Management of Common Respiratory Disorders
Chronic Bronchitis, Bronchial Asthma & Sinusitis.

By
Prof. Y.K. Sharma.
dryks2gmail.com
About Author:

Prof. Y.K. Sharma

MD(kayachikitsa), Ph.D (Geriatrics)
Prof&HOD P.G.Department of Kayachikitsa cum Principal
Rajiv Gandhi Govt Post Graduate Ayurvedic College, Paprola-HP
About Presentation:

-Shall be Concentrating on The principal Disorders, COPD, Bronchial Asthma and Chronic Sinusitis.
-(Duration about - 60-90 Minutes)
-Medium- Presentation display in English and oral deliberations in –English and Hindi
- Number of Slides -75
Source material:

- Data from authorised websites like: WHO, Wikipedia, Myo-clinics-USA, Ministry of Health and Family Welfare Govt of India, etc.

- Available Medical and Ayurvedic Literature.

-- Personal professional experiences.

Author acknowledges all.
Components of the Upper Respiratory Tract

- Sinus
- Nasal cavity
- External nose
- Nostril
- Tongue
- Larynx
- Esophagus
- Trachea
- Sinus
- Opening of the Eustachian tube
- Pharynx
- Glottis
- Epiglottis
Upper Respiratory Tract Functions

- Passageway for respiration
- Receptors for smell
- Filters incoming air to filter larger foreign material
- Moistens and warms incoming air
- Resonating chambers for voice
Components of the Lower Respiratory Tract

- Larynx
- Trachea
- Left bronchus
- Right bronchus
- Bronchioles
- Clusters of alveoli
Lower Respiratory Tract

- **Functions:**
  - **Larynx:** maintains an open airway, routes food and air appropriately, assists in sound production
  - **Trachea:** transports air to and from lungs
  - **Bronchi:** branch into lungs
  - **Lungs:** transport air to alveoli for gas exchange
Gas Exchange Between the Blood and Alveoli
Pranvaha Sarotas and Swas Roga

Pranvaha sarotus serve all the functions attributed to respiratory system. This combines Both the lungs and heart as a unit.

Factors are described that vitiate this system and lead to various signs and symptoms attributable to Swasa Roga- The Diseases associated with difficulty in breathing.
Factors that vitiate the Pranvaha Sarotus:run vyadi

i. Kshaya – Physical waisting.
ii. Veg-Dharan – Retension of natural physical urges.
iii. Rookshata – Loss of unctuousness in body.
iv. Vyajama – Unaccustomed physical exercises.
v. Kshudha – Prolonged Starvation
vi. Darun awastha – Chronic ailments.

These factors are not only applicable in weakening the strength of Lungs and Heart but make them prone to ailments of Lungs and Heart.

Specific factors responsible for Chronic Bronchitis (Kasa and Bronchial Asthma) are separately explained:
Factors responsible for Bronchial Asthma (Tamak Swasa) and Chronic Bronchitis (Kasa) and decreased Respiratory capacity are

1. Raja and Dhool in Vayu: Gasseous and Suspended particulate polluting air.

2. Sheersthana: Dwelling in cool and damp place.

3. Aptarpan Hetu – Indulgence in activities causing wasting of body.


5. Marmabighat – Damage to vital organs.

In addition to these some chronic ailments may also get associated with difficulty in respiration. Few of among them are:

1. Pandu-Anaemia.
2. Rakatpitta – Bleeding disorders.
3. Visha- Poisoning.
4. Hrid roga – Cardiac ailments.
5. Jalodhara – Ascitis.

In all these conditions breathlessness may actually be secondary and correctable, hence cannot be linked to Bronchial asthma.
Features of Pranvaha sarotus dushti:

i. Atisrishta swasa – Obstructed respiration effort.
ii. Atideerga swasa – Prolonged respiration.
iii. Sswad swasa – Noises in act of respiration.
v. Sshoola swasa – Painful respiration.

It is advised that all such conditions where Pranwah sarotus is effected to cause Swasa the treatment should be like Swasa roga only.
Principals of management of Disorders of Pranvaha sarotus:

1. Nidan Parivarjan- Avoid aetiological and precipitating factors.
3. Shaman Chikitsa – Symptomatic including emergency management.
5. Vihar - Other life style advises.
PART – I

Chronic Bronchitis/COPD
What Is COPD?

COPD, or chronic obstructive pulmonary (lung) disease, is a progressive disease that makes it hard to breathe.

The disease gets worse over time. COPD can cause coughing that produces large amounts of mucus (a slimy substance), wheezing, shortness of breath, chest tightness, and other symptoms.

Cigarette smoking is the leading cause of COPD. Most people who have COPD smoke or used to smoke.

Long-term exposure to other lung irritants—such as air pollution, chemical fumes, or dust—also may contribute to COPD.
A Normal Lungs

- Trachea (windpipe)
- Airways
- Right lung
- Left lung
- Bronchioles (tiny airways)
- Alveoli (air sacs)

B Lungs With COPD

- Bronchioles lose their shape and become clogged with mucus
- Walls of alveoli are destroyed, forming fewer larger alveoli
Causes of Airflow Limitation

- Fibrosis and narrowing of the airways

- Loss of elastic recoil due to alveolar destruction

- Destruction of alveolar support that maintains patency of small airways
Incidence:

- 65 million Indians suffer from various chronic respiratory diseases excluding tuberculosis.
- Approximately, 13 million Indians suffer from COPD.
- About 62% of these are men and the remaining women.
- Prevalence rates were assessed as 5% for male and 2.7% for female subjects over 30 years of age.
- In more than 70% of patients, COPD limits normal physical activities.
- More than 30% of patients are forced to give up their work.

- World Health Organization study estimated the global prevalence of chronic obstructive pulmonary disease (COPD) to be 9.33 per 1000 individuals for men and 7.33 per 1000 for women. The prevalence was observed to be higher in industrialized countries.
Main risk factors for COPD:

1. Tobacco smoking
2. Indoor air pollution (such as biomass fuel used for cooking and heating)
3. Outdoor air pollution
4. Occupational dusts and chemicals (vapors, irritants, and fumes)
Smoking:

The primary cause of chronic obstructive pulmonary disease (COPD) is tobacco smoke (including second-hand or passive exposure). WHO estimates that in 2005 5.4 million people died due to tobacco use. Tobacco-related deaths are projected to increase to 8.3 million deaths per year by 2030.
Symptoms:

1. Cough:
   - A chronic cough is usually the first symptom to occur.
   - When it exists for more than three months a year for more than two years without another explanation,
   - This condition can occur before COPD officially develops.
   - The amount of sputum produced can change over hours to days.
   - In some cases the cough may not be present or only be occur occasionally and may not be productive. Some people with COPD write it off as simply a "smoker's cough".
2. Shortness of breath:

- Shortness of breath is often the symptom that bother people the most. It commonly describe as:
  "my breathing requires effort,"
  "I feel out of breath," or
  "I can't get enough air in."

Typically the shortness of breath is of a prolonged duration, worsened over time and is worse with exercise.

In the advanced stages it occurs during rest and maybe always present.
3. Wheezing:

- Those with obstructed airflow may have wheezing or decreased sounds of air entry with poor air entry typically representing a greater severity of disease.

- It may also take longer to breathe out than breathing in.

- Chest tightness may occur but is not common and may represent another problem.

- A barrel chest while a classic finding,

- In those with severe disease tiredness and weight loss become common.
4. Corpulmonale:

- Advanced COPD may lead to Cor-pulmonale a strain on the heart due to the extra work required to pump blood through the lungs.

- Symptoms that indicate the presence of cor-pulmonale include swelling around ankles.

- Many people with COPD breath through pursed lips and this action can improve shortness of breath in some.
Exacerbation of COPD:

-An exacerbation is defined as increased shortness of breath, increased sputum production, a change in the color of the sputum from clear to green or yellow, or an increase in cough in someone with COPD.

-This may present with signs of increased work of breathing such as: fast breathing, a fast heart rate, sweating, active use of muscles in the neck, a bluish tinge to the skin, and confusion if in a severe exacerbation.

-Fever may be due to underlying infection.
Diagnosis:

Symptomatological Criteria

(a) Symptoms of COPD
   - Cough with expectoration.
   - Dyspnoea on exertion
   - Wheezes
   - Tightness in the chest
   - Sputum production
   - Edema

(b) Signs criteria:
   - Barrel shaped chest
   - Reduced air entry
   - Central or peripheral cyanosis
   - Diminished expansion of the chest
   - Prolonged expiration
   - Use of accessory respiratory.
Functional Criteria :

- Power of exertion
- Breath holding time
- Cyanosis
- Sleep duration with posture
- Pulse rate
- Six minute walk test
Spirometry

- Diagnosis
- Assessing severity
- Assessing prognosis
- Monitoring progression
Radiological Criteria

Signs of hyperinflation
- Decreased Broncho-vascular markings
- Narrow/tubular heart
- Low flat Diaphragm
- Increased intercostal spaces.

Signs of bronchitis
- Marked bronchovascular markings
- Large heart.
CHRONIC BRONCHITIS

EMPHYSEMA

PINK PUFFER

BLUE BLOTTER
COPD management:

An effective COPD management plan includes four components:
(1) assess and monitor disease;
(2) reduce risk factors;
(3) manage stable COPD;
(4) manage exacerbations.

The goals of effective COPD management are to:
• Prevent disease progression
• Relieve symptoms
• Improve exercise tolerance
• Improve health status
• Prevent and treat complications
• Prevent and treat exacerbations
• Reduce mortality
PART-II

Bronchial Asthma-Tamak Swasa.
Asthma Definition

- Asthma is a chronic disease causing inflammation and occasional obstruction of the airways.

- Asthma exacerbations are acute episodes of progressively worsening shortness of breath, coughing, wheezing and chest discomfort.
Definition:

Asthma (from the Greek ἄσθμα, ásthma, "panting") is a common chronic inflammatory disease of the airways characterized by variable and recurring symptoms, reversible airflow obstruction, and bronchospasm.

Common symptoms include wheezing, coughing chest tightness, and shortness of breath.

In classical Ayurvedic literature it is described as Tamak Swasa
The scale of the problem:

• Between 100 and 150 million people around the globe.

• India has an estimated 15-20 million asthmatics.

• In India, rough estimates indicate a prevalence of between 10% and 15% in 5-11 year old children.
Causes:

Asthma is caused by inflammation in the airways. When an asthma attack occurs, the muscles surrounding the airways become tight and the lining of the air passages swells. This reduces the amount of air that can pass by.

In sensitive people, asthma symptoms can be triggered by breathing in allergy-causing substances (called allergens or triggers).

Types:
1. Episodic.
2. Chronic
Common asthma triggers include:

- Animals (pet hair or dander)
- Dust
- Changes in weather (most often cold weather)
- Chemicals in the air or in food
- Exercise
- Mold
- Pollen
- Respiratory infections, such as the common cold
- Strong emotions (stress)
- Tobacco smoke

Aspirin and other nonsteroidal anti-inflammatory drugs (NSAIDs) provoke asthma in some patients. Many people with asthma have a personal or family history of allergies, such as hay fever (allergic rhinitis) or eczema. Others have no history of allergies.
Symptoms:

Most people with asthma have attacks separated by symptom-free periods. Some people have long-term shortness of breath with episodes of increased shortness of breath. Either wheezing or a cough may be the main symptom.

Asthma attacks can last for minutes to days, and can become dangerous if the airflow is severely restricted.

Symptoms include:
- Cough with or without sputum (phlegm) production
- Pulling in of the skin between the ribs when breathing (intercostal retractions)
- Shortness of breath that gets worse with exercise or activity
Emergency symptoms:

Bluish color to the lips and face
Decreased level of alertness, such as severe drowsiness or confusion, during an asthma attack
Extreme difficulty breathing
Rapid pulse
Severe anxiety due to shortness of breath
Sweating

Other symptoms that may occur with this disease:
Abnormal breathing pattern -- breathing out takes more than twice as long as breathing in
Breathing temporarily stops
Chest pain
Tightness in the chest
Associated conditions:

A number of other health conditions occur more frequently in those with asthma, including gastro-esophageal reflux disease (GERD), rhino-sinusitis, and obstructive sleep apnea.

Psychological disorders are also more common, with anxiety disorders occurring in between 16–52% and mood disorders in 14–41%.
Genetic factors:

Asthma is caused by a combination of complex and incompletely understood environmental and genetic interactions.

These factors influence both its severity and its responsiveness to treatment.

It is believed that the recent increased rates of asthma are due to changing epigenetics (heritable factors other than those related to the DNA sequence) and a changing living environment.
Environmental:

Many environmental factors have been associated with asthma's development and exacerbation including allergens, air pollution, and other environmental chemicals. Smoking during pregnancy and after delivery is associated with a greater risk of asthma-like symptoms.

Low air quality from factors such as traffic pollution has been associated with both asthma development and increased asthma severity.

Common indoor allergens include: dust mites, cockroaches animal dander, and mold.
Exercise-induced:

Exercise can trigger bronchoconstriction in both people with and without asthma.

It occurs in most people with asthma and up to 20% of people without asthma.

While it may occur with any weather conditions it is more common when it is dry and cold.
Occupational:

Asthma as a result of (or worsened by) workplace exposures, is a commonly reported occupational diseases. Many cases however are not reported or recognized as such.

It is estimated that 5–25% of asthma cases in adults are work–related. A few hundred different agents have been implicated with the most common being: Drugs, grain and wood dust, paint, animals, bakers, food processing, chemical, hospitals, hairdressers, dairy, etc.
Exams and Tests:

- Allergy testing: may be helpful to identify allergens in people with persistent asthma.
- The doctor or nurse will use a stethoscope to listen to the lungs. Wheezing or other asthma-related sounds may be heard. However, lung sounds are usually normal between asthma episodes.

Tests may include:
- Arterial blood gas:
- Blood tests to measure eosinophil count (a type of white blood cell) and IgE (a type of immune system protein called an immunoglobulin)
- Chest x-ray
- Lung function tests
- Peak flow measurements
Treatment:

Because asthma is a chronic condition, it usually requires continuous medical care. Patients with moderate to severe asthma have to take long-term medication daily to control the underlying inflammation and prevent symptoms and attacks. If symptoms occur, short-term medications are used to relieve them. Medication is not the only way to control asthma.

It is also important to avoid asthma triggers -- stimuli that irritate and inflame the airways. Each person must learn what triggers he or she should avoid.

Although asthma does not kill on the scale of chronic obstructive pulmonary diseases (COPD), failure to use appropriate drugs or comply with treatment, coupled with an under-recognition of the severity of the problem, can lead to unnecessary deaths, most of which occur outside hospital.
The goals of treatment are:

- Control airway swelling
- Stay away from substances that trigger your symptoms
- Patient and your doctor should work together as a team to develop and carry out a plan for eliminating asthma triggers and monitoring symptoms.

There are two basic kinds of medication for treating asthma:
Control drugs to prevent attacks
Quick-relief (rescue) drugs for use during attacks
Asthma care at home:
Know the asthma symptoms to watch out for.

Know how to take your peak flow reading and what it means.

Know which triggers make your asthma worse and what to do when this happens.

Asthma action plans are written documents for anyone with asthma. An asthma action plan should include:

A plan for taking asthma medications when your condition is stable
A list of asthma triggers and how to avoid them
How to recognize when your asthma is getting worse, and when to call your doctor or nurse
Outlook (Prognosis):

There is no cure for asthma, although symptoms sometimes improve over time. With proper self management and medical treatment, most people with asthma can lead normal lives.

Possible Complications
The complications of asthma can be severe. Some include:
- Death
- Decreased ability to exercise and take part in other activities
- Lack of sleep due to night time symptoms
- Permanent changes in the function of the lungs
- Persistent cough
- Trouble breathing that requires breathing assistance (ventilator)
When to Contact a Medical Professional:

An asthma attack requires more medication than recommended
Symptoms get worse or do not improve with treatment
You have shortness of breath while talking
Your peak flow measurement is 50% - 80% of your personal best
Drowsiness or confusion
Severe shortness of breath at rest
A peak flow measurement is less than 50% of your personal best
Severe chest pain
Bluish color to the lips and face
Extreme difficulty breathing
Rapid pulse
Prevention:
WE can reduce asthma symptoms by avoiding known triggers and substances that irritate the airways.

Cover bedding with "allergy-proof" casings to reduce exposure to dust mites.

Remove carpets from bedrooms and vacuum regularly. Use only unscented detergents and cleaning materials in the home.

Keep humidity levels low and fix leaks to reduce the growth of organisms such as mold.

Keep the house clean and keep food in containers and out of bedrooms -- this helps reduce the possibility of cockroaches, which can trigger asthma attacks in some people.

If a person is allergic to an animal that cannot be removed from the home, the animal should be kept out of the bedroom.
Tobacco elimination:

Eliminate tobacco smoke from the home. This is the single most important thing a family can do to help a child with asthma.

Smoking outside the house is not enough. Family members and visitors who smoke outside carry smoke residue inside on their clothes and hair -- this can trigger asthma symptoms.

Persons with asthma should also avoid air pollution, industrial dusts, and other irritating fumes as much as possible.
Management of Swasa Rog and ISM:

i. Nidan parivarjan-Avoid disease triggers and etiogenic factors.
ii. Shodhan Chikitsa- Purification of morbid factors from body.
iii. Shaman Chikitsa – Symptomatic and palliative management management.
iv. Aahar Vihar-Dietetics and lifestyle in disease
vi. Rasayana Chikitsa-Rejuvination.
Nidan parivarjan-Avoid disease triggers and aetiogenic factors such as:

i. Smoking.
ii. Cold air.
iii. Gaseous and dust pollution including deodorants, fresheners.
iv. Heavy unctuous diet/indigestion.
v. Fasting.
vi. Unwanted drugs.
vii. Unaccustomed exertion.
viii. Pratishaya-Rhinitis.
ix. Humidity.
x. Kshaya-physical wasting.
xi. Etc.
Shodhan Chikitsa- Purification of morbid factors from body.


1. Snehan Swedan- Uro Snehan followed by Nadi Swedan and vaman.
Shaman Chikitsa – Symptomatic and Palliative management.

1. Expectorants/Mucolytics (Kaphanissarak)- e.g. Sitopladi ch 3 gm, Suddha tankan 500 mg, Swaskuthar ras 120 mg two to three times a day with honey, Madhuyashti Quath 100 ml twice day.

2. Bronchodilators (Swasnalikavispharak)- e.g.- Kantkariavleha 10 gm twice a day, Kanakasva 10 ml with water twice a day. Somlata ch 2 gm BD if acute episode

3. Antiallergics- e.g.-Haridra khanda 3 gm, Rasmanakaya 60 mg, Praval panchamrit 100 mg mix with honey two to three times a day. Sharishavleha 10 gm BD, Sharishadi kwatha 100 ml twice a day. Somlata ch. 2 gm three times a day with hot water.
Aahar Vihar-Dietetics and lifestyle in disease

1. Avoid-High fat milk, Excessive oils in food, Curd, Tubors, Fish, Cold water and drinks, etc. In life style routine avoid Cold air, getting wet in rains, humid places, excessive physical and mental exertion, physical and mental stress, factors and medications leading to physical and immunological debility, etc.

1. Take - Cereals like wheat floor, seasoned rice, low fat milk, lean meat, vegetable, and meat soups, light drinks and beverages, honey, Luke warm water, lemon, green leafy vegetables, etc. In lifestyle engage in accustomed physical exercises, day time rest, engage in activities that assure physical and mental relaxation
Vegkala Chikitsa-Management of acute episode.

- Complete rest
- Plenty of fluids
- Oxygen.
- Som Churna – 2 to 3 gm with vasadi qwath 3 to 4 times a day.
- Kanakasva- 10 ml thrice a day.
- If possible and patient is relatively fit and have entrapped secretions in chest try to induce emesis by giving Madhuyashti quath or Takan leha especially in children.

- If the condition does not improve patient be referred to intensive care.
Rasayana Chikitisa- Rejuvination

1. Chyavanprash Rasayana.
2. Ashwagandha Rasayana.
3. Amritprash Rasayan.
Breathing Exercise

• Posture
• Pranayama
PART- III
Sinusitis
Definition:

Sinusitis or rhinosinusitis is inflammation of the para-nasal sinuses. It can be due to infection, allergy, or autoimmune issues. Most cases are due to a viral infection and resolve over the course of 10 days.

Sinus produce mucus, which drains into the nose. If your nose is swollen, this can block the sinuses and cause pain and sinusitis.
Types of sinusitis:

Acute, which lasts up to 4 weeks

Subacute, which lasts 4 to 12 weeks

Chronic, which lasts more than 12 weeks and can continue for months or even years

Recurrent, with several attacks within a year
The sinuses:

We have four pairs of sinuses in your head:
Two sinuses behind your forehead-Frontal
Two at either side of the bridge of your nose-Sphenoidal
Two behind your eyes-Ethmoidal
Two behind your cheekbones-Maxillary

Sinuses open up into the cavity of your nose and help control the temperature and water content of the air reaching your lungs.

It is the sinuses behind the cheekbones (Maxillary) that are most commonly affected.
Symptoms:

Chronic sinusitis and acute sinusitis have similar signs and symptoms, but acute sinusitis is a temporary infection of the sinuses often associated with a cold.

At least two of the following signs and symptoms must be present for a diagnosis of chronic sinusitis:

1. Drainage of a thick, yellow or greenish discharge from the nose or down the back of the throat
2. Nasal obstruction or congestion, causing difficulty breathing through your nose
3. Pain, tenderness and swelling around your eyes, cheeks, nose or forehead
4. Reduced sense of smell and taste
Other signs and symptoms can include:

- Ear pain
- Aching in your upper jaw and teeth
- Cough, which may be worse at night
- Sore throat
- Bad breath (halitosis)
- Fatigue or irritability
- Nausea

The signs and symptoms of chronic sinusitis are similar to acute sinusitis, except they last longer and often cause more significant fatigue. Fever isn't a common sign of chronic sinusitis, as it may be with acute sinusitis.
When to see a doctor:

You may have several episodes of acute sinusitis, lasting less than four weeks, before developing chronic sinusitis. You may be referred to an allergist or an ear, nose and throat specialist for evaluation and treatment.

You've had sinusitis a number of times, and the condition fails to respond to treatment
You have sinusitis symptoms that last more than seven days
Your symptoms don't get better after you see your doctor

See a doctor immediately if you have symptoms that may be a sign of a serious infection:
Pain or swelling around your eyes
A swollen forehead
Severe headache
Confusion
Double vision or other vision changes
Stiff neck
Shortness of breath
Causes of Sinusitis:

Common causes of chronic sinusitis include:
Nasal polyps. These tissue growths may block the nasal passages or sinuses.
Allergic reactions.
Deviated nasal septum.
Trauma to the face.

Other medical conditions:
-Gastroesophageal reflux,
-Respiratory tract infections. most commonly, colds,
-NBA, etc.
Risk factors:

Aspirin sensitivity that causes respiratory symptoms.

An immune system disorder, such as HIV/AIDS.

Hay fever or another allergic condition that affects your sinuses.

Asthma — about 1 in 5 people with chronic sinusitis have asthma.

Regular exposure to pollutants such as cigarette smoke.
Complications:
Chronic sinusitis complications include:

Asthma flare-ups: Chronic sinusitis can trigger an asthma attack.
Meningitis: This infection causes inflammation of the membranes and fluid surrounding your brain and spinal cord.
Vision problems: If infection spreads to your eye socket, it can cause reduced vision or even blindness that can be permanent.
Aneurysms or blood clots: Infection can cause problems in the veins surrounding the sinuses, interfering with blood supply to your brain and putting you at risk of a stroke.
Management of Sinusitis:

1. Prevention.
2. Medical management.
3. Surgical management.
Prevention:

1. Checkup of a predisposing factor.

2. Avoid pollution, smoking, allergens, diving in water, deodorants, room fresheners, coolers, air conditioners, stuffy atmosphere, etc.

3. Regular Nasya in form of Pratimarsh.

4. Immunity boosting food, routine and additives.

5. Regular Jal Neti after learning the same from experts.
Medical management.


3. Immunity boosting drugs: Amalaki Rasayana, Chavanprashavleha, etc.

4. Local application: Dashmooladi Taila, etc.

5. Other useful drugs when chronic inflammation is there: Triphala Gugglu, Suddha Tankan, Laxmi-vilas rasa, etc.
Surgical management.

Surgery for Polyp
Surgery of DNS
Surgery for Blocked Sinus opening.
1. Respiratory diseases account for very high incidence of Morbidity and mortality in India.

2. Cigarette and Beedi smoking are important factors for diseases like Chronic Bronchitis and Lung cancers.

3. Air pollution with toxic gasses and suspended particulate matters, allergens account for high incidence of occurrence and exacerbation of respiratory ailments.

4. Use of fossil fuels, room fresheners, deodorants and other aerosolable chemicals should be restricted in homes where someone is having respiratory ailments.
5. Education about protection from respiratory ailments and adequate management during chronic phase and acute episodes should be available in hand to avoid morbidity and mortality.

6. Ayurveda advise regarding life style and yogic pranayamic exercises play important role in management of respiratory ailments.

7. Ayurveda have safe medicines for long term management of respiratory ailments and they should be first choice of management.
THANK YOU