

**CME FOR MEDICAL OFFICERS**  
**Module-I &II**  
**37 hours-6 days**

**Modules Learning Objectives –**

During the course, the participants shall receive the

1. Clinical inputs, case discussions on various topics
2. Thorough discussion on various clinical topics/diseases and its management
3. Pharmacodynamics & Pharmacokinetics
4. Research updates in the field of Ayurveda and that of its contemporary sciences on relevant topics/diseases
5. Skill developments & hands on training
6. Data collection and record keeping methods in daily clinical practice.
7. Quality aspects in health care delivery
8. Knowledge about Teaching techniques & research methodology

**Code of Conduct for the participants**

1. Participants are expected to be punctual
2. Participants are expected to attend every session
3. Participants are expected to actively participate in group discussion/learning
4. Participants are expected to carry out the work assigned during the interactions/activity
5. To make cell phones on silent mode
6. Grievances if any shall be communicated to the Session conductor/ modulator/ demonstrator.

**General guidelines for the demonstrator/session conductor/ modulator/ expert**

- Shall have a basic qualification of ISM with clinical experience of minimum ten years after possessing the degree in ISM.
- Good clinician, expertise in treating various clinical conditions through ISM methods.
- Having good communication skills
- Good at explaining the things to the participants level
- Experience in handling the hospital/dispensary units independently
- Being exposed to treat various clinical conditions through ISM approach
- Managing OPD/IPD and any other hospital/dispensary functioning unit
- Having multilingual approach
- Having written few books/presented few papers/participated in few scientific seminars national/international platforms
- Expert / well known/accomplished personalities in ISM practices of India/abroad may be even in one disease/one clinical condition etc..
- Good at Quality health care delivery practices, accreditation practices etc
- Any other relevant skill/knowledge

**Case presentation design -**

- Case study-Name-xyz, Age-, Gender-, Deseh-, Occupation-, Habits/Addiction-Present complaints- in chronological order Past history-Family history-Investigations -Hematological,

Biochemical, Radiological. Nidanpanchak - Nidan, Sampraptighatak (Involved Dosh, Dushya, Srotas, Adhisthan, Srotodushti), Upashaya-Anupashaya, Treatment plan- Principles of treatment, treatment modalities, sampraptivighatankriya, pathyapathya, Apunarbhav chikitsa.

## **Unit 1 : Vyadhikshamatva Vikara (Immunological disorders)**

### **Learning Objectives-**

- Case based learning
- Pathophysiology of immunity
- Pharmacokinetics and pharmacodynamics of drugs used to treat these disorders.
- Research updates

### **1. Category (T-L method)- Case based learning /problem-based learning;**

Presentation of case by moderator.

### **2. Interactive session**

Basic -

- Probable diagnosis of the presented case to be discussed by participants
- Discussion or queries related with the shared experience.
- Nidanpanchak of case including details of samprapti ghatak, Differential diagnosis, final diagnosis of discussed case/problem by moderator.
- Chikitsa sutra / samprapti vighatan prakriya discussion, subjective and objective parameter changes in case.
- Discussion of single drugs/compound drugs/procedures adopted
  - Introduction to Ayurvedic approach of Vyadhikshamatva (Immunity)
  - Contemporary views about Vyadhikshamatva

Advance -

- Factors responsible for inherited and acquired immunity
- Immunodeficiency
- HIV/AIDS
- Covid 19 updates and importance of immunity during pandemics
- Rasayan Therapy

### **3. Activity session (Group discussion)**

- Doubts and query related to above topic by participants and doubt clearance by moderator
- Give a task to the participants or can be presented by moderator- to present a questionnaire on how to assess the Vyadhikshamatva.
- Any diagnostic tools developed by the participants at their set ups or by any Ayurveda college /Ministry may be shared in the session, and further the discussion can be carried out.
- Giving different tasks to different groups like –  
Research updates on relates topics using PubMed, Science Direct, AYUSH Research Portal like-
  - Single drug management
  - Compound drugs
  - Role of Rasayana
  - National AIDS Control programme, IEC material collection, latest updates.

- Participant's success/failure stories related to the topic.



Take home message /Summing up by the moderator.

## **Unit 2 : Madhumeha – Diabetes Mellitus**

### **Learning Objectives-**

- Case based learning
- Pathophysiology of diabetes mellitus
- Pharmacokinetics and pharmacodynamics of drugs used to treat these disorders.
- Research updates

#### **1. Category (T-L method)- Case based learning /problem-based learning;**

Presentation of case by moderator.

#### **2. Interactive session**

Basic -

- Probable diagnosis of the presented case to be discussed by participants
- Discussion or queries related with the shared experience.
- Nidanpanchak of case including details of samprapti ghatak, Differential diagnosis, final diagnosis of discussed case/problem by moderator.
- Chikitsa sutra / samprapti vighatan prakriya discussion, subjective and objective parameter changes in case.
- Discussion of single drugs/compound drugs/procedures adopted
  - o Introduction to Ayurvedic approach approach of Diabetes mellitus
  - o Contemporary views about Diabetes mellitus

Advance -

Prevalence in National/Global Scenario.

Factors responsible of increased incidence of D.M.

Pathophysiology of D.M.

Glucose Metabolism

Signs and symptoms

Investigations

Complication of D.M.and its management.

#### **3. Activity session (Group discussion)**

- Doubts and query related to above topic by participants and doubt clearance by moderator
- Giving different tasks to different groups like –
  - Research updates on relates topics using PubMed, Science Direct, AYUSH Research Portal like-
  - Single drug management
  - Compound drugs
- Participant's success/failure stories related to the topic.
  - Take home message /Summing up by the moderator.

## **Unit. 3 : Rajyakshma -Tuberculosis**

## Learning Objectives-

- Case based learning
- Pathophysiology of tuberculosis and bronchial asthma
- Pharmacokinetics and pharmacodynamics of drugs used to treat these disorders.
- Research updates

### 1. Category (T-L method)- Case based learning /problem-based learning;

Presentation of case by moderator.

### 2. Interactive session

Basic -

- Probable diagnosis of the presented case to be discussed by participants
- Discussion or queries related with the shared experience.
- Nidanpanchak of case including details of samprapti ghatak, Differential diagnosis, final diagnosis of discussed case/problem by moderator.
- Chikitsa sutra / samprapti vighatan prakriya discussion, subjective and objective parameter changes in case.
- Discussion of single drugs/compound drugs/procedures adopted
- o Introduction to Ayurvedic approach approach of tuberculosis and bronchial asthma
- o Contemporary views about tuberculosis and bronchial asthma

Advance –

- Pathophysiology of tuberculosis and bronchial asthma
- Tuberculus pneumonia, Empyema, Haemoptysis
- MDR Tuberculosis
- Complications of tuberculosis like Lung fibrosis, Pneumothorax, Pulmonary Hypertension.
- HIV infection and Tuberculosis. Immunity against Tuberculosis.
- Role of Rasayana and Ayurvedic drugs in management of Tuberculosis.
- Tamaka Shwas (Bronchial asthma).

### 3. Activity session (Group discussion)

- Doubts and query related to above topic by participants and doubt clearance by moderator
- Giving different tasks to different groups like –  
Research updates on relates topics using PubMed, Science Direct, AYUSH Research Portal like-  
Single drug management  
Compound drugs
- Revised National Tuberculosis Control Programme (RNTCP), IEC material collection, latest updates.
- Participant's success/failure stories related to the topic.

Take home message /Summing up by the moderator.

## Unit 4 : Hrid roga

### Learning Objectives-

- Case based learning
- Pathophysiology of heart diseases

- Pharmacokinetics and pharmacodynamics of drugs used to treat these disorders.
- Research updates

1. **Category (T-L method)- Case based learning /problem-based learning;**

Presentation of case by moderator.

2. **Interactive session**

Basic -

- Probable diagnosis of the presented case to be discussed by participants
- Discussion or queries related with the shared experience.
- Nidanpanchak of case including details of samprapti ghatak, Differential diagnosis, final diagnosis of discussed case/problem by moderator.
- Chikitsa sutra / samprapti vighatan prakriya discussion, subjective and objective parameter changes in case.
- Discussion of single drugs/compound drugs/procedures adopted
  - o Introduction to Ayurvedic approach of heart disease
  - o Contemporary views about heart disease

Advance -

- Prevalence in National/Global Scenario.
- Factors responsible for increased incidence of heart disease
- Pathophysiology of ischemic, valvular and conductive heart disease
- Angina, myocardial infarction clinical signs and symptoms
- Investigations like ECG, TMT, angiography, etc.
- Complication of heart diseases and its management.

3. **Activity session (Group discussion)**

- Doubts and query related to above topic by participants and doubt clearance by moderator
- Giving different tasks to different groups like –
  - Research updates on relates topics using PubMed, Science Direct, AYUSH Research Portal like- Single drug management
  - Compound drugs
- Participant's success/failure stories related to the topic.
- Take home message /Summing up by the moderator.

**Unit 5 : Vyanabalavridhhi /Hypertension**

**Learning Objectives-**

- *Case based learning*
- *Pathophysiology of hypertension*
- *Pharmacokinetics and pharmacodynamics of drugs used to treat these disorders.*
- *Research updates*

1. *Category (T-L method)- Case based learning /problem-based learning;*

*Presentation of case by moderator.*

2. **Interactive session**

Basic -

- *Probable diagnosis of the presented case to be discussed by participants*

- *Discussion or queries related with the shared experience.*
- *Nidanpanchak of case including details of samprapti ghatak, Differential diagnosis, final diagnosis of discussed case/problem by moderator.*
- *Chikitsa sutra / samprapti vighatan prakriya discussion, subjective and objective parameter changes in case.*
- *Discussion of single drugs/compound drugs/procedures adopted*
- o *Introduction to Ayurvedic approach of hypertension*
- o *Contemporary views about hypertension*

*Advance -*

- *Prevalence in National/Global Scenario.*
- *Factors responsible for increased incidence of hypertension*
- *Pathophysiology and factors responsible for hypertension*
- *Clinical signs and symptoms*
- *Investigations to rule out causes of hypertension.*

*Complication of Hypertension and its management.*

### **3. Activity session (Group discussion)**

- *Doubts and query related to above topic by participants and doubt clearance by moderator*
  - *Giving different tasks to different groups like –*  
*Research updates on relates topics using PubMed, Science Direct, AYUSH Research Portal like-*  
*Single drug management*  
*Compound drugs*
  - *Participant's success/failure stories related to the topic.*
- Take home message /Summing up by the moderator.*

## **Unit 6 : Jara/Geriatrics and rasayana**

### **Learning Objectives-**

- *Case based learning*
- *Pathophysiology and prevalence of Geriatric disorders*
- *Pharmacokinetics and pharmacodynamics of drugs used to treat these disorders.*
- *Research updates*

*Category (T-L method)- Case based learning /problem-based learning;*

1. *Presentation of case/problem by moderator.*
2. *Interactive session*

*Basic -*

- *Probable diagnosis of the presented case to be discussed by participants*
- *Discussion or queries related with the shared experience.*
- *Nidanpanchak of case including details of samprapti ghatak, Differential diagnosis, final diagnosis of discussed case/problem by moderator.*
- *Chikitsa sutra / samprapti vighatan prakriya discussion, subjective and objective parameter changes in case.*
- *Discussion of single drugs/compound drugs/procedures adopted*
- *Introduction to Ayurvedic approach of geriatric disease*

- *Definition, Common features of normal aging*
- o *Contemporary views about geriatric disease*

*Advance -*

- *Prevalence of diseases in geriatric group .*
- *Pathophysiology and factors involved in geriatric disorders*
- *Clinical signs and symptoms*
- *Routine and special Investigations in geriatric group.*
- *Old age associated common ailments*
- *Social and Psychological problems of old people. Role of Rasayana*
- *Rasayan chikitsa and its applicability in geriatric disorders*

### **3. Activity session (Group discussion)**

- *Doubts and query related to above topic by participants and doubt clearance by moderator*
- *Giving different tasks to different groups like –*
- *Research updates on related topics using PubMed, Science Direct, AYUSH Research Portal like-  
Single drug management  
Compound drugs*
- *Updates on national campaign on geriatric diseases and its management through Ayurveda*
- *Participant's success/failure stories related to the topic.*
- *Take home message /Summing up by the moderator.*

## **Unit 7 : Panchakarma-Therapy-Poorva Karma.**

**Learning Objectives-**

- *Introduction to panchakarma therapy*
- *Importance of poorva karma in day to day practise*
- *Research updates*

### **1. Category (T-L method)- Microteaching session of Panchakarma therapy-Poorva Karma.**

**Course contents-**

#### **2. Interactive session**

*Basic -*

- *Importance of shodhan chikitsa, shadvidha upakrama*
  - *Indications of shodhan upakrama*
  - *Introduction to panchakarma*
  - *Scope of Panchakarma in management of Acute and Chronic ailments.*
  - *Pachan/poorvakarma before Panchakarma.*

*Advance –*

- *Introduction of poorvakarma and its importance in shodhana.*
- *Pachana ,Snehan and Swedan indications*
- *Snehan types and its descriptions*
- *Internal snehpaan procedure and its details*
- *External snehan procedures*

- *Different Swedan upakrama*
- *Keraliya panchakarma procedures under Bahyasnehan and swedana upakrama*

### 3. Activity session (Group discussion)

- *Doubts and query related to above topic by participants and doubt clearance by moderator*
- *Video demonstration of different snehan procedures*
- *Practical demonstration of snehan techniques*
- *Video demonstration of different swedan procedures and its tools*
- *Giving different tasks to different groups like –  
Research updates on relates topics using PubMed, Science Direct, AYUSH Research Portal like-  
Participant's success/failure stories related to the topic.*

*Take home message /Summing up by the moderator.*

## **Unit 8 : Panchakarma therapy-Pradhan Karma.**

### **Learning Objectives-**

- Introduction to panchakarma therapy Pradhan karma
- Importance of panchkarma in day to day practice
- Research updates

### **1. Category (T-L method)- Microteaching session and practical's of Panchakarma therapy-Pradhan Karma.**

Course contents-

### **2. Interactive session**

Basic -

- Importance of panchakarma in chikitsa
- Introduction to panchakarma
- Indications of shodhan upakrama
- Scope of Panchakarma in management of Acute and Chronic ailments.
- Panchakarma mentioned in different samhita.

Advance –

- Knowledge of applicability and procedures of vaman, virechana, basti, nasya and

Raktmokshana

- Indication, contraindications and complications of Pradhan karma and its management
- Paschat karma procedures
- Latest updates on Vaman and Virechana
- Different bastiupakrama and their practical utility in different conditions
- Nasya and raktmoshan techniques and specific disease conditions
- Panchakama utility in emergency cases
- Experience of Panchakarmavyapad and its management

### 3. Activity session (Group discussion)



- Doubts and query related to above topic by participants and doubt clearance by moderator
- Video demonstration of vaman, basti and nasya procedures
- Practical demonstration of basti, nasya and raktmokshana techniques
- Video demonstration of different tools used in panchakarma
- Giving different tasks to different groups like –
  - Research updates on related topics using PubMed, Science Direct, AYUSH Research Portal like
  - Different dravya used in vamana and virechana karma
  - Different dravya and sneh used in basti
  - Collection of tools used for panchakarma
- Participant's success/failure stories related to the topic.
- Take home message /Summing up by the moderator.

## **Unit. 9 Topic: Ksharasutra Therapy-I**

### **Learning Objectives-**

- Case based learning
- Ksharasutra importance in the clinical practice
- How to prepare the Ksharasutra, It's Utility & Indications,
- Complications & its management
- Application of Ksharasutra for Ano rectal & Non Ano rectal cases
- Research updates

### **1. Category (T-L method)- Case based learning /problem-based learning:**

Presentation of case by moderator where Ksharasutra was more beneficial

### **2. Interactive session**

Basic -

- Probable diagnosis of the presented case to be discussed by participants
- Discussion or queries related with the shared experiences.
- Nidanpanchak of case including details of samprapti ghatok, Differential diagnosis, final diagnosis of discussed case/problem by moderator.
- Chikitsa sutra / samprapti vighatan prakriya discussion, subjective and objective parameter changes in case.
- Discussion on the indications of the Ksharasutra in various clinical conditions, its utility etc.
- preparation of the Ksharasutra

Advance –

- Ksharasutra procedures for Ano rectal ailments
- Ksharasutra procedures for Non-Anorectal ailments, Anal Fissures, Sinuses etc.
- Discussion on complications & its management
- Recent advancements in the Ksharasutra procedures
- Research updates on modified scope of utility of Ksharasutra etc.

### 3. Activity session (Group discussion)

- Doubts and query related to above topic by participants and doubt clearance by moderator
  - *Video demonstration of Ksharasutra preparation, procedure of Ksharasutra and its toolset*
  - *Practical demonstration of Ksharasutra in a theater.*
- Giving different tasks to different groups, (after making the participants into smaller groups) like :
- Research updates on the topic using - PubMed, Science Direct, AYUSH Research Portal etc.
  - Anorectal case-Ksharasutra utility-A case study
  - Non- Anorectal case-Ksharasutra utility-A case study
  - Ksharasutra preparation- recent advancements

Take home message /Summing up by the moderator.

## Unit. 10 Topic: Ksharasutra Therapy-II

### Learning Objectives-

- Case based learning
- Ksharasutra importance in the clinical practice
- Application of Ksharasutra in the management of piles, polyps & Fistula.
- Complications & its management
- Research updates

### 1. Category (T-L method)- Case based learning /problem-based learning:

Presentation of case by moderator where Ksharasutra was more beneficial

### 2. Interactive session

Basic -

- Probable diagnosis of the presented case to be discussed by participants
- Discussion or queries related with the shared experiences.
- Nidanpanchak of case including details of samprapti ghatak, Differential diagnosis, final diagnosis of discussed case/problem by moderator.
- Chikitsa sutra / samprapti vighatan prakriya discussion, subjective and objective parameter changes in case.
- Discussion on the indications of the Ksharasutra in various clinical conditions like management of Piles, Polyps and Fistula etc.
- preparation of the Ksharasutra

Advance –

- Ksharasutra procedures for management of Piles, Polyps and Fistula etc.
- Complications and their management
- Recent advancements in the Ksharasutra procedures

### 3. Activity session (Group discussion)

- Doubts and query related to above topic by participants and doubt clearance by moderator
  - *Video demonstration of Ksharasutra preparation, procedure of Ksharasutra and its toolset.*
  - *Practical demonstration of Ksharasutra in the management of Piles, Polyps and Fistula in a theater.*
- Giving different tasks to different groups, (after making the participants into smaller groups) like :
- Research updates on the topic using - PubMed, Science Direct, AYUSH Research Portal etc.
  - Ksharasutra preparation- recent advancements
  - *Ksharasutra in the management of Piles-A case study*
  - *Ksharasutra in the management of Polyps A case study*
  - *Ksharasutra in the management of Fistula - A case study*
  - *Ksharasutra complications and their management A case study*

Take home message /Summing up by the moderator.

## Unit- 11 : Pharmacovigilance and Drug Interactions

### Learning Objectives-

- Case based learning
- Pharmacovigilance & its significance in the therapeutic practice
- Ways and means of observing pharmacovigilance.
- Status of Pharmacovigilance in Ayurvedic practice.
- WHO guidelines on Pharmacovigilance.
- National Pharmacovigilance council.
- Concept importance of knowledge of drug interaction in Ayurveda with its Practical utility.
- Research updates

#### 1. Category (T-L method)- Case based learning /problem-based learning:

- Presentation of case by moderator about Pharmacovigilance & its significance in the therapeutic practice

#### 2. Interactive session

Basic -

- Discussion of the presented topic by the participants
- Discussion or queries related with the shared experiences.
- Pharmacovigilance & its significance in the therapeutic practice
- Discussion on ways and means of observing pharmacovigilance.
- Discussion on status of Pharmacovigilance in Ayurvedic practice.

Advance –

- WHO guidelines on Pharmacovigilance.

- Giving details to the participants about National Pharmaco - vigilance council
- Concept importance of knowledge of drug interaction in Ayurveda with its Practical utility.
- Research updates

### 3. Activity session (Group discussion)

- Doubts and query related to above topic by participants and doubt clearance by moderator
  - Audio/Video presentation of National Pharmaco - vigilance council/ WHO guidelines on Pharmaco Vigilance etc.
- Giving different tasks to different groups,(after making the participants into smaller groups) like :
- Pharmaco vigilance & its significance in the therapeutic practice- A short story
  - Ways and means of observing pharmaco-vigilance- preparation of a presentation
  - Status of Pharmaco-vigilance in Ayurvedic practice
  - WHO guidelines on Pharmaco Vigilance- Chart preparation
  - National Pharmaco - vigilance council- - Chart preparation
  - Drug interaction in Ayurveda – A case study with its Practical utility.
  - Research updates

Take home message /Summing up by the moderator.

## Unit- 12 : Medical Law/National AYUSH Campaigns/ NRHM

### Learning Objectives-

- Case based learning
- Knowledge of Central/State Medical Laws/Rules/Regulations applicable to practitioners of ISM
- Knowledge of National programmes,
- Knowledge of N.R.H.M
- Kshar Sutra and Geriatric Health Campaigns of AYUSH
- Sustainable Development Goals (SDG) 2030-Public health related topics

#### 1. Category (T-L method)- Case based learning /problem-based learning:

- Presentation of case by moderator about Medical Laws/Rules/Regulations & its significance in the therapeutic practice

#### 2. Interactive session

Basic -

- Discussion of the presented topic by the participants
- Discussion or queries related with the shared experiences.
- Discussion on Central/State Medical Laws/Rules/Regulations applicable to practitioners of ISM

Advance –

- Discussion on National programmes
- Discussion on N.R.H.M , its Aims & objectives
- Discussion on Kshara Sutra and Geriatric Health Campaigns of AYUSH
- Sustainable Development Goals (SDG) 2030-Public health related topics

### 3. Activity session (Group discussion)

- Doubts and query related to above topic by participants and doubt clearance by moderator
- Audio/Video presentation of NRHM/ Central/State Medical Laws/Rules/Regulations applicable to practitioners of ISM/National Health campaigns of AYUSH.
- Giving different tasks to different groups (after making the participants into smaller groups) like :
  - Central Medical laws/Rules/Regulations applicable to practitioners of ISM,
  - State Medical Laws/Rules/Regulations applicable to practitioners of ISM
  - National programmes,
  - N.R.H.M. -Aims & Objectives
  - Kshara Sutra Health Campaigns of AYUSH
  - Geriatric Health Campaigns of AYUSH
  - Sustainable Development Goals (SDG) 2030-Public health related topics

Take home message /Summing up by the moderator.

## Unit-13 : Trauma and First aid

### Learning Objectives-

- Case based learning Trauma leading to Head injuries, Fractures, Bleedings, Perforating injuries,
- assessment of severity,
- Trauma & First aid
- Knowledge of further Management in cases of trauma.
- Difference between Emergency room & Trauma center
- Trauma center & its various levels of care

#### 1. Category (T-L method)- Case based learning /problem-based learning:

- Presentation of case by moderator of Trauma leading extreme illness where immediate survival is a problem –role of a trauma center

#### 2. Interactive session

Basic -

- Discussion of the presented topic by the participants
- Discussion or queries related with the shared experiences.
- Discussion on Trauma and its causes
- Discussion on Trauma leading to Head injuries, Fractures, Bleedings, Perforating injuries, etc
- Discussion on differences between Emergency room & Trauma center
- Trauma & First aid

Advance –

- Discussion on Tools of assessment of severity,

- Trauma & further levels of Management
- Trauma center functions & various levels of care
- Best Practice Protocols Clinical Procedures Safety- WHO document –Related to Trauma topic of contents

### 3. Activity session (Group discussion)

- Doubts and query related to above topic by participants and doubt clearance by moderator
  - Audio/Video presentation of any Trauma centre with its various levels of care .
- Giving different tasks to different groups (after making the participants into smaller groups) like :
- Trauma , its causes , Trauma leading to Head injuries, Fractures, Bleedings, Perforating injuries, etc
  - Differences between Emergency room &Trauma center
  - Trauma & First aid
  - Discussion on Tools of assessment of severity,
  - Trauma & further levels of Management
  - Trauma center functions & various levels of care
  - Best Practice Protocols Clinical Procedures Safety- WHO document –Related to Trauma topic of contents

Take home message /Summing up by the moderator.

## Unit-14 : Minor OPD Surgical procedures

### Learning Objectives-

- Case based learning
- Knowledge about - Minor OPD Surgical procedures like Excisions, Ligations, Stitching, Drainage of Abscesses, Immobilization of Fractures, Care of Dislocation, Care of Burns, Local anesthesia, etc.
- Global and national initiatives for infection prevention and control
- National guidelines for infection prevention &Control (IPC programme)

### 1. Category (T-L method)- Case based learning /problem-based learning:

- Presentation of case by moderator of any Minor OPD Surgical procedures

### 2. Interactive session

Basic -

- Discussion of the presented topic by the participants
- Discussion or queries related with the shared experiences.
- Discussion on Minor OPD Surgical procedures

- Advance –

- Discussion on individual minor OPD procedures like Excisions, Ligations, Stitching, Drainage of Abscesses, Immobilization of Fractures, Care of Dislocation, Care of Burns, Local anaesthesia, etc.
- Global and national initiatives for infection prevention and control
- National guidelines for infection prevention & Control (IPC programme)

### 3. Activity session (Group discussion)

- Doubts and query related to above topic by participants and doubt clearance by moderator
- Audio/Video presentation of Minor OPD Surgical procedures
- Audio/Video presentation of Global and national initiatives for infection prevention and control/ National guidelines for infection prevention & Control (IPC programme)
- Giving different tasks to different groups (after making the participants into smaller groups) like:
  - Minor OPD Surgical procedures
  - Individual minor OPD procedures like Excisions, Ligations, Stitching, Drainage of Abscesses, Immobilization of Fractures, Care of Dislocation, Care of Burns, Local anaesthesia, etc.
  - Global and national initiatives for infection prevention and control
  - National guidelines for infection prevention & Control (IPC programme)

Take home message /Summing up by the moderator.

## Unit-15 : Shalaky Disorders – 1½ Hour

### I - Netra Roga: Conjunctivitis, Cataract, Glaucoma, Eye injuries and Corneal ulcer care.

#### Microteaching

- **Statement , Explanation, Deduction & Conclusion by expert :**
  - Definitions & Essentials of Diagnosis, Incidence, Prevalence, Etiology, Pathogenesis, Differential Diagnosis, Treatment Strategy, Treatment. Ayurveda Correlation, Samprapti, Saadhyata- Asaadhyata ,Chikitsa Sutra, Drugs & Procedures.
    - ✓ 45 minutes
    - ✓ 10-12 minutes for each clinical entity
    - ✓ Use not more than 5 slides for each clinical entity

#### Group Activity

- All the participants will be divided in 5 groups
- Each group will be allotted one clinical entity
- This will be done by moderator/ co-ordinator in advance
- The participants may choose one of following activity for their group and two groups will not chose same activity:
  1. Case presentation (Experience Sharing)/Presentation of an already published article.
  2. Role play to demonstrate clinical approach
  3. Poster presentation
  4. Designing flip Charts for Quiz Game
  5. *Shloka* recitation

**Timeline:** 45 minutes (Not more than 10 minutes for each group)

## 16. Shalaky Disorders – II ENT:

- *Nasagat Raktasrava* (Epistaxis), Naso-Bronchial Allergies, Ear Discharges, Perforation of Drum, Sinusitis, etc . Deafness and Audiometry.

### Microteaching

- Statement ,Explanation, Deduction & Conclusion by expert :
- Definitions & Essentials of Diagnosis, Incidence, Prevalence, Etiology, Pathogenesis, Differential Diagnosis, Treatment Strategy, Treatment. Ayurveda Correlation, Samprapti, Saadhyata- Asaadhyata ,Chikitsa Sutra, Drugs & Procedures.
- Timeline
  - 45 minutes
  - 10-12 minutes for each clinical entity
  - Use not more than 5 slides for each clinical entity

### Group Activity

- All the participants will be divided in 5 groups
- Each group will be allotted one clinical entity
- This will be done by moderator/ co-ordinator in advance
- The participants may choose one of following activity for their group and two groups will not chose same activity:
  1. Case presentation (Experience Sharing)/Presentation of an already published article.
  2. Role play to demonstrate clinical approach
  3. Poster presentation
  4. Designing flip Charts for Quiz Game
  5. Shloka recitation

**Timeline:** 45 minutes (Not more than 10 minutes for each group)

**Unit: 17- Stri Roga:** Common Menstrual Disorders, Amenorrhea, Menorrhagia, DUB, Uterine Fibroids and malignancies, Ovarian cysts and Growths.

### Microteaching

- Statement ,Explanation, Deduction & Conclusion by expert : Definitions & Essentials of Diagnosis, Incidence, Prevalence, Etiology, Pathogenesis, Differential Diagnosis, Treatment Strategy, Treatment. Ayurveda Correlation, *Samprapti*, *Saadhyata- Asaadhyata* ,*Chikitsa Sutra*, Drugs & Procedures.
- **Timeline:**
  - ✓ 45 minutes
  - ✓ 10-12 minutes for each clinical entity
  - ✓ Use not more than 5 slides for each clinical entity

### Group Activity

- All the participants will be divided in 5 groups
- Each group will be allotted one clinical entity
- This will be done by moderator/ co-ordinator in advance
- The participants may choose one of following activity for their group and two groups will not chose same activity:
  1. Case presentation (Experience Sharing)/Presentation of an already published article.



2. Role play to demonstrate clinical approach
3. Poster presentation
4. Designing flip Charts for Quiz Game
5. *Shloka* recitation

**Unit- 18. Prasuti Tantra:** Normal and Abnormal Pregnancy, Antenatal Care, Identification of High Risk Pregnancy, Puerperal problems, Family Planning advice.

#### Microteaching

- Statement ,Explanation, Deduction & Conclusion by expert about below:
  1. Pregnancy , Normal & Abnormal Pregnancy , High Risk Pregnancy, Antenatal & Postnatal care : Definitions, Identification, Management
  2. Family Planning; Definition, Statement of need, Various methods for family planning
- **Timeline:**
  - ✓ 45 minutes
  - ✓ 20-25 minute for each
  - ✓ Use not more than 12 slides for each of 1 &2

#### Group Activity

- All the participants will be divided in 4 groups
- Each group will be allotted one clinical entity
- This will be done by moderator/ co-ordinator in advance
- The participants may choose one of following activity for their group and two groups will not chose same activity
- 
- I. Case presentation (Experience Sharing)/Presentation of an already published article.
- II. Role play to demonstrate clinical approach
- III. Poster presentation
- IV. Designing flip Charts for Quiz Game
- V. *Shloka* recitation
- 45 minutes
- (Not more than 10 minutes for each group)

#### Unit-19: Balaroga

Learning Objectives:

- Monitoring Physical and Mental development of Child.
- Immunization programme.
- Common Paediatric ailments like Diarrhoeas, Pneumonias and other infective ailments. Deficiency disorders, psychological problems like Bed Wetting, Malingering, Thumb sucking, etc.

#### Microteaching

- Statement , Explanation, Deduction & Conclusion by expert :
  1. Growth & Development of child: Milestones, Methods of Assessment & Management of Common Problems related to Growth and Development of Child.
  2. Immunization : Purpose of Immunization, Immunization Schedule, Explanation of benefits accrued by Immunization schedule
  3. Paediatric ailments: Definition, Essentials of Diagnosis, Complications & Management.

**Timeline:** 45 minutes

#### Group Activity

- All the participants will be divided in 5 groups

- Each group will be allotted one clinical entity
- This will be done by moderator/ co-ordinator in advance
- The participants may choose one of following activity for their group and two groups will not chose same activity
  1. Case presentation (Experience Sharing)/Presentation of an already published article.
  2. Role play to demonstrate clinical approach
  3. Poster presentation
  4. Designing flip Charts for Quiz Game
  5. *Shloka* recitation
- Timeline: 45 minutes (Not more than 10 minutes for each group)

### **Unit-20: National Programmes - I**

#### **Learning objectives:**

- National AIDS Control Campaign, Revised National Tuberculosis Control Programme, Blindness Control Programme.

#### **Microteaching**

- Statement ,Explanation, Deduction & Conclusion by expert :
  1. National AIDS Control Campaign: Need of the campaign, A brief History in Chronological Order, Components of Campaign, Challenges & Achievements till date.
  2. RNTCP: Need of the campaign, A brief History in Chronological Order, Components of Campaign, Challenges & Achievements till date.
  3. Blindness Control Program: Need of the campaign, A brief History in Chronological Order, Components of Campaign, Challenges & Achievements till date.

#### **Group Activity**

- All the participants will be divided in 5 groups
- Each group will be allotted one clinical entity
- This will be done by moderator/ co-ordinator in advance
- The participants may choose one of following activity for their group and two groups will not chose same activity
  1. Experience Sharing
  2. Role play to demonstrate IEC approach
  3. Poster presentation
  4. Designing flip Charts for Quiz Game
  5. Slogan writing (at least 10 slogans)
- **Timeline:** 45 minutes (Not more than 10 minutes for each group)

### **Unit-21: National Programmes - II**

#### **Learning Objectives:**

- Other National Programmes like RCH, Malaria Control programme, Anti Polio Programme, Leprosy Eradication Programme, etc.

#### **Microteaching**

- Statement ,Explanation, Deduction & Conclusion by experts on following:
  1. RCH:A brief History in Chronological Order, Components of Campaign, Challenges & Achievements till date
  2. Malaria Control Program:A brief History in Chronological Order, Components of Campaign, Challenges & Achievements till date
  3. Anti-Polio Programme:A brief History in Chronological Order, Components of Campaign, Challenges & Achievements till date
  4. Leprosy Eradication Programme:A brief History in Chronological Order, Components of Campaign, Challenges & Achievements till date

- **Timeline:** 45 minutes (Not more than 10 minutes for each group)

### **Group Activity**

- All the participants will be divided in 5 groups
- Each group will be allotted one clinical entity
- This will be done by moderator/ co-ordinator in advance
- The participants may choose one of following activity for their group and two groups will not chose same activity
  1. Experience Sharing
  2. Role play to demonstrate IEC approach
  3. Poster presentation
  4. Designing flip Charts for Quiz Game
  5. Slogan writing (at least 10 slogans)

## **Unit: 22: Documentation aspects of the Day to day work**

### **Learning Objectives-**

- Case based learning
- Importance of documentation
- Tools of documentation
- Levels of documentation
- Accessibility of documentation
- Documentation errors & its effects , Rectification methods
- Recent updates on documentation processes

### **1. Category (T-L method)- Case based learning /problem-based learning:**

- Presentation of case by moderator of any Documentation process

### **2. Interactive session**

Basic –

- Discussion of the presented topic by the participants
- Discussion or queries related with the shared experiences.
- Discussion on Importance of documentation
- Discussion on Tools of documentation
- Discussion on Levels of documentation
- Discussion on Accessibility of documentation

Advance –

- Discussion on Documentation errors & its effects , Rectification methods
- Discussion on Recent updates on documentation processes

### **3. Activity session (Group discussion)**

- Doubts and query related to above topic by participants and doubt clearance by moderator
- Audio/Video presentation of Documentation process of different wings of same hospital/clinic setup

- Giving different tasks to different groups (after making the participants into smaller groups) like:
  - Importance of documentation
  - Tools of documentation
  - Levels of documentation
  - Accessibility of documentation
  - Documentation errors & its effects , Rectification methods
  - Recent updates on documentation processes

Take home message /Summing up by the moderator.

### **Unit: 23: Quality aspects in health care delivery**

#### **Learning Objectives-**

- Case based learning
- Importance of Quality- in health care delivery
- Components of Quality health care delivery
- How to maintain Quality health care
- Hindrance of quality health care delivery
- Measures to overcome the barriers of Quality health care
- Importance of trainings in the health care delivery
- Developing need based training calendars
- National Patient safety goals (NPSGs)
- Need of developing Soft skills in patient care delivery
- Need of administrative skills for better handling of health care setups

#### **1. Category (T-L method)- Case based learning /problem-based learning:**

- Presentation of case by moderator of any component of Quality health care delivery

#### **2. Interactive session**

Basic –

- Importance of Quality- in health care delivery
- Components of Quality health care delivery
- How to maintain Quality health care

Advance –

- Discussion on Hindrance of quality health care delivery
- Measures to overcome the barriers of Quality health care
- Importance of trainings in the health care delivery
- Developing need based training calendars
- National Patient safety goals (NPSGs)
- How to develop Soft skills which are essential part of patient care delivery
- How to develop administrative skills for better handling of health care setups

#### **3. Activity session (Group discussion)**

- Doubts and query related to above topic by participants and doubt clearance by moderator

- Audio/Video presentation of National Patient safety goals (NPSGs)
- Audio/Video presentation of Components of Quality health care delivery
- Giving different tasks to different groups (after making the participants into smaller groups) like:
  - Importance of documentation
  - Tools of documentation
  - Levels of documentation
  - Accessibility of documentation
  - Documentation errors & its effects , Rectification methods
  - Recent updates on documentation processes

Take home message /Summing up by the moderator.

## **Unit- 24: Methods for Teaching Technology**

### **Learning Objectives:**

- To enhance teaching skills
- To upgrade the soft skill and sensitize about the new technologies including AI based teaching techniques.

### **Microteaching**

#### **Basics**

Understanding the basic teaching techniques like-

- Direct Instruction (Low Tech)
- Kinesthetic Learning (Low Tech)
- Differentiated Instruction (Low Tech)

#### **Advance**

Understanding the advance teaching techniques like-

- Flipped Classrooms (High Tech)
- Inquiry-based Learning (High Tech)
- Expeditionary Learning (High Tech)
- Personalized Learning (High Tech)
- Game-based Learning (High Tech)

### **Group Activity**

- All the participants will be divided in 4 groups
- Each group will be allotted to practice one high tech and one low tech teaching methodology.
- All the participants of the group will have to share their idea related to use of AI for teaching in Ayurveda (demonstration of idea is mandatory)
- Demonstration of AI technologies by demonstrator/ expert.
- The participants have to perform one activity from the following
  - ✓ Presentation of shortcoming in the present teaching module
  - ✓ Suggestions related to up gradation of bedside teaching module in Ayurveda
  - ✓ Demonstration of application of electronic media (e.g. Google workplace) for connecting, creating and collaborating to share case studies, research data, clinical experiences, unique cases, use of medicines, etc.

## Unit-25: Research Methodology

### Learning Objectives:

- Understanding the need of research in Ayurveda
- Having knowledge of general guidelines and steps in the research process.
- Preparation of research proposals for submission to funding agencies taking EMR-AYUSH scheme as a model.
- Updates about scientific writing and publication skills.
- Knowledge about the classical methodology of research
- Introduction to latest Trends in Drug Discovery and Drug Development, Clinical research
- Introduction to bioinformatics, scope of bioinformatics, role of computers in biology. Introduction to Data base- Pub med, Medlar and Scopus. Accession of databases.
- Intellectual Property Rights- Different aspect and steps in patenting. Information on Traditional Knowledge Digital Library (TKDL).
- Introduction of basics of Medical statistics and its application in Ayurvedic research.

### • Basics (teaching part)

- Selection of the research problem
- Defining research problem and formulation of hypothesis
- Defining general and specific objectives
- Research design: observational and interventional, descriptive and analytical, preclinical and clinical, qualitative and quantitative
- Sample design, Collection of the data and Analysis of data.
- Generalization and interpretation, evaluation and assessment of hypothesis.
- Ethical aspects related to human and animal experimentation.
- Information about Institutional Ethics Committee (IEC) and Animal Ethics Committee (AEC) and their functions. Procedure to obtain clearance from respective committees, including filling up of the consent forms and information sheets and publication ethics.
- Methods of scientific writing including familiarization with publication guidelines- Journal specific and CONSORT guidelines, different types of referencing and bibliography, thesis/Dissertation: contents and structure, research articles structuring: Introduction, Methods, Results and Discussions (IMRAD).
- Learning classical methods of research Concept of *Pratyakshadi Pramana Pariksha*, their types and application for Research in Ayurveda, *Dravya-, Guna-, Karma-Parikshana Paddhati, Aushadhi-yog Parikshana Paddhati, Swastha, Atura Pariksha Paddhati, Dashvidha Parikshya Bhava, Tadvidya sambhasha, vadmarga and tantrayukti.*
- Knowledge of basics of clinical and drug research.
- Basics of Medical statistics.

### • Advance (teaching part)

- Introduction to bioinformatics, scope of bioinformatics, role of computers in biology. Introduction to Data base- Pub med, Science Direct and Scopus. Accession of databases.
- Intellectual Property Rights- Different aspect and steps in patenting. Information on Traditional Knowledge Digital Library (TKDL).
- Knowledge about new drug development techniques like Thin-layer chromatography (TLC), Column chromatography (CC), Flash chromatography (FC), High-performance thin-layer chromatography (HPTLC), High Performance (Pressure) Liquid Chromatography (HPLC),

Gas Chromatography (GC, GLC).

- Familiarization with the use of Statistical software like SPSS/Graph Pad

**Group Activity (Practical part):**

- Hands-on training by all participants on the following:
  - Clinical study design and protocol writing based on the research question given by expert/demonstrator (research question should be different for each participant)
  - Application of statistical method based on the research design.
  - Searching appropriate Journal for publication of research article written on the given research question and statistical derivation.
  - Scientifically correction of article (provided by the expert/ demonstrator) including research design, data collection method, allocation, sampling, etc., ethical aspects, referencing style, method of presentation, selection of journal and should mention the probable reasons for rejection of the article.
  - Discussion of 2-3 Patents by the Ministry of Ayush, CCRAS or any other genuine authority.
  - Discussion related to method of applying patent in countries other than India and their commercialization.
  - Methods of commercialization of patent (demonstrator should give practical examples).