneself is trivial if the expected outcome is death it is considered as a serious attempt  
E.g. a person who takes 5 tablets of Paracetamol who believes that the dose is lethal)

### **History and MSE**

- Explore underlying mental illnesses (i.e. axis I disorders such as depression, schizophrenia or anxiety and axis II disorders such as personality disorders)
- Presence of hopelessness, worthlessness and current suicidal ideas with active plans are also very important

### **Presence of substance use**

- Current use and the severity of the problem are important in managing the risk.



#### **Practice point**

Asking about suicide does not increase the suicide rate. It is unlikely that people will come out with suicidal ideas unless asked by the clinician. Most people find it a helpful opportunity to talk about their despair with a non-judgmental professional.

### Assessing suicidal risk

(From [www.medicine.manchester.ac.uk/storm](http://www.medicine.manchester.ac.uk/storm))

1. Ask open style questions
2. Pick up verbal and nonverbal cues
3. Identify current stressors
4. Specific questioning about suicide intent
  - a. Explore hopelessness (e.g. ‘How do you see your future?’)
  - b. Does the patient have any wishes to be dead (fleeting or persistent)?
  - c. Specific plans for suicide (questions could include: ‘Have you ever felt that you would prefer to get away from it all?’, ‘Have you ever felt that life isn’t worth living?’, ‘Have you ever thought that you would do something to harm yourself?’, ‘What exactly would you do? Do you have plans?’, ‘What has stopped you from carrying that out so far?’)
5. Measures to prevent detection
6. Background: past suicide attempts, coping mechanisms
7. Symptoms of mental disorder

### Management of deliberate self-harm

- When deciding on the setting (inward vs. outpatient) to manage a person with suicidal ideation the degree of suicidal risk, social support structures and the access to potentially lethal means should also be considered.
- If the suicidal risk is high or if there are inadequate support structures the person will require admission. High suicidal risk is considered an emergency and may even require the patient to be admitted against his will by invoking the mental health act (e.g. psychotic depression)
- If there is underlying axis I or II disorders they need to be managed and followed up by the psychiatric team
- Medical / surgical management is required on presentation depending on the method employed by the patient
- Those who attempt DSH without the intention of dying to change others behaviour etc. may have poor coping mechanisms or the stressor has overwhelmed the existing coping mechanisms. Identifying the stressor, possible support structures and also providing psychological support is important.

## Psychological management of the patient

### Supportive care

“The 2 E’s & 2 I’s of supportive care”

Emotional support – to provide love and care

Esteem support – highlight the value of the person and provide due respect  
Raise his / her moral through praise and encouragement

Informational support

Information in factual knowledge – e.g. current status of his problem

Explanation – e.g. with regard to current issues he/she may have

Advice – e.g. what to do and what not to do

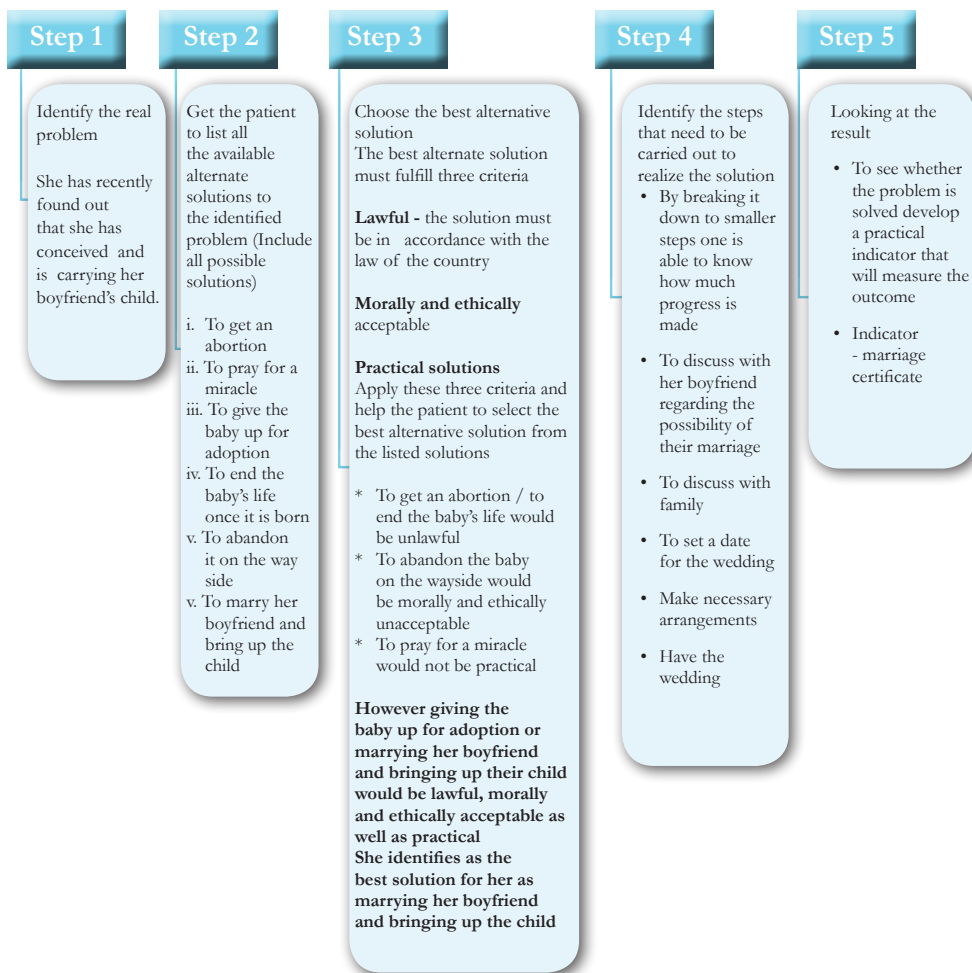
Instrumental support – to provide practical help

### Problem solving counseling

The five step module of problem solving counseling is an essential component of the psychological management in patients presenting following suicidal behaviour

It will be described with the aid of an example

E.g. A 19 year old girl presents after a drug overdose following a quarrel with her boyfriend.



## Grief counseling

### The four principles of grief counseling

- Accept the reality of loss
- Acknowledge the pain associated with the loss
- Adjust to life to live despite the loss
- Internalize the loss in order to move on with life

### The five strategies of grief counseling

- Talk about the loss & the circumstances of the loss
- Express the normal emotions triggered by the loss

- Make necessary adjustments to live despite the loss
- Sort out practical problems encountered
- Engage in routine activities

## The suicide prevention policy of Sri Lanka

- i. Limiting the use of pesticides
  - a. Limiting sale of pesticides – requiring a license to be able to sell pesticides
  - b. Encouraging the use of biological control in cultivation
- ii. Reducing the harmful effects of pesticides
  - a. Selling pesticides in a crystal / powder form instead of liquid form
  - b. Selling pesticides in a diluted form
  - c. Adding an emetic to the pesticide
- iii. Treating patients who present with deliberate self harm in an effective way
  - a. To supply equipment for artificial ventilation (ambu bag) to district and rural hospitals
  - b. Train the staff to effectively manage such a patient (Ambu breathing, intubation)  
\* It is also important to change the attitudes of the staff – to treat the patient in a humane manner and understand that they have a psychological problem
- iv. Changing the attitudes of the public about suicide
  - a. Use religion to bring about an attitudinal change – suicide is not something to be glorified but should be regarded as a sin
  - b. The survivors are not to be blamed
- v. Media policy on reporting suicides
  - a. Not to report suicides if possible
  - b. If reporting a suicide do not give it a heroic status  
Avoid sensationalisation  
Investigate and find out the root cause and report it  
The message to the public should be that it is a life lost in vain, suicide is a foolish act  
Highlight the merits of living
- vi. Promoting mental health
  - a. To identify mental illness early and treat – especially depression  
(Research indicates that the majority may have suffered from undetected depression)
  - b. Establishing counseling services and its promotion
  - c. Developing life skills

## Key points

- Sri Lanka is still one of the countries with a high number of suicides
- Deliberate self-harm increases the risk of death by suicide
- It is important to identify high risk groups
- A majority of people who commit suicide have an underlying mental illness
- It is important to assess risk in individuals who present after an attempt of DSH
- Individual and community interventions are available that are known to reduce risk of suicide in the individual as well as in the community.

## Further reading

Cowen P, H. P. T., 2012. Shorter Oxford Textbook of Psychiatry. Sixth Edition ed. :Oxford University Press.

## Pierce Suicide Intent Scale for use after a suicide attempt

Circumstances Score

Isolation	(0) Someone Present (1) Someone nearby or telephone (2) No-one nearby
Timing	(0) Timed so intervention possible (1) intervention unlikely (2) Intervention highly unlikely
Precautions against rescue	(1) Passive (eg alone in room door unlocked) (2) Active precautions
Acting to gain help	(0) Notifies friend/helper (1) Contacts friend / helper, doesn't tell
Final acts in anticipation	(0) None (2) Definite plans (eg will, insurance gifts)
Suicide note	(0) None (1) Note torn up (2) Presence of Note

### Self Report Score

Lethality

- (0) Thought would not kill
- (1) Unsure if lethal action
- (2) Believed would kill

Stated intent

- (1) Unsure
- (2) Wanted to die

Premeditation

- (0) Impulsive
- (1) Considered for <1 hour
- (2) Considered for <1 day
- (3) Considered for > 1 day

Reaction to act

- (0) Glad recovered
- (2) Sorry Unsuccessful

### Medical Risk Score

Predictable Outcome

- (0) Survival Certain
- (1) Death unlikely
- (2) Death Likely

Death without medical treatment

- (0) No
- (1) Death unlikely
- (2) Death Likely

Total=  /25

Total score <4 = low risk; 4-10 medium risk;>10 high risk









## **MODULE 5**

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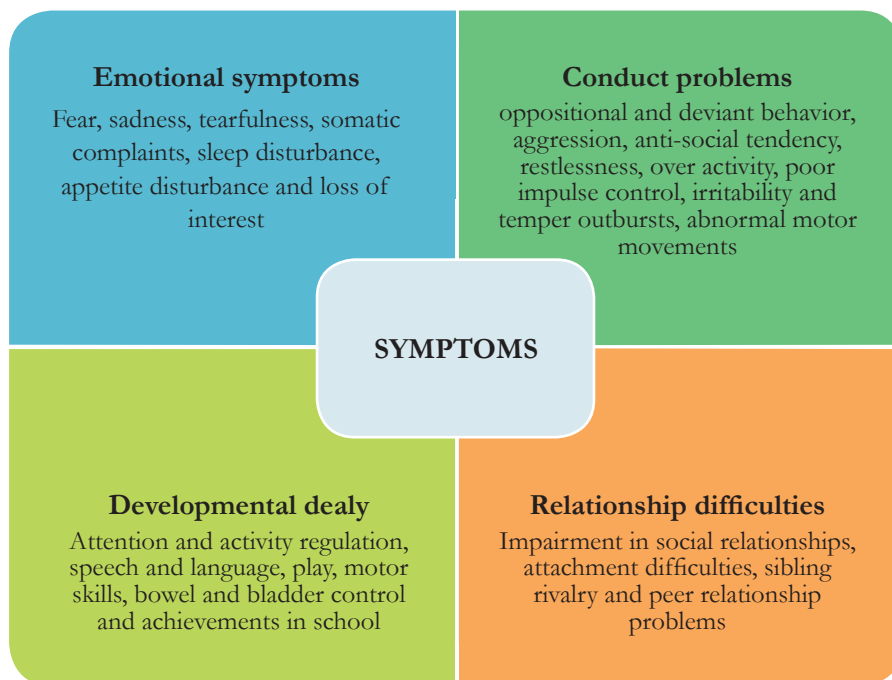


## 5. CHILD & ADOLESCENT MENTAL HEALTH

### Core Knowledge

1. Common clinical presentations of mental health problems in children.
2. Differentiating between normal variations of behaviour, and psychiatric disorders.
3. Impact of mental health problems.
4. Risk factors and protective factors.
5. Basic concepts of management.
6. Prevention and health promotion.

### Common Presentations



Most children who get referred for mental health problems show more than one type of symptoms.

## Differentiation

Many of the symptoms are present in children who do not have any mental health problems. Other factors should be considered to differentiate a disorder from normal variation in behavior.

- Age of the child
- Presence of multiple symptoms
- Persistence of symptom or symptoms
- Source of information about the child

## Impact of symptoms

A disorder should be diagnosed only if the symptoms have a substantial impact.

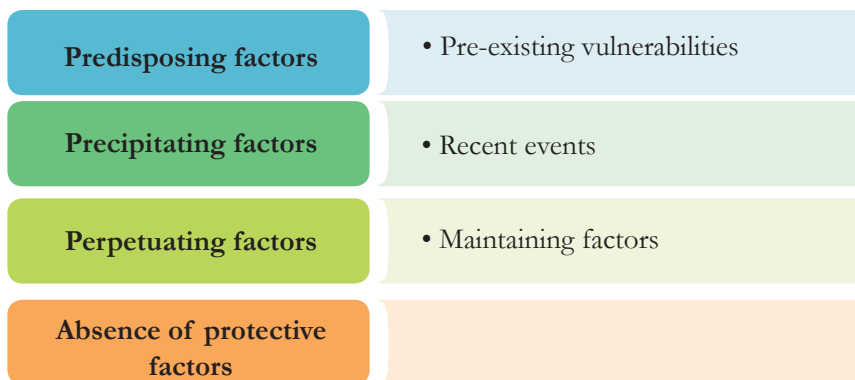
Impact is judged from,

- a. Social impairment
  - Family life
  - Classroom learning
  - Friendships
  - Leisure activities
- b. Distress to the child
- c. Disruption to others

## Risk factors

- I. Risk factors will increase the likelihood of the child developing a mental health problem.
- II. Risk factors help to understand the reason/s for a child having particular combination of symptoms.
- III. Single risk factors are not relevant unless severe.
- IV. Risk factors are associated with individual child, family, school, community or a combination.

Risk factors can be grouped as;



Some known risk factors associated with child mental health problems

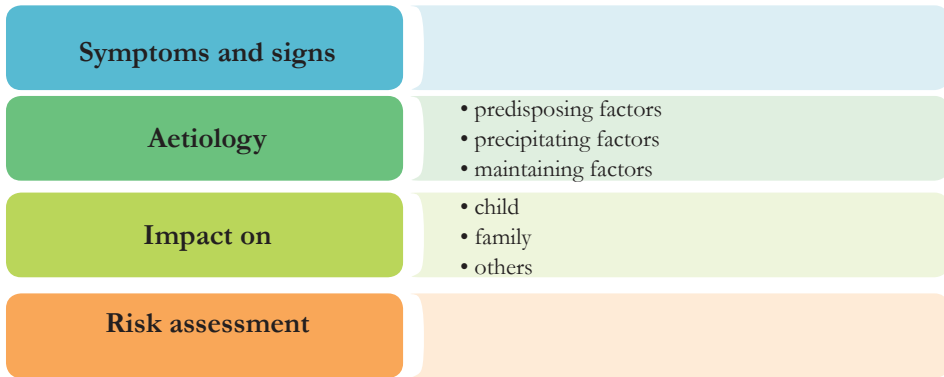
- Chronic physical illnesses
- Learning difficulties
- Brain disease
- Temperamental difficulties
- Adverse life events
- Persistent social disadvantage
- Chronic illness in parents
- Family conflicts and dysfunctions
- Child abuse

### Protective factors

- Easy temperament
- Good self esteem
- Close supportive relationship with an adult
- Superior intellectual ability
- Good social skills
- Well-functioning parents

Protective factors will determine that the child has a mild rather than a severe disorder.

## Diagnostic Formulation



## Diagnosis

### Types of disorders

Onset specific to childhood and adolescence – e.g. Attention deficit hyperactivity disorder (ADHD)

Disorders common with adults – e.g. depression, schizophrenia, anxiety

### Basic concepts in management

- Understand how the family explains the problem in the child.
- Inform and educate the child and the family.
- Have a realistic and focused management plan.
- Aim at improving the level of functioning and quality of life of the child and the family.
- Use existing resources in child, family and the community
- Monitor outcome of management.

### Prevention and health promotion

Prevention is possible and cost effective

Knowledge of understanding risk and protective factors in the child mental health is important.

## Types of preventive strategies

<b>Indicated prevention</b>	<ul style="list-style-type: none"> <li>• Target individuals who are at risk or already showing early signs of having problems</li> <li>• eg. children of mentally ill mothers</li> </ul>
<b>Selective prevention</b>	<ul style="list-style-type: none"> <li>• Target populations at high risks</li> <li>• eg. Following disasters and displacement. Children living in deprived and disadvantaged communities.</li> </ul>
<b>Universal prevention</b>	<ul style="list-style-type: none"> <li>• Target entire population</li> <li>• eg. Prenatal care, anti-drug campaigns in schools</li> </ul>

## Prevention and mental health promotion

Network of services are needed to work together.

- Health services
- Educational services
- Social and welfare services
- Law enforcement and legal services
- Voluntary organizations working for the welfare of children and families

## Autism

### Core Knowledge

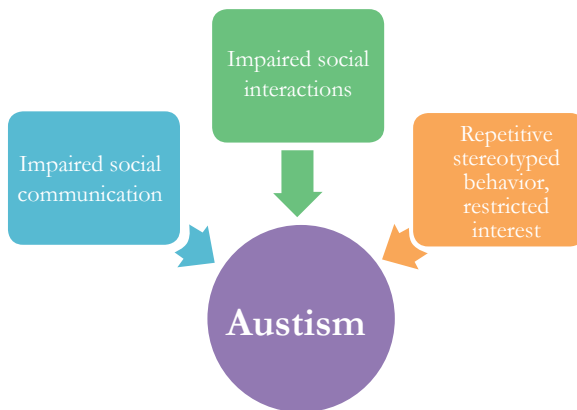
1. Clinical presentations of Autism
2. Diagnostic criteria and associated features
3. Differential diagnosis
4. Screening for Autism
5. Importance of early detection & intervention

## Common Presentations

- Delay in speech development
- Hyperactivity
- Tantrums and temper-outbursts
- Rejection from preschool
- Does not work in class
- Ignores when spoken to
- On teacher's suggestion
- Does not mix with peers
- In their own world



## Diagnosis



## Austim Clinical Feature

### Speech / Language Problems

- Too few words or no speech
- Repeats what others say
- Regression
- Jargon language
- Incomprehensible speech
- Receptive language problem
- Use words in the wrong place (pragmatic language problem)

### Social relationship Problems

- Does not share interests with parents
- Does not initiate interactions
- Cannot be made to respond to an interaction
- Avoids eye contact
- Indifferent to presence of others
- Does not recognize emotions

### Other Behaviours

- Watch rotating objects
- Line up toys
- Lack of appropriate play
- Repetitive hand movements
- Toe walking
- Mannerisms in gait/speech
- Insistence on routines

## Atypical Presentations

- Common
- Good eye contact
- Points
- Talks a lot – repeated questioning
- Staring
- Sensory integration problems
- High-functioning autism
- Co-morbidities

## Associated Features

- 1) Spectrum of intellectual ability - range from mental retardation to above average intelligence
- 2) Seizures
  - Affect 40%
  - Seizures often begins in adolescence
  - Majority have abnormal EEGs
- 3) Behaviour problems
  - Hyperactivity, self-injurious behavior, aggressive outbursts, food fads, fears and avoidance
- 4) Oversensitivity and under-sensitivity to sensory stimulation
- 5) Medical conditions: well recognised associations are
  - Tuberous sclerosis
  - Fragile X syndrome

## Association is also known with

- Prader Willi syndrome
- Angelman's syndrome
- Congenital rubella
- Perinatal trauma and asphyxia
- Encephalopathies
- Prenatal exposure to antiepileptic medication

## Differential Diagnosis

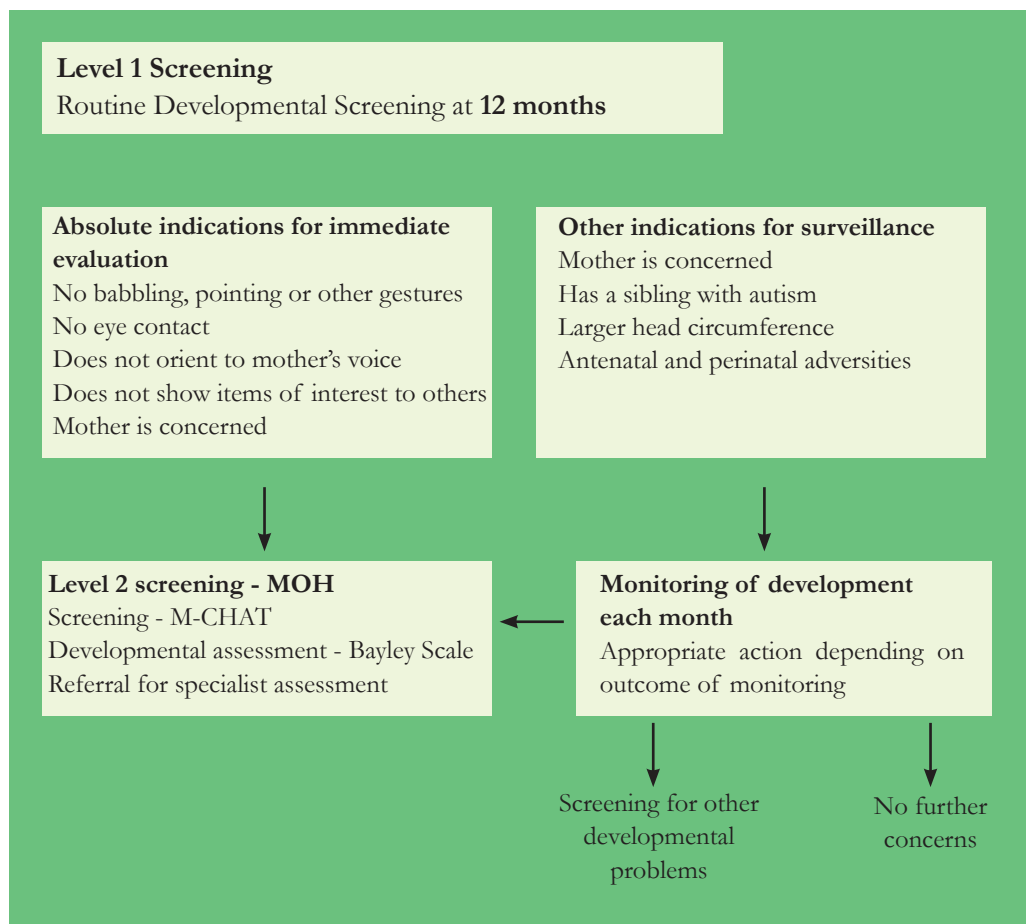
- Mental retardation
- Developmental language disorder
- Selective mutism

- Landau Kleffner syndrome
- Attachment disorder
- Severe emotional deprivation
- Temperamental shyness

### It is widely accepted that....

- Autism need to be identified as early as possible
- Children & their families need to be referred to appropriate services as soon as possible
- Early intervention in autism is necessary and beneficial
- The earlier the better for higher gains. Less favourable after 4 years.

## SCREENING



**Level 1 Screening**

Routine Developmental Screening at **18-24 months**

**Absolute indications for immediate evaluation**

- No single words by 16 months
- No eye contact
- Does not respond to name
- No two word spontaneous speech
- Lost language and social interaction

**Other indications for surveillance**

- Prefers to play alone, no pretend play
- Has a sibling with autism
- Unusual sensory preferences
- Mother concerned
- No appropriate social behavior and emotional expression



**Level 2 screening - MOH**

- Screening - M-CHAT
- Developmental assessment - Bayley Scale
- Referral for specialist assessment

**Monitoring of development each month**

Appropriate action depending on outcome of monitoring



↓  
Screening for other developmental problems

↓  
No further concerns

## Surveillance of Preschool Child

- Mother concerned
- Preschool teacher concerned
- Poor use of words to communicate
- Lacks appropriate gestures to request for things
- Ignores when mother calls the name or when mother attempts to engage child in play
- Does not seem to understand spoken language
- Lacks eye contact
- Prefers to play alone. Does not mix with peers
- Does not show pretend play – eg. Feed a doll
- Displays extreme distress when child does not get his own way or sometimes for no apparent reason
- Overactive and sometimes under-active
- Lacks emotional expressions
- Shows repetitive behaviours with toys or with own fingers and hands
- Smells everything including food

## Preliminary assessment for autism using DSM IV criteria - by MOH

### Referral for specialist assessment

### Early detection

- Can be reliably assessed by 18 months (CHAT)
- Can be differentiated from non-autistic language delay
- Evidence from case studies, home videos, prospective follow up
- Early social, communication, behaviour and sensory abnormalities

### Diagnostic tools

- Child Autism Rating Scale (CARS) - (Schopler et al 1980)
- Development Behaviour checklist (DBC) - (Einfeld & Tonge 1992)
- Autism Screening Questionnaire (ASQ) - (Berument et al 1999)
- Autism Diagnostic Observation Schedule (ADOS) - (Lord et al 1989)
- Developmental, dimensional and diagnostic interview (3Di) - (Skuse & Warrington 2004)

## Early intervention –objectives

- Enhance development
- Minimise potential for delay
- Optimise special needs for health, education and social welfare
- Optimise opportunities for learning
- Enhance capacity of families as caregivers
- Improve quality of life

## Special Needs

- Infant and preschool – facilitate development of Joint Attention
- Early school years – Joint Attention and academic learning
- Late childhood, adolescence – treatment of co-morbidities, behaviour problems

## Intervention in Autism

- Multidisciplinary – Medical, Speech Language Therapist, Occupational Therapist, Psychologist, Teachers
- Parent education / involvement. Implementation in the home by parents.
- Intense - 25 hrs per week 52 weeks per year
- Health, Education, Social Welfare collaboration

## Attention Deficit Hyperactivity Disorder (ADHD)

### Core Knowledge

1. Common presentations of Attention Deficit Hyperactivity Disorder (ADHD)
2. Diagnostic criteria & clinical features
3. Assessment of a child with features of ADHD
4. Management of a child with ADHD

## How a child with ADHD may present

### Common presentations

- “Always on the go”
- “Bright but not bothered”
- Always breaking or losing things
- Does not understand safety
- Noisy and disruptive

- Ignores when spoken to
- Leaves work incomplete

### The child may present due to a more serious problem

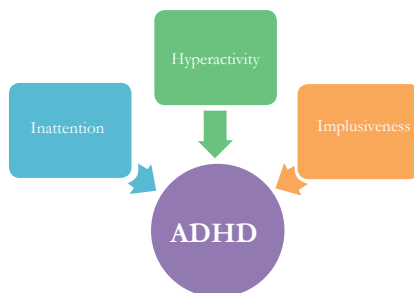
- About to be expelled from school
- Other children have got injured
- Work far below class average
- Exhausting to look after
- Temper outbursts and aggression
- Accident proneness

### The problem behaviors

- Cannot be explained on the chronological age or mental age
- Are evident in multiple situations
- Has early onset and takes a chronic course
- Significant impairment of social and academic functioning

## ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)

### Characteristic features



ADHD Clinical Feature		
<p><b>Inattention</b></p> <p>Unable to sustain attention at work or play</p> <p>Easily distractible</p> <p>Reluctant to attempt activities that require attention</p> <p>Unable to organize themselves</p> <p>Does not listen, forgetful</p>	<p><b>Hyperactivity</b></p> <p>Walks about when expected to be seated</p> <p>Always on the move</p> <p>Cannot wait in a queue</p> <p>Talks too much</p> <p>Inability to suppress activity</p>	<p><b>Impulsiveness</b></p> <p>Talks out of turn</p> <p>Gets over - excited</p> <p>Disturbs others in class</p> <p>Cannot wait for the turn</p> <p>Low frustration tolerance</p> <p>Disinhibition with adults</p>

## Assessment

- History
  - Developmental history
  - Diagnostic criteria
  - Impact on child, family and others
- Behaviour observation
  - Can be misleading sometimes
- Rating scales
- Cognitive / intellectual / learning assessment
- Presence of co-morbid disorders

## Co-morbid disorders

- Reading and spelling disability
- Motor coordination disability
- Delayed language development
- Obsessive compulsive disorder
- Tourette disorder
- Antisocial behaviour

## Causes

- Genetic
- Monoamine under-activity
- Frontal cortical dysfunction
- Socio- environmental dysfunction

## Treatment with Methylphenidate

- Effective and safe
- Only one aspect of treatment
- Aims to improve learning potential

## Before starting treatment

- Check Past history, Family history of epilepsy, tics
- Neurological examination
- Check heart, blood pressure
- Check height, weight
- Get a baseline WBC, platelets
- Explain what Methylphenidate can do and can't; symptom reduction and not a cure



## Starting treatment

- Age should be >6 years
- Starting dose preferably 5mg twice a day
- Doses per day 0.7-1.0mg/Kg body weight
- Desired outcome – improvement in all key clinical features
- Rebound effect may occur when effect wears off

## Adverse effects

- Appetite suppression
- Headache
- Abdominal pain or discomfort
- Growth retardation
- Reduced seizure threshold
- Cardiovascular effects
- Tics
- Mood change
- Worsening of exfoliating skin condition

## Special situations

There are no absolute contraindications but caution is needed.

- Child <6 years – effects are unpredictable
- Presence of epilepsy / tics
- Presence of exfoliating skin disease
- Presence of anxiety – mood changes may occur
- Addiction – a risk in older adolescents

## Other drugs

The following can be used in the absence of methylphenidate but the effects are inconsistent

- Imipramine
- Haloperidol
- Risperidone
- Clonidine
- Fluoxetine

## Other therapy

- Improving parent effectiveness
- Social skills training
- Improve cognitive / learning skills
- Improve organizational skills

## Home intervention

- Predictable daily routines
- Avoid over-stimulating experiences
- Close guidance and monitoring on expected behaviour
- Immediate rewarding for cooperation and positive behaviour

## Hyperactivity and inattention is common also in

- Post head injury
- Post encephalitic syndrome
- PANDAS
- Mental retardation / Autism
- Epilepsy
- Drug treatment
- Mood disorders
- Anxiety – often situational
- Disruptive and chaotic environments
- Inappropriate school placement

## Points to note

- If features of ADHD is not evident at the time of consultation, it does not mean the diagnosis is wrong
- Avoid misdiagnosing an active and temperamentally difficult child as ADHD
- Never say that a child will “grow out of” difficult behaviour

# The Snap IV - Teacher & Parent Rating Scale

James M. Swanson, PhD, University of California, Irvine, CA 92715

දරුවාගේ නම : ..... ගැහැණු / පිරිමි .....

පිළිතුරු සැපයුවේ : ..... වයස : .....

මව / පියා / භාරකරු

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පන්ති භාර / විෂය භාර ගුරුතුමා / තුමිය

පන්තියේ සිටින ළමුන් ගණන : .....

අධ්‍යාපනය : සාමාන්‍ය / විශේෂ

සෑම ප්‍රශ්නයකටම වැඩිපුරම ගැලපෙන එක පිළිතුරක් පමණක් ලකුණු කරන්න

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1. පාසැල් වැඩට නිසි අවධානයක් යොමු නොකරයි හෝ නොසැලකිලිමත් කමින් වැරදි සිදුවේ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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3. කථා කළ විට නැසුණා සේ සිටී	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. පාසැල් වැඩ හා පැවරුම් නිම කිරීමටත්, උපදෙස් නිසි ලෙස පිළිපැදීමත් අපහසුය	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. තමාගේ ක්‍රියාකාරකම් පිළිවෙලට සැලසුම් කර ගැනීම අපහසුය	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. අවධානයෙන් යුක්තව කළ යුතු කාර්යයන් වලට අකමැතිය නැත්නම් මග හරී	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. නිතර තමා පාවිච්චි කරන දේ නැති කර ගනී (සෙල්ලම් බඩු පැන්සල් මකනය පොත්පත්)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. පිටතින් ඇසෙන හෝ දකින දේවලින් ඉක්මනින් අවධානය කැඩේ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. එදිනෙදාට කළ යුතු වැඩ නිතර අමතක කරයි	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. නිතර දඟලයි හෝ එකතැන වාඩිවී සිටීම අපහසුය	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. එක තැන වාඩිවී සිටිය යුතු අවස්ථාවල අසුනෙන් නැගිටී	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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13. නුසුදුසු තැන්වලදී දුවයි හෝ උඩවල්වල නගී	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. සංසුන්ව සෙල්ලමක් හෝ විනෝදාංශයක යෙදීම අපහසුය	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. නිතර එහා මෙහා ඇවිදීම් පමණට වඩා ක්‍රියාකාරීය	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. පමණට වඩා කතා කරයි	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. ප්‍රශ්නයක් අසා නිමවීමටත් පෙර උත්තරය කියා කෑ ගසයි	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. තමාගේ වාරය එනතුරු ඉවසා නොසිටී	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. නිතර අනුන්ගේ කථාවට බාධා කරයි හෝ වැඩට බාධා කරයි	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tentative 5% cutotts		Teacher	Parent
	ADHD - In	2.56	1.78
	ADHD- H/Im....	1.78	1.44
	ADHD- C	2.00	1.67

\*\*\* University Psychological Medicine Unit, Lady Ridgeway Hospital for Children, Colombo

## Scoring of the SNAP IV – Teacher & Parent Rating Scale

For scoring the scale is used as 0,1,2,3

1- 9 items in the questionnaire represent ADHD- Inattention score

10 – 18 items represent ADHD – Hyperactivity/Impulsivity score

All 18 items represent ADHD combined score

Cut off scores are given separately for teacher and parent







## MODULE 6

*Compiled by:*

**Prof. S.T. Kathriarachchi**  
MBBS, MD (Psych), FCCP



## 6. DEMENTIA

### Objectives

- To be able to identify dementia in clinical practice
- To be able to assess the severity of dementia
- To know the different types of dementia
- To know the reversible and irreversible causes of dementia
- To be aware of the general management principles in patients with dementia
- To be able to advice a care giver on the management of a patient with dementia

### What is dementia?

It is the progressive deterioration of multiple cognitive functions, including memory in clear consciousness, leading to functional deterioration of day to day activities



#### ICD – 10 Definitions

“A syndrome due to disease of the brain, usually of a chronic or progressive nature, in which there is disturbance of multiple higher cortical functions, including memory, thinking, orientation, comprehension, calculation, learning capacity, language, and judgment. Consciousness is not clouded. Impairments of cognitive functions are commonly accompanied and occasionally preceded by deterioration in emotional control, social behaviour or motivation.”

### Causes of dementia

#### Main primary causes in later life:

- Alzheimer’s disease
- Vascular (cortical, subcortical and mixed)
- Lewybody disease (Lewybody dementia & dementia in Parkinson’s disease)

#### Potentially reversible:

- Hypothyroidism
- HIV, Neurosyphilis
- Alcoholic dementia
- Brain tumor
- Normal pressure hydrocephalus
- Vitamin B12 deficiency

#### Other, rarer causes:

- Frontotemporal dementia (including Pick’s disease)
- Huntington’s disease, Wilson’s disease



Commonest type of dementia is Alzheimer's disease followed by vascular and Lewy body dementias. A significant number of patients will have a mixture of Alzheimer's and vascular dementia

### Alzheimer's disease

Most cases of Alzheimer's disease are sporadic.

Familial cases of Alzheimer's disease with a defined inheritance pattern account for only 5 to 10%. They have an earlier age of onset.

Genetic defects on chromosomes 21, 19, 14, 12 and 1 have been identified.

### Pathology

#### Macroscopy

Cerebral atrophy results in widening of sulci and narrowing of gyri mainly in frontal, temporal, and parietal regions.

This results in compensatory ventricular dilatation.

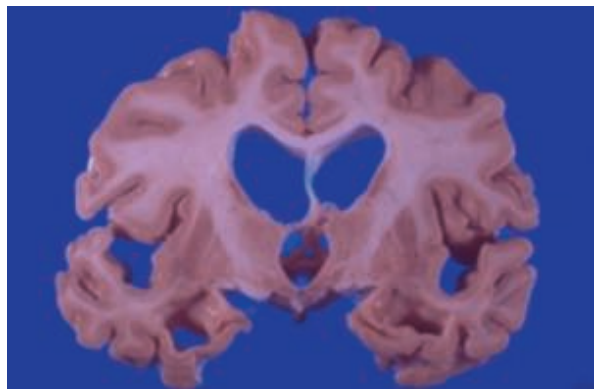


Fig.1 Cerebral atrophy with compensatory

#### Ventricular dilatation

#### Microscopy

Presence of;

- 1) Neuritic plaques
- 2) Diffuse plaques
- 3) Neurofibrillary tangles
- 4) Amyloid angiopathy
- 5) Granulovacuolar degeneration
- 6) Hirano Bodies

#### How common is dementia?

As the population is aging the prevalence of dementia is rising. It is estimated at the age of 60 years 5% of the population will have dementia. This figure is supposed to double every 5 years.



### At present Sri Lanka has an aging population. Prevalence of dementia is rising in Sri Lanka.

The prevalence of dementia in a suburban population in Sri Lanka was found to be 7.1% in a study conducted by Kathriarachchi *et al*, (2009)

#### How do you recognize dementia?

In dementia there is deterioration of multiple cognitive functions which would have an effect on the patient's activities of daily living (ADL). There is progressive memory loss, with memories of recent events affected more than remote events. There is progressive worsening of cognitive skills over time including difficulty in learning & manipulating new information, impairment of attention and concentration, disorientation, deterioration of language skills and difficulty in carrying out complex motor tasks.



#### Practice point

Be aware of the elderly patient who complains of memory loss with depressed mood. The patient may be having depression instead of dementia and the apparent memory loss the patient complains may be due to reduced attention and concentration seen in depression, without having a primary problem in memory. This type of presentation is called a 'depressive pseudo-dementia'. These individuals should be treated with antidepressants and psychological therapies instead of anti-dementia drugs.

In addition to the cognitive symptoms there are other non-cognitive symptoms of dementia that are seen. These may be more troublesome and difficult to manage than the cognitive symptoms of dementia.

These symptoms include poor sleep, inappropriate sexual behaviour, irritability, worsening of personality characteristics, self neglect, incontinence, wandering, hoarding, delusions and hallucinations.

These symptoms can be troublesome to the caregivers.



It is important to obtain a good history from the patient as well as collaborative history from a caregiver.

## Dementia affects day to day life

The doctor should also explore details of the patient's home circumstances, ability to cope with activities of daily living and to handle more complex tasks (e.g. handling money transactions, using a telephone, driving) and inquire about support from family. A home visit will enable assessment regarding safety and mobility.

### Side bar

#### Mild Cognitive Impairment (MCI)

As a person ages there is some deterioration of cognitive functions. There are certain illnesses such as Alzheimer's disease which cause the patient to lose his or her cognitive functions at an earlier age.

Before functional deterioration occurs patients may complain of mild forms of cognitive impairment. On screening they may have some cognitive deficits but would not be severe enough to be diagnosed as dementia. These individuals are considered to have mild cognitive impairment. The present guidelines do not recommend use of AChEI in these individuals but recommend regular exercise, use of antioxidants, close monitoring of DM and blood pressure and to be monitored closely for development of dementia. It is an area of where a lot of research is taking place.

## 6.5 How do you manage people with dementia?

Broad management principles of dementia include;

1. Establishing a diagnosis of dementia and assessing severity
2. Ruling out potentially reversible causes of dementia
3. Use of medication and therapies to,
  - a. stop or slow down the progression
  - b. symptom alleviation
  - c. management of behavioural and psychological symptoms (BPSD) of dementia
4. Supporting the primary caregiver and family
5. Education and support with regards to legal and financial matters

Establishing a diagnosis of dementia and assessing severity

- **History and mental state examination** – would reveal multiple cognitive deficits and associated functional deterioration as well as the other behavioural and psychological symptoms of dementia.
- The physical examination focuses on physical risk factors (e.g. pulse, blood pressure, peripheral pulses). A thorough neurological examination should also be done in these patients.

- Use of a screening tool such as the MMSE and the MoCA (Montreal cognitive assessment), for which there are validated Sinhala translations, helps to identify the severity of the dementia. These are also useful to measure the deterioration over time. The clock drawing test is a useful screening test that can be used in a primary care setting.

#### Ruling out potentially reversible causes of dementia

- A range of investigations need to be organized to identify potentially reversible causes of dementia, such as hypothyroidism, Vitamin B<sub>12</sub> deficiency, normal pressure hydrocephalus, intracranial tumours, and other space occupying lesions.
- FBC, U&Es, LFTs, C-reactive protein, TFTs, B<sub>12</sub> and folate (can be replaced by blood picture in primary care), FBS (and HbA1C if diabetic), cholesterol, MSU, CXR and VDRL
- If indicated CT Brain / MRI

#### Use of medication

Types of medication used in dementia of Alzheimer's disease

1. Acetylcholine esterase inhibitors (AChEI) - The three licensed drugs are all cholinesterase inhibitors: donepezil, rivastigmine and galantamine. They can be given only to patients with moderate Alzheimer's disease, suggested by an MMSE score of 10–20. Their administration must be initiated by a specialist and monitored.
2. NMDA receptor antagonists – Memantine to be used in severe dementia (MMSE score of less than 10)

There should be optimal management of hypertension and diabetes with anti-hypertensive and oral hypoglycaemic drugs

#### Acetylcholine esterase inhibitors (AChE-I) in Dementia with Alzheimer's disease

- AChEIs are known to stop the progression of symptoms in 1/3 of patients, improve the clinical picture in another 1/3 and not to have any effect on rest. Serial measurement of MMSE scores will enable to identify these groups who benefit from AChEIs.
- AChEIs may also reduce the severity of non-cognitive symptoms of dementia such as behavioural and psychological symptoms

- AChEIs are relatively safe drugs with fewer side effects. Side-effects include nausea, vomiting, headaches and dizziness. These drugs aggravate cardiac conduction defects, and patients with pre-existing heart disease, dysrhythmias or a pulse rate below 60 beats/min need to have an ECG before treatment is commenced.
- Some times antidepressants and antipsychotics may need to be used with caution in patients with depression and psychosis. Antipsychotics are associated with increased side effects in patients with dementia. In addition they increase the risk of strokes.

### Non pharmacological management

Education and support is a very important part of management

### **Psychological treatments**

- **Reality orientation**

This is used to help patients with dementia by reorienting them to details about themselves and their environment. It can be used as individual or group therapy.

They are oriented to their environment using a range of materials and activities. Orientation devices such as signposts, notices and other memory aids such as calendars and clocks should be used consistently. Sensory stimuli such as distinctive sights, sounds, and smells are used to improve sensory awareness.

- **Validation therapy**

It is based on the general principle of validation, the acceptance of the reality and personal truth of another's experience. The therapist attempts to communicate with individuals with dementia by empathizing with the feelings and meanings hidden behind their speech and behaviour, giving importance to the emotional content of what is being said. The benefits of this therapy include gratification and reduction in behavioural disturbance.

- **Reminiscence therapy**

Reminiscence therapy helps the patient to re-live past experiences especially those that are positive and personally significant such as birthdays, holidays and weddings. This too can be done with individual patients or groups. Music, artwork and old photographs can be used to provide stimulation. It is said to improve the level of well-being and may give rise to reemergence of the pre-morbid personality.

- **Art therapy**  
This form of therapy provides stimulation, promotes self esteem by providing choice with regard to their creations and is also a form of self expression.
- **Music therapy**  
This could be in the form of singing, playing an instrument or listening to music / songs. This too can enhance the level of well-being, improve social interactions and autobiographical memory and reduce agitation in people with dementia.
- **Activity therapy**  
It involves activities such as dance, sport and drama. Physical exercise can improve mood, sleep, confidence and self esteem. Daytime exercise may also help to reduce agitation and night time restlessness. The non-sexual physical contact which occurs during this therapy is found to be soothing by many people with dementia.
- Specific stress management and coping skills training may also help caregivers

### How do you follow up people with dementia?

- Education and support for the patient and carer plays an important role
- If the disease is mild advice patients regarding the preparation of a will, about advance directive, appointment of a guardian and end of life discussions
- Titrate medication according to symptom relief and side effects
- Tightly control risk factors that would lead to further deterioration – diabetes, hypertension, cardiovascular diseases

### Key points

- Dementia is a progressive illness
- Dementia is on the rise worldwide and especially in Sri Lanka
- It is important to identify the cause of dementia as some causes may be reversible
- Screening tools play an important role in the diagnosis and the monitoring of the severity and treatment response
- AChEIs can stop the progression of the illness in some patients
- Non pharmacological management plays an important part in the management
- Caregiver support is an integral part in dementia management.

### Further reading

- Shorter Oxford Textbook of Psychiatry (06th Edition)
- The Oxford Text book of Psychiatry (02nd Edition)
- The Maudsley Prescribing Guidelines in Psychiatry (11th Ed)

## The Mini Mental State Examination

### The mini mental state examination

#### Orientation

Year, month, day, date, season \_\_\_\_\_/5

Country, county, town, hospital, ward (clinic) \_\_\_\_\_/5

#### Registration

Examiner names three objects (for example, apple, pen, and table)

Patient asked to repeat objects, one point for each. \_\_\_\_\_/3

#### Attention

Subtract 7 from 100 then repeat from result, stop after

Five subtractions, (Answers: 93, 86, 79, 72, 65)

Alternatively if patient errs on subtraction get them to spell world backwards: DLROW

Score best performance on either task. \_\_\_\_\_/5

#### Recall

Ask for the names of the objects learned earlier. \_\_\_\_\_/3

#### Language

Name a pencil and a watch \_\_\_\_\_/2

Repeat : No ifs, and or buts' \_\_\_\_\_/1

Give a three stage command. Score one for each stage (for example, "Take this piece of paper in your right hand, fold it in half and place it on the table." \_\_\_\_\_/3

Ask patient to read and obey a written command on a piece of paper stating: "Close your eyes." \_\_\_\_\_/1

Ask patient to write a sentence. Score correct if it has a subject and a verb. \_\_\_\_\_/1

#### Copying

Ask patient to copy intersecting pentagons  
Score as correct if they overlap and each has five sides \_\_\_\_\_/1

**Total Score :** \_\_\_\_\_/30









## **MODULE 7**

*Compiled by:*

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## 7. PSYCHOPHARMACOLOGY

### Objectives

- To know the minimum effective doses of antidepressants & antipsychotics
- To be able to manage common side effects of antipsychotics
- To identify Neuroleptic Malignant Syndrome
- To identify Serotonin syndrome
- To identify and manage discontinuation symptoms of antidepressants

### Antipsychotics

Antipsychotics are drugs used in the treatment of schizophrenia and other psychotic disorders.

They can be classified as first generation antipsychotics (FGA) / typicals and second generation antipsychotics (SGA)/ atypicals.

### What is the minimum effective daily dose of commonly used antipsychotics?

Antipsychotic	First Episode (mg/ d)	Relapse (mg/d)
Haloperidol	2	>4
Trifluoperazine	10	15
Risperidone	2	3
Olanzapine	5	10

(Source – The Maudsley Prescribing Guidelines in Psychiatry – 11th Ed)

### Acute psychotic episode choice of antipsychotic

A drug with;

Less Extra Pyramidal Side Effects (EPSE)

Sedative- to control agitation

Minimal drug interactions

- Olanzapine / Risperidone

Depressive symptoms are common – antidepressants are not indicated

## What are the common adverse effects of antipsychotics?

The side effect profile of antipsychotics is variable, with extra pyramidal side effects being common with first generation antipsychotics & metabolic side effects with second generation antipsychotics.

### Management of Extra Pyramidal Side Effects (EPSE)

Acute dystonic reactions

1. Anticholinergic drugs – Benztropine, Procyclidine
2. Route of administration – oral, IM, IV according to severity of symptoms

Parkinsonism

1. Reduce the drug dose ( if clinically stable)
2. Switch over to a SGA
3. Add an anticholinergic – oral Benzhexol

Akathisia

1. Reduce the drug dose ( if clinically stable)
2. Switch over to a SGA – Quetiapine , Olanzapine
3. Consider oral Propranolol ( Exclude contraindications e.g –asthma, bradyarrhythmias)

Tardive dyskinesia

1. Omit anticholinergics
2. Reduce the drug dose ( if clinically stable)
3. Switch over to a SGA – Clozapine > Quetiapine
4. Add on – Tetrabenazine

### Metabolic & other side effects

Monitoring – regular monitoring; in increased frequency in the presence of individual risk factors

- Blood urea / serum electrolytes
- Full blood count
- Fasting blood sugar
- Lipid profile
- Liver function test
- Weight
- Blood pressure

## How can you improve tolerability?

### Switching antipsychotics

In the presence of side effects antipsychotics may need to be switched to improve tolerability

- Acute EPSE – Aripiprazole, Olanzapine, Quetiapine
- Impaired glucose tolerance – Aripiprazole
- Dyslipidaemia - Aripiprazole
- Weight gain – Aripiprazole, Haloperidol, Trifluoperazine, Olanzapine
- Sexual dysfunction - Aripiprazole, Quetiapine

## What is Neuroleptic Malignant Syndrome?

Neuroleptic Malignant Syndrome is a rare but potentially life threatening condition which occurs as a side effect of antipsychotics.

Clinical features include fever, rigidity, altered level of consciousness and confusion, while investigations reveal elevated creatinine phosphokinase (CPK) level, leukocytosis and abnormal liver function tests.

A patient on high potency FGA; recent dose increment; rapid dose titration would be at an increased risk as NMS occurs due to hyperactivity of sympathetic nervous system resulting from dopaminergic blockade.

Withdraw antipsychotic and refer patient for emergency admission to nearest hospital with ICU facilities.

## Antidepressants

Antidepressants are used in the treatment of depression and anxiety disorders.

### Main indications and doses

- Depression
  - SSRIs – Fluoxetine – 20 – 40 mg / d
  - SNRI - Venlafaxine – 75 – 375mg / d
  - TCA - Imipramine – 50 – 200mg / d

Response takes close to 2-6 weeks to be seen
- Doses for anxiety disorders are usually similar to doses used in depression, except in OCD, and panic disorder where higher doses are used. Generally takes a longer time to show a response.



### Practice point

Due to the slow onset of the clinical response, the patient needs to be educated on this to prevent poor compliance. Even though the clinical response takes about 2-3 weeks the side effects are immediate.

## What is the minimum effective dose of commonly used antidepressants?

Antidepressant	Minimum effective dose
Fluoxetine	20mg / d
Sertraline	50mg / d
Citalopram	20mg / d
Escitalopram	10mg / d
Mirtazapine	30mg / d
Venlafaxine	75mg / d

(Source – The Maudsley Prescribing Guidelines in Psychiatry – 11th Ed)

## What is the duration of prophylaxis?

- Duration of prophylaxis depends on the episode
- First episode – treat for at least six to nine months after full remission
- Recurrent depression – two or more episodes (with functional impairment during the episode) continue at least for two years
- Maintenance beyond two years – patient requires re-evaluation by consultant psychiatrist

## Drug interactions

### Pharmacokinetic interactions –CYP 450 enzymes

- Fluoxetine increases risk of clozapine induced seizures (increases the clozapine level)
- Combination of paroxetine with tamoxifen can result in increased mortality due to treatment failure

### Pharmacodynamic interactions

- Cardio-toxicity of tricyclic antidepressants can be increased by drugs which cause electrolyte imbalance such as diuretics.

- SSRI cause an increased risk of upper GI bleeds due to inhibition of platelet aggregation and can be exacerbated by aspirin/NSAIDs



### Practice point

A patient treated with an SSRI for depression may already be on a TCA (Amitriptyline) for medical reasons.

This combination increases the risk of serotonin syndrome

Therefore it is essential to go through clinic records, prescriptions etc. to ascertain the patient's current treatment.

### What is Serotonin syndrome?

- Can occur as a result of overdose or when antidepressants are used in combination or when switching from one antidepressant to another.
- Clinical features - fever, diaphoresis, nausea, vomiting, diarrhoea, tremors, agitation, delirium, autonomic instability (changing blood pressure, tachycardia)
- Management - Stop antidepressant medication immediately. Urgently admit/transfer patient to a medical ward

### How safe are antidepressants in an overdose?

- SSRIs – Safe; no major effects on the heart
- SNRIs – Venlafaxine – Generally safe; but there is a risk of cardiac effects
- TCAs – Very toxic; always require hospitalisation. May need ICU care.

### What are discontinuation symptoms?

Symptoms which occur on stopping certain non-dependant drugs including antidepressants  
Symptoms are of six categories

- Affective – agitation, irritability
- Gastrointestinal - nausea
- Neuromotor- ataxia, movement disorder
- Vasomotor – excessive sweating
- Neurosensory -paraesthesia
- Other neurological symptoms – vivid dreams

Onset is within five days of stopping treatment. It may occur after a missed dose or during tapering of the drug





### Practice point

Discontinuation symptoms may be mistaken as a relapse, or occurrence of a physical illness. Unnecessary investigations & treatment can be avoided through recognition & proper management of discontinuation symptoms

## How do you avoid discontinuation symptoms?

Discontinue antidepressants over a four week period. This is not required with fluoxetine as it has a long half life. However patient may suffer from symptoms despite slow tapering off of the drug.

## What information would you provide to the patient regarding antidepressants?

- Drug information- name, dose, dosing interval
- Duration of treatment
- Need for compliance – risk of relapse; discontinuation symptoms with abrupt withdrawal
- Onset of action – in clinical practice through observation is usually seen by 2 - 4 weeks
- Side effects – common & life threatening
  - If intolerable side effects are present an alternative drug can be tried
  - Antidepressants are effective & non addictive ( despite discontinuation symptoms)

## Bibliography

- BNF (60th Edition)
- The Maudsley Prescribing Guidelines in Psychiatry (11th Edition)
- Oxford Shorter Text book of Psychiatry ( 5th Edition)
- The Oxford Text book of Psychiatry (02nd Edition)
- Oxford Hand book of Psychiatry (01st Edition)

## MCQ

### 1. True / False Regarding Antipsychotics,

- Haloperidol is more potent than Trifluoperazine ( )
- Metabolic side effects are more common with typical antipsychotics than atypical antipsychotics ( )
- Management of tardive dyskinesia includes, switching antipsychotics to clozapine ( )
- The minimum effective daily dose of Risperidone for the first episode is 2mg ( )
- Akathisia is an extra pyramidal side effect caused by typical antipsychotics. ( )

### 2. Neuroleptic Malignant Syndrome,

- Full blood count shows leucopenia. ( )  
Can be treated in a general psychiatric ward. ( )
- Rapid dose titration of antipsychotics can increase risk of getting NMS. ( )
- Antipsychotics can be given in reduced doses ( )
- Occurs due to hyperactivity of sympathetic nervous system resulting from dopaminergic blockade. ( )

### 3. Serotonin Syndrome,

- Can occur due to over dose of antidepressants. ( )
- Presents with autonomic instability. ( )
- Urgent transfer to a medical ward is essential. ( )
- Low doses of antidepressants can be given. ( )
- Switching from one antidepressant to another can be a predisposing factor. ( )

### 4. Treatment with Antidepressants,

- In OCD & Panic disorder lower doses are needed than in depression & other anxiety disorder. ( )
- Minimum effective dose per day of Citalopram is 20mg. ( )
- Clinical response takes 2-3 weeks to appear. ( )
- In First episode of depression antidepressant can be stopped after full remission. ( )
- Fluoxetine decreases the risk of seizures induced by clozapine. ( )

**5. Discontinuation symptoms of antidepressants,**

- Occur due to dependency for antidepressants. ( )
- Paraesthesia is a neurosensory symptom of it. ( )
- May occur during tapering of the drug. ( )
- Fluoxetine should be tapered over four week period to avoid symptoms. ( )
- Onset is within five days of stopping treatment. ( )

**Answers**

1. a. (True)  
b. (False)  
c. (True)  
d. (True)  
e. (True)
2. a. (False)  
b. (False)  
c. (True)  
d. (False)  
e. (True)
3. a. (True)  
b. (True)  
c. (True)  
d. (False)  
e. (True)
4. a. (False)  
b. (True)  
c. (True)  
d. (False)  
e. (False)
5. a. (False)  
b. (True)  
c. (True)  
d. (False)  
e. (True)





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