



"A CLINICAL STUDY OF ILTEHAB-E-ANAF-E HISSASI(ALLERGIC RHINITIS)AND ITS MANAGEMENT WITH UNANI MEDICINE"

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Abstract

Allergic rhinitis (Iltehab-e-Anaf-e-Hassasi) is an immunologic response of the nasal mucosa to air born allergens and is characterized by watery nasal discharge, nasal obstruction, sneezing and itching in the nose.According to Unani literature Allergic rhinitis (Iltehab-e-Anaf-e-Hassasi) is a condition with watery irritating nasal discharge dripping down towards throat, with sense of burning (sozish) in nose, face and eyes with lacrimation, and also alters the sense of olfaction.Nazla va Zukam were used synonymously by most of the Unani physicians.It is an extremely common condition affecting a large population.It also has many ill impact on the patients quality of life such as work, sleep, school performance of children.

Allergic Rhinitis can lasts for weeks to months with allergen exposure.Despite the advancement in pharmacological interventions the management remains unsatisfactory.Esteemed Unani physicians showed the efficacy of miraculous unani drugs in such conditions.Hence to scientifically validate the efficacy of test drug formulation a clinical trial was conducted.

Aim And Objectives:

- 1.To evaluate the efficacy of Unani drugs in the cases of ALLERGIC RHINITIS(ILTEHAB-E-ANAF-E-HISSASI).
- 2.To help the suffering patients by providing an effective & safe Unani treatment of ALLERGIC RHINITIS.

Methodology:

The study was conducted as a Randomized single blind clinical trail with a sample size of 40 patients.They received treatment for 45 days in Govt.Nizamia General Hospital,Hyderabd.The drugs selected for the study are GUL-E-BANAFSHA,GUL-E-GAOZABAN,USTUKHUDOOS,

KALONJI.A decoction of above mentioned drugs followed by Mushil and Tabreed alternate days for 4 days.The pre and post treatment effects were assessed based on subjective and objective parameters.The results were analyzed according to the relevent statistical test.

Results:

The study revealed that the drugs showed extreme statistical significance with p value[<0.0001]. Drugs were found safe without any adverse effects.

INTRODUCTION

RHINITIS: Inflammation of the mucous membrane of the nose is called Rhinitis. Commonly known as common cold.

ALLERGIC RHINITIS: Allergic Rhinitis(Iltehab-e-Anaf-e-Hissasi) is an IgE mediated hypersensitivity reaction of nasal mucosa to air borne allergens.It is type of inflammation in the nose that occurs when the immune system overreacts to the allergens in the air. Allergic Rhinitis typically triggered by environmental allergens such as pollens, animal dander, house dust or molds, dust mites, feathers, various fragrances.Allergic Rhinitis triggered by the pollens of specific seasonal plants is commonly known as “Hay Fever” because it is most prevalent during Hay Season.

EPIDEMIOLOGY:

Respiratory allergy(allergic rhinitis & asthma)is high prevalence disease that affects an average of 10-15%of the general population.

PREVALENCE:

The Prevalence of Allergic Rhinitis is increasing constantly all over the world. Recently World Health Organization has estimated that 400 million people in the world suffer from Allergic Rhinitis.The phase 3 International Study of Asthma and Allergy in Children(ISAAC).An Indian study reported that prevalence of allergic rhinitis was 24.4%in children aged between 13-14years and 10%-30% in adults.Approximately 22% of adolescents currently suffer from allergic rhinitis in India.

CLASSIFICATION

Two Clinical types have been recognise

- 1.Seasonal
- 2.Perennial

1.SEASONAL ALLERGIC RHINITIS: Symptoms appear in or around a particular season when the pollens of a particular plant to which patient is sensitive are present in air.

2. PERENNIAL ALLERGIC RHINITIS: Symptoms are present throughout the year.

BASED ON DURATION

Intermittent symptoms are present <4days per week or <4weeks

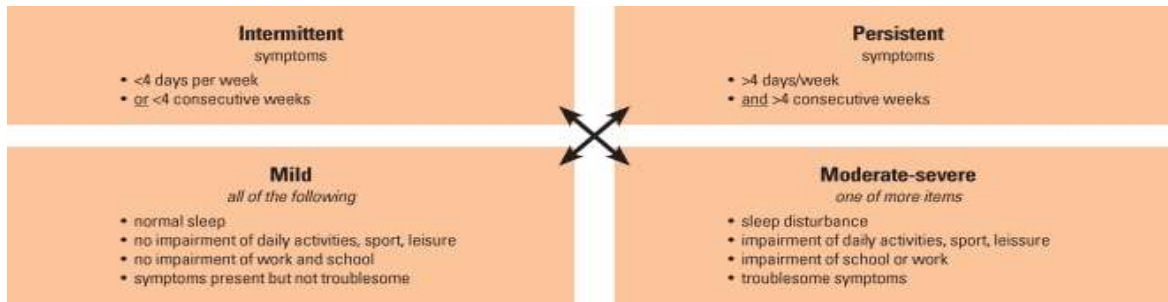
Persistent symptoms are present >4days per week or >4weeks

BASED ON SEVERITY

Mild and Moderate

MILD :No interference with daily activity or troublesome symptoms

MODERATE :Impairment of daily activities work, school, disturbed sleep, troublesome symptoms.



SYNONYMS: Iltehab e anaf hissasi(Allergic Rhinitis),Cold in head,Coryza,Common cold,Nazla(Catarrh),Hay Fever.

The term NAZLA(Rhinitis) means the inflammation of the mucous membrane of the nose.

The body's defence mechanism works over time to react against foreign particles which may pose danger to normal functioning of the human system.These foreign particles are known as Allergens.People who are known to be allergic,respond to allergens in an exaggerated manner thus resulting in irritation and discomfort to the body.

Allergic Rhinitis is a miserable condition that significantly impairs the quality of life.It also has many ill impact on the patients quality of life such as work, sleep, school performance of children it affects their psychological behaviour.

When compare to the modern drugs Unani systme of Medicine is comparatively affordable and with the reach of the poor people under such circumstances Unani medicine is good source to cure the intensity of diseases.Keeping in view all the above factors we have chosen certain drugs to show the efficacy of the drugs in the management of Allergic Rhinitis.

AIM AND OBJECTIVES OF STUDY

- ◆ To evaluate the efficacy of Unani drugs in the cases of ALLERGIC RHINITIS(ILTEHAB-E-ANAF-E-HISSASI).
- ◆ To help the suffering patients by providing an effective &safe Unani treatment of ALLERGIC RHINITIS

REVIEW OF LITERATURE

There is no separate description of allergic rhinitis in Unani literature when we go through the literature of the ancient Unani physicians regarding the present concept of the Allergic Rhinitis we find the symptoms and signs have been described under the disease of Chapter “NAZLA WA ZUKAAM”

Hippocrates (460 BC) was the first man who described Nazla or Nasal catarrh is the inflammation of the mucosa membrane of the nose and he also described that the excessive cold of atmosphere the secretion of the brain are released which result in the running of nose.

The waste product of the brain are secreted towards the respiratory tract is termed as “Nazla” when they are secreted via the nose it is termed as “Zukam”.

In zukam the secretions are salty taste and watery in nature and these secretion affects the eye’s nose ,face,muscles and sense of smell.

The etiological factors described by Shaikur Rayees Bu Ali Sina(Avicena)980AD Rhinitis is purging of the brain.Rhinitis specially applied to an inflamed condition that occur in nasal cavity.

AKHLAT(Humours) :-

The unani system is based on the humoral theory. Their unequal or irregular distribution constitutes disease.³⁷

The humoral theory is first described by **Hippocrates** according to him four humours are blood (dam). Phlegm (Balgham) , Yellow bile (Safra), black bile (Sauda). The humours themselves are assigned temperaments. Blood is hot and moist, phlegm is cold and moist, yellow biles is hot and dry, black is cold and dry.

Hakeem Kabeeruddin expressed the quotation of Buqrat very implicitly in his book **Tarjuma-e-sharah asbab** that “zukam is the catarrhal condition of the nasal mucosa and Nazla is the inflammation of the nasal mucosa characterized by fluid discharge.²⁸

Hakeem Gulam Jeelani in his book “**Makhzannul hikmat** stated that the term nazla” is derived from the Arabic word “**Nuzool**” which mean dripping down while it is called “Rezish“ in Persian language he defined nazla as a condition in which there is a liquid asal secretion along with irritaion.³⁶

Shaikur Rayees Bu Ali Sina(Avicena) 980AD described unhygienic, imbalanced diet and obstruction in passages are also the causes for infection (Ufoonat) which results in inflammation (warm).⁶

Unani physicians divided NAZLA into 2 major kinds

1. NAZLE HAAR
2. NAZLE BARID

NAZLE HAAR :-Nazle haar occurs due to domination of hot humours like blood and bile and mixture of humours. According to Avicenna the balgamme malah (one kind of abnormal Balgham) which is hot in temperament and may be responsible in producing nazle haar.

The face and eyes of the patient may be examined on touching the forehead it is found hot than other part of the body. Patient gives history of burning & irritation in the nose discharge, these are the dominant symptoms of Nazle haar.⁸

NAZLE BARID:-

The Unani concept of Nazle Barid is that the mijaz of the patient becomes cold. Nazle barid occurs in the cold temperament persons with the domination of phlegmatic humours.

According to Avicenna the cold type of Catarrh or Nazla Barid is always caused by excessive cold baths, sudden contact with cold environment, sudden seasonal changes and poor nourishment.

Nazla Barid patient have positive history of nasal discharge, nasal obstruction voice change and feeling of heaviness in the forehead.¹⁴

CAUSES OF ILTEHAB E ANAF HISSASI:

The aetiological factor described by **Hippocrates (460 BC)** **Avicenna (980AD)** **Tabri (1052H)** and other famous Unani physician are altered temperament which may be hot or cold, poor nourishment, unhygienic condition, atmospheric changes, imbalance diet, excessive use of sour food and fruits, weakness of defensive mechanism are mainly responsible for producing this disease.

Shaik-ur-rayees bu ali senna (Avicenna) described unhygienic environment, imbalance diet and obstruction in passages are also the causes for ufoonath (infection), which result in warm (inflammation).⁶

1) Internal factors (asbab-e-badaniya)

2) External factors (asbad-e-badiya)

1) INTERNAL FACTOR :

a) **HAAR (HOT)** : It may be due to the excessive body temperature of brain. This may be associated with excessive body temperature.

b) **BARID (COLD)** : This may be due to the cold altered temperament of brain which is unable to excrete the accumulated waste products of brain result in nazla.

2) EXTERNAL FACTOR :

a) **HAAR (HOT)** ; This may be due to su-e-mijaz of brain (hot altered temperament) which originated due to external causes like sun light or applying hot oils to head. Zafran which increase brain temperature leading to

the liquefaction of brain liquids (Rutu bath-e-dimagh) when the brain overflows with rut bat. This will exudates through nostrils.

b) **BARID (COLD)**; Hardening of scalp skin, closer of skin pores which usually excrete out.

ETIOLOGY: According to the doctrine of Unani medicine, any state that hampers the equilibrium of humours (Akhlat) either qualitatively or quantitatively may cause disease. Some of the etiologies defined by various Unani practitioners are as:

1. According to **Ibn Sina**, individuals with a hot temperament (intrinsic factors) may likely to develop Nazla Haar.
2. According to **Samarqand**, there are 8 causes for Nazla, viz, four are of Sue mizaj dimagh and other four are Akhlate Arba.
3. Extrinsic factors (Asbabe kharija): hararat mizaj, hararate mizaj khaas, uncovered head, exposure to sunlight, fire, garam hamam, working in hot environment, applying pungent odour perfumes or smelling/snuffing of hot drugs such as mushk, jundbadastar, zafran, onion etc. Massaging the head with hot oils or usage of warm hair oils, sleeping immediately after food, consumption of hot things like garlic, onion, mustard etc., bathing after exercise followed by improper wrapping, or strenuous psychic or physical activity and also exposure to allergens like pollen, cotton fur, feather, dust.
4. Mostly both intrinsic and extrinsic factors together will produce Nazla va Zukam.

Further, it is caused by Sue mizaj haar, Sue mizaj of brain, Zoafe dimagh, imtilae aam va raas (plethora of body and head), Tukhma, Infealate nafsania and Seasonal variation.

CLINICAL FEATURES: Clinical features may vary from individual to individual in terms of severity, frequency, duration and the nature of etiologies involved, but most common feature are nasal discharge (rhinorrhoea) paroxysmal sneezing, nasal congestion, redness of face and eyes hyper sensitivity, burning and itching in the nose, eye and throat lacrimation, mild headache, hot to touch (malmas), hoarseness of voice, excess thirsty, fatigue, lethargy, Nabz- Azeem, Saree va mutavatar, Qarura- Yellowish.

LINE OF TREATMENT (USOOLE ILAJ) ;

Effective treatment of Nazla Haar depends upon accurate clinical diagnosis and assessment of the patient's dominant symptoms.

1. Izale sabab (Elimination of the cause)

Exposure to heat and/cold (intrinsic and extrinsic factors) should be eliminated.

2. Correction of Sue mizaj:

- 1) Sue mizaj sada should be modulated with appropriate regimen and barid makulat va mashrubat, roghaniyat, nutulat, zimadat, quturat etc.

2) Sue mizaj mad'di should be corrected through munzijat followed by Tanqia.3). Ta'deele mizaj

4. Tadabeer: According to Zakaria al Razi and Jalinoos, cupping over the nape of the neck is advisable for itching in the nose and Sneezing. Inkibab (steam inhalation), takmeed (fomentation), fasd (venesection) and use of suitable oils for qutoor (nasal drops).

5. Ghiza; Precaution from oily, ghaleez lesdaar and delayed digestible foods, alcohol, sour things like milk, curd along with ghaleez and saqeel ghiza. 6. muqawwiyyate dimagh va me'dda.⁸

PATHOPHYSIOLOGY

The pathogenesis of allergic rhinitis:

This disorder is initiated by an allergic immune response to inhaled allergens. Atopic individuals have a genetic predisposition to become sensitized to harmless allergens via activation of dendritic cells and T lymphocytes.⁴¹ Dendritic cells are strategically located at mucosal surfaces to capture allergens and act as antigen-presenting cells, thereby presenting the allergenic peptide to T lymphocytes in draining lymph nodes.

The dendritic cell is situated, with molecules such as thymic stromal lymphopoietin possibly promoting a T helper 2 (Th2) allergic response.^{42–44} CD4+ T cells play a key part in initiation and orchestration of the allergic immune response through secretion of cytokines such as interleukins 4, 5, 10, and 13. Interleukin 4 is a cardinal cytokine in driving sensitisation to allergens by inducing the IgE class switch in B lymphocytes. IgE molecules are released into the bloodstream and bind to high-affinity receptors on the surface of tissue mast cells and circulating basophils. When allergens are deposited onto nasal mucosa of sensitised individuals, they bind allergen-specific IgE on the surface of mast cells, leading to rapid release of preformed mediators such as histamine, causing symptoms associated with the early nasal response—ie, sneezing, rhinorrhoea, and nasal itching. Both histamine and tumour necrosis factor α , and newly generated lipid mediators such as leukotriene C4 and prostaglandin D2, contribute to the influx of inflammatory cells—eg, eosinophils, CD4+ T lymphocytes, and basophils—by stimulation of expression of adhesion molecules on endothelial cells. Influx of these cells characterises the late allergic response, with nasal obstruction as the main presenting symptom.

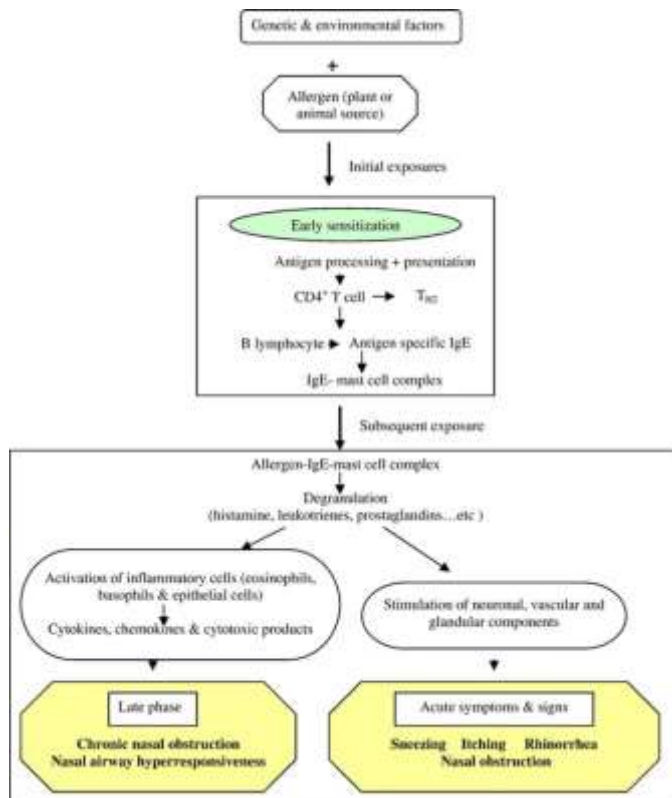
CD4+ lymphocytes represent the main source of interleukin 5. This cytokine has a key role in eosinophilic inflammation in allergic rhinitis through stimulation of eosinopoiesis, influx of eosinophils in mucosa, and eosinophil survival in tissue.⁵

Allergen-specific IgE and eosinophilic nasal inflammation are typical features of allergic rhinitis, and these features distinguish allergic from other forms of the disorder.

Non-allergic neuronal mechanisms could have a role in the non-specific hyper-reactivity that is frequently seen in allergic rhinitis. Therefore, neurotrophins are prime candidates as mediators. These include nerve growth factor (NGF) and brain-derived neurotrophic factor (BDNF) and their receptors.

Regulatory T lymphocytes are important for maintenance of immune responses and T-cell homeostasis. Naturally occurring CD4⁺CD25⁺ regulatory T cells, T regulatory 1 (Tr1) cells that produce interleukin 10, or both cell types suppress Th2 lymphocyte responses to allergens in health, whereas this inhibition is attenuated in allergic disorders.

Nonspecific nasal hyper-reactivity is seen in patients of allergic rhinitis. There is increased nasal response to normal stimuli resulting in sneezing, rhinorrhoea and nasal congestion. Clinically, allergic response occurs in two phases:



1. **Acute or early phase.** It occurs immediately within 5–30 min, after exposure to the specific allergen and consists of sneezing, rhinorrhoea nasal blockage and/ or bronchospasm. It is due to release of vasoactive amines like histamine.

2. **Late or delayed phase.** It occurs 2–8 hours after exposure to allergen without additional exposure. It is due to infiltration of inflammatory cells—eosinophils, neutrophils, basophil, monocytes and CD4 + T cells at the site of antigen deposition causing swelling, congestion and thick secretion. In the event of repeated or continuous exposure to allergen, acute phase symptomatology overlaps the late phase.²²

SIGN AND SYMPTOMS:

Nasal sign: Nasal Crease, Oedematous nasal mucosa, Swollen turbinates

Ocular signs: oedema of lids, dark circles under eyes (Allergic shiners)

Otologic signs: Serous otitis media due to Eustachian tube block

Itchy nose, eyes and palate

Allergic rhinitis is characterized by 4 cardinal symptoms of

- Watery Rhinorrhea
- Nasal Obstruction
- Nasal Discharge
- Sneezing

COMPLICATIONS:

Allergic Asthma

Chronic Otitis media

Hearing loss

Sinusitis

DIAGNOSIS

New Allergic Rhinitis and Its Impact on Asthma

(ARIA) Classification; It is based on duration and symptoms of disease. Duration of symptoms is subdivided into intermittent or persistent and severity of disease into mild, moderate or severe.

To determine the cause of Allergic rhinitis we have to take A detailed comprehensive history including questions about comorbidities

And thorough clinical examination are the two most important methods to aid accurate diagnosis

We have to ask a number of questions about;

Time of day and year of rhinitis episodes, Rhinitis that appears seasonally is typically due to pollens and outdoor allergens. If symptoms occur throughout the year the doctor will suspect perennial allergic or non-allergic rhinitis.

- Family history of Allergies.
- History of medical problems.
- In women if they are pregnant or taking any drugs that contain estrogen(oral contraceptives, hormone replacement therapy).
- Use of other medications including decongestants, which can cause a rebound effect.
- Pets

Any additional unusual symptoms such as Bloody nasal discharge and obstruction in only Nasal passage could suggest tumour.

PHYSICAL EXAMINATION

Examine inside of the nose with an instrument called speculum. This is painless examination to check for redness and other signs of inflammation. Also usually check the Eyes, Ears, and chest.

Possible physical findings may include:

- Eye itching, hyperaemia, watering, and occasionally, periorbital oedema.
- Swollen mucus membranes in the nose
- Swollen Nasal turbinates or nasal polyps
- Evidence of fluid behind eardrum
- Skin rashes
- Wheezing

METHODOLOGY

METHOD AND MATERIAL:

The present study entitled Clinical study of ILTEHAB E ANAF E HISSASI (Allergic Rhinitis) was conducted at Govt. Nizamia general hospital Charminar, under the guidance of Professor Dr. N. Narasimha PG Dept of Moalejat.

This study included 40 patients of either sex male & female, belonging to different age groups ranging from 15-55 years. As per rules applied for CTRI. Got registered with number CTRI/2023/01/048785. Ethical registration no. 20314221003D

Patients those who are having symptoms of allergic rhinitis, were taken from out patient room no: 107 department of general medicine Govt. Nizamia general hospital. Patients were selected with allergic rhinitis from either sex belonging to different age groups, fulfilling the inclusion and exclusion criteria were invited to participate in research study. Patients were selected after registration and were explained about the research work nature of study, and drug with the mode of Administration. After giving the consent form to participate voluntarily, they were asked to sign in the informed consent and included in the study. Apart from this patients were selected through the advertisements in the local newspapers. All the findings were recorded on the case record proforma, designed for the study.

Duration of study - The study has been carried out for a period of 1 year.

Duration of therapy : 45 days

Study Design: A Randomised Single blind Clinical Trial

Selection of cases -Criteria used for selection of patients-Physical Examination,Clinical History & investigations.

INCLUSION CRITERIA

Participants of either sex in age group of 15-55years

Patients with following sign and symptoms suggesting the diagnosis of Allergic Rhinitis

- a. Nasal Discharge
- b. Sneezing
- c. Nasal Obstruction
- d. Dull Headache
- f. Nasal itching

EXCLUSION CRITERIA

Age <15and >55 years were excluded from the study

Pregnant women with Allergic Rhinitis

Known cases of coronary artery disease, ischemic heart disease and myocardial infarction

Patients with Pulmonary disease such as Allergic Bronchial Asthma and other allergic systemic disorders

Deviated Nasal Septum and Sinusitis

Patients with other ENT diseases were exclude.

WITH DRAWAL CRITERIA

Those who are not giving proper follow up.

Patients landing into complication like deranged liver function, and kidney function .

Patients showing sensitivity towards drugs, Drug intolerance

Serious Adverse effects if any

INVESTIGATIONS

ROUTINE INVESTIGATION:

CBP (Complete blood picture)

AEC (Absolute Eosinophil Count)

ESR (Eryocyte sedimentation rate)

RBS (Random blood sugar)

LFT (Liver function test)

RFT (Renal function test)

CUE (complete urine examination)

X-Ray PNS (To exclude Sinusitis Patient)

Specific investigation:

Serum specific IgE level

Skin testing

RAST(radioallergosorbent test)

Method of collection of Data: Through clinical study of patients after signing informed consent at OPD 107 PG Moalijat Department GNGH.

Study design: Randomized single blind standard clinical trail.

Sample size: Total 40 cases were studied.

Duration of Treatment: Duration of treatment was 45 days and assessment of therapeutic response were done every week and findings were recorded on a proforma prepared for the purpose.

Outcome Measures: Efficacy Evaluation

Subjective parameters: Nasal Discharge, Sneezing, Nasal Obstruction, Dull Headache, Nasal itching

Objective parameters: Assessment by clinical examination and lab investigation CBP, ESR, AEC

Safety Evaluations

Adverse effects / Adverse drug Reaction

Laboratory Abnormalities.

Follow up during treatment :

Patients were kept under strict observation and advised for follow up for every 7th day with a total duration of 45 days . At every visit patients were asked about the progression or regression in their symptoms and were investigated . After withdrawal of treatment or recurrence and non-recurrence of symptoms patients were asked to come every 15 days for a period of 2 months.

SELECTION OF DRUGS FOR CLINICAL TRAIL

When selecting the drugs the fact was kept in the mind of the special pharmacological action according to unani pharmacology, beneficial mode of their action in relieving symptoms of Allergic Rhinitis.

The drugs are selected according to their properties actions and uses, temperament and the modren research data available. All the drugs selected and studied for their usefulness in sneezing, nasal blockage and watering of eyes in various research centres of country.

In this present study the following drugs are selected consists of single drugs, Which are having anti allergic and anti inflammatory effects on nasal mucosa.

GUL-E-BANAFSHA(Viola odorata) [5gm]

GUL-E-GAOZABAN(Borago officinalis) [5gm]

USTUKHUDOOS (Lavandula stoechas) [5gm]

KALONJI(Nigella sativa) [5gm]

All the drugs will be coarsely powdered and a decoction will be prepared and will be given in 2 divided doses

Followed by Mushil and Tabreed for 4 alternate days

The above drugs grinded well to coarse powder form and dispensed to the patients instructed to soak in 120ml of water for entire night. Then the next day morning the water along with drugs to be boiled till the water reduced to half, the obtain filtered and divided into two half doses and given in morning and evening before meals.

Method of preparation of medicine:

All the single drugs are taken in the required quantity and identified by the chief pharmacist Govt. Nizamia General Hospital, to ensure their originality and authenticity. The drugs were cleaned by weeding out superfluous material and impurities. The drugs was then pulverized to make a coarsly grind powder under hygienic condition .

The patients were dispensed medicine for 2 weeks at a time with instruction to return the unconsumed medicine (sachets) at the next visit, if any. This procedure was repeated for the whole duration of study. Each 2week supply of drugs were dispensed in a sealed plastic cover. The sachets were prepared for exact quantification of drug dose and for patient convenience.

DIETARY MODIFICATIONS:

While deciding the diet of the patient, their daily routine and dietary habits were taken into consideration and their dietary modification were advised accordingly.

The following food items considered to the phlegmatic are specifically withdrawn.

Curd, Butter milk, chilled water, ice creams, lime, tamarind, cucumber, pine apple etc..

STATISTICAL ANALYSIS:

All the data were presented as mean, standard deviation (SD). The result were analyzed statistically by T test, one way ANOVA, T test and data was analyzed by using instant graph pad and difference in the treatment groups were considered statistically.

OBSERVATIONS AND RESULTS

Table 1: showing distribution of patients according to age

Age (in yrs.)	Frequency	Percentage
21-30	14	35
31-40	15	37.5
41-50	8	20
51-60	3	7.5
Total	40	100

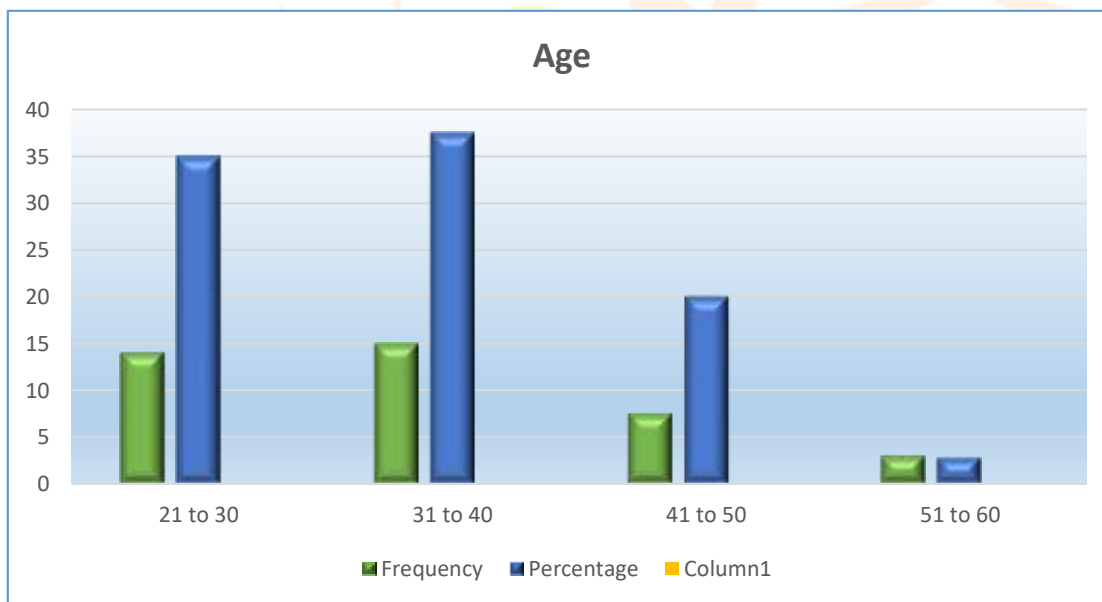


Table 2: showing distribution of patients according to gender

Gender	Frequency	Percentage
Female	15	37.5
Male	25	62.5
Total	40	100

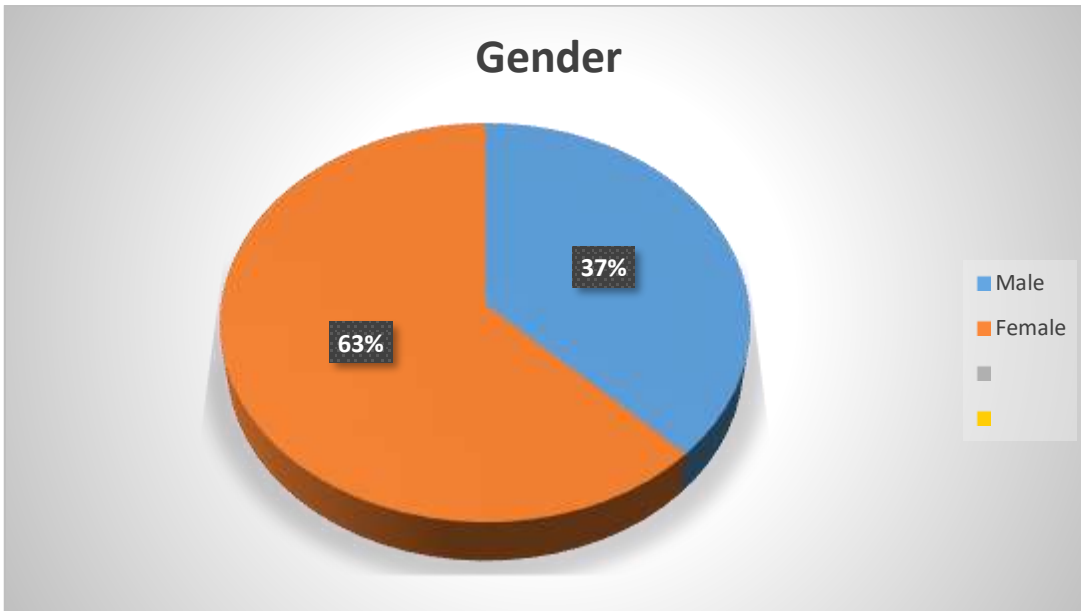


Table 3: showing distribution of patients according to religion

Religion	Frequency	Percentage
Hindu	7	17.5
Muslims	33	82.5
Total	40	100

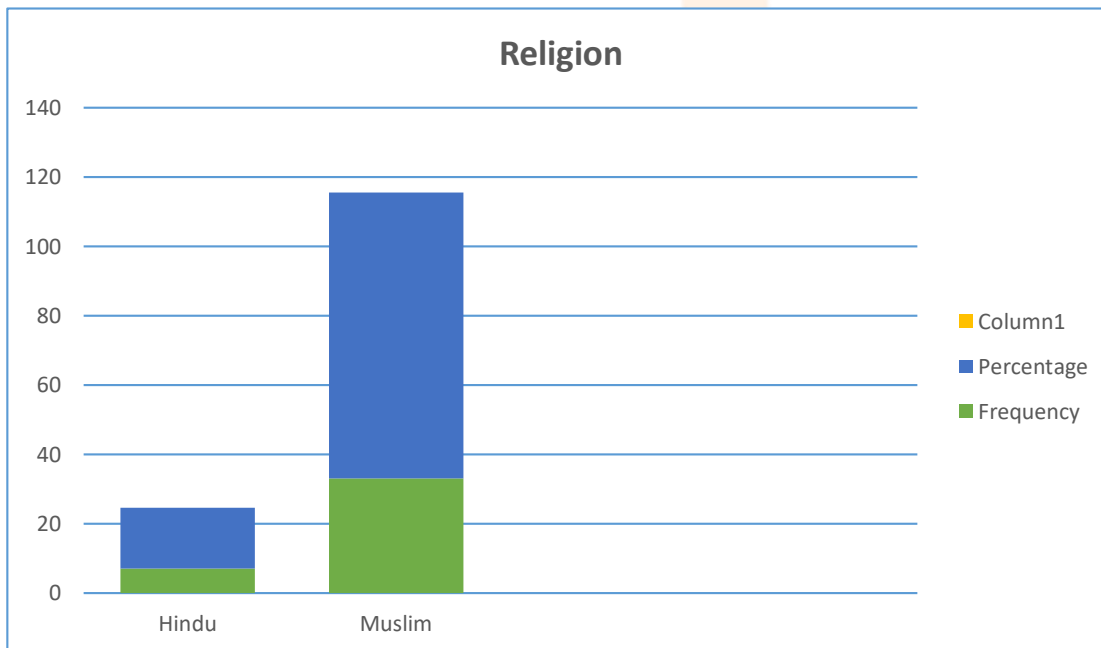


Table 4: showing distribution of patients according to marital status

Marital status	Frequency	Percentage
Married	30	75
Unmarried	10	25
Total	40	100

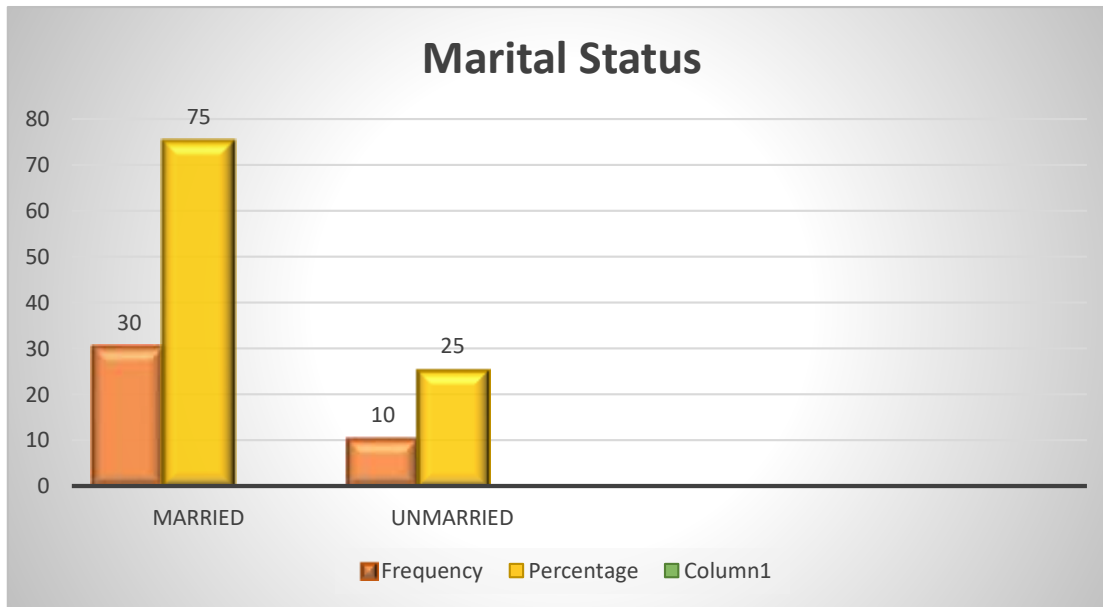
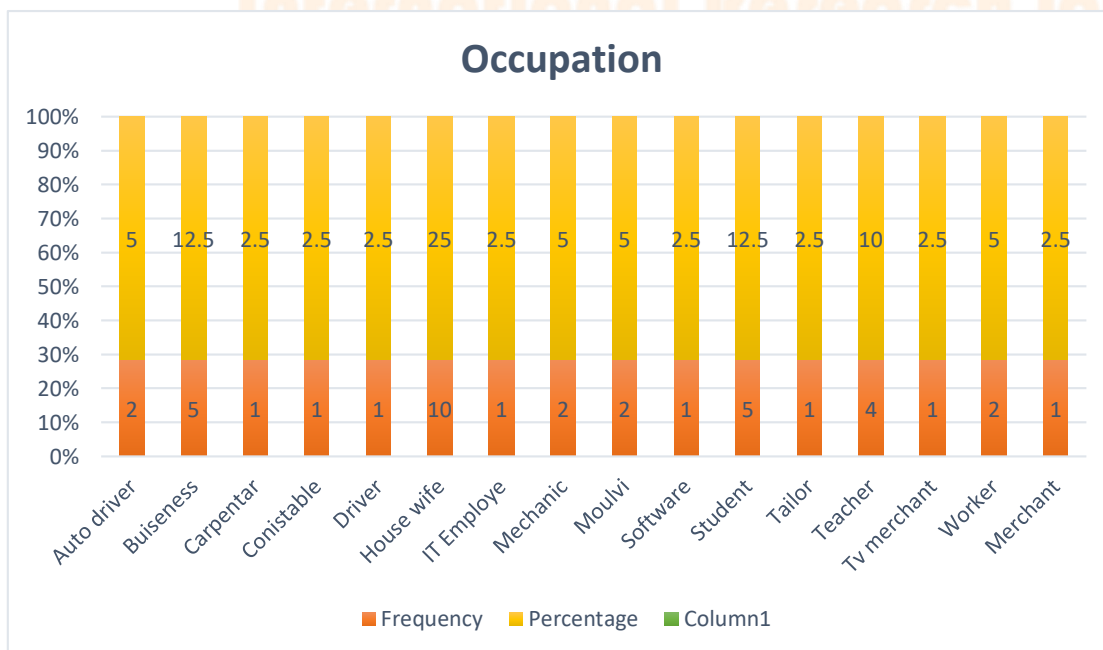


Table : 5 Showing Distribution of patients according to occupation



Occupation	Frequency	Percentage
Auto driver	2	5
Buiseness	5	12.5
Carpentar	1	2.5
Conistable	1	2.5
Driver	1	2.5
House wife	10	25
IT Employe	1	2.5
Mechanic	2	5
Moulvi	2	5
Software	1	2.5
Student	5	12.5
Tailor	1	2.5
Teacher	4	10
Tv merchant	1	2.5
Worker	2	5
Merchant	1	2.5

Table: 6 Showing distribution of patients according to socioeconomic status

S E S	Frequency	Percentage
LC	10	25
MC	17	42.5
UC	13	32.5
Total	40	100



Table: 7 Showing distribution of patients according to Mizaj (temperament)

Mizaj (temperament)	Frequency	Percentage
Balgami	31	77.5
Damawi	2	5
Safrawi	6	15
Saudawi	1	2.5
Total	40	100

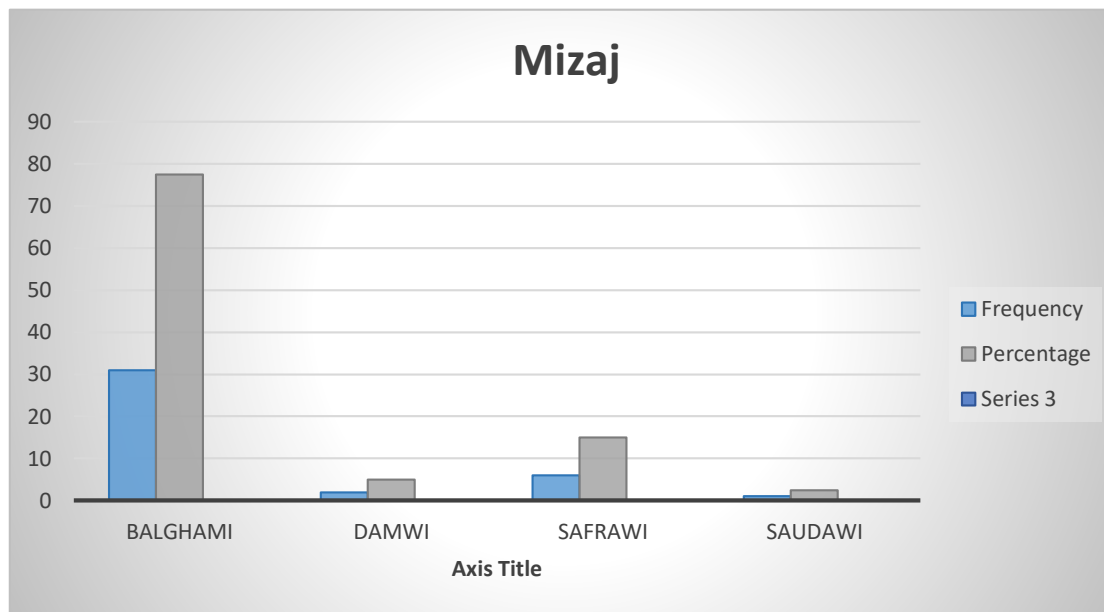


Table: 8 Showing distribution of patients according to chronicity of the disease

Chronicity	Frequency	Percentage
3 - 6 months	7	17.5
6 m - 1 year	9	22.5
1 - 3 years	18	45
3 - 8 years	6	15

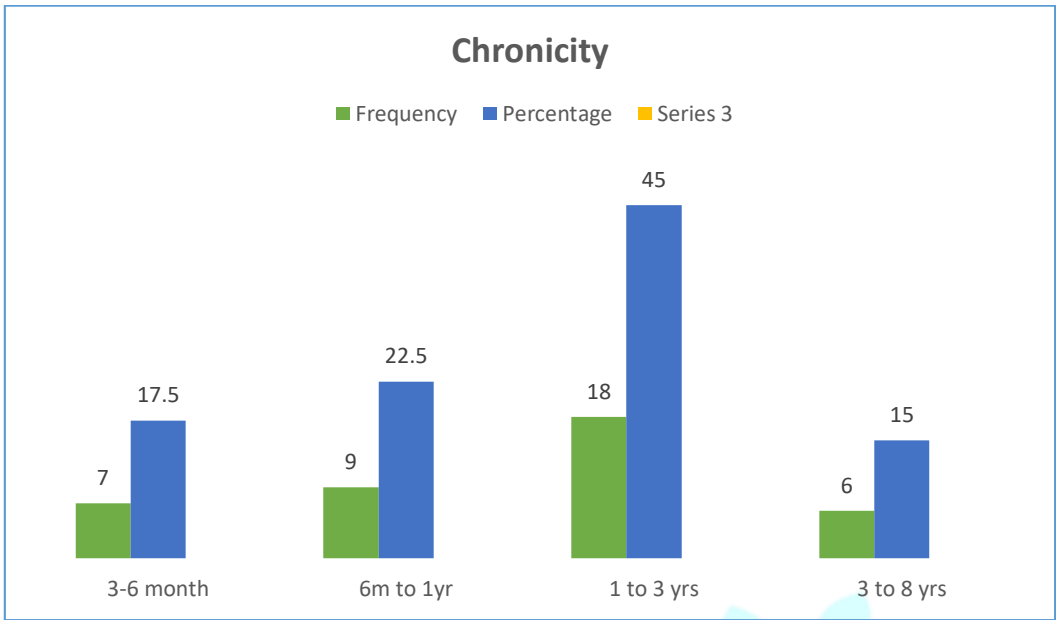


Table: 9 Showing distribution of patients according to subjective parameters

Patients according to clinical symptom Runny nose on 0day, 15th day, 30th day, 45th day.

Grade	0 Day	15th Day	30th Day	45th Day
No Compliants	0	0	15 (37.5%)	17 (42.5%)
Mild	3 (7.5%)	20 (50.0%)	19 (47.5%)	20 (50.0%)
Moderate	17 (42.5%)	20 (50.0%)	6 (15.0%)	3 (7.5%)
Severe	20 (50.0%)	0	0	0

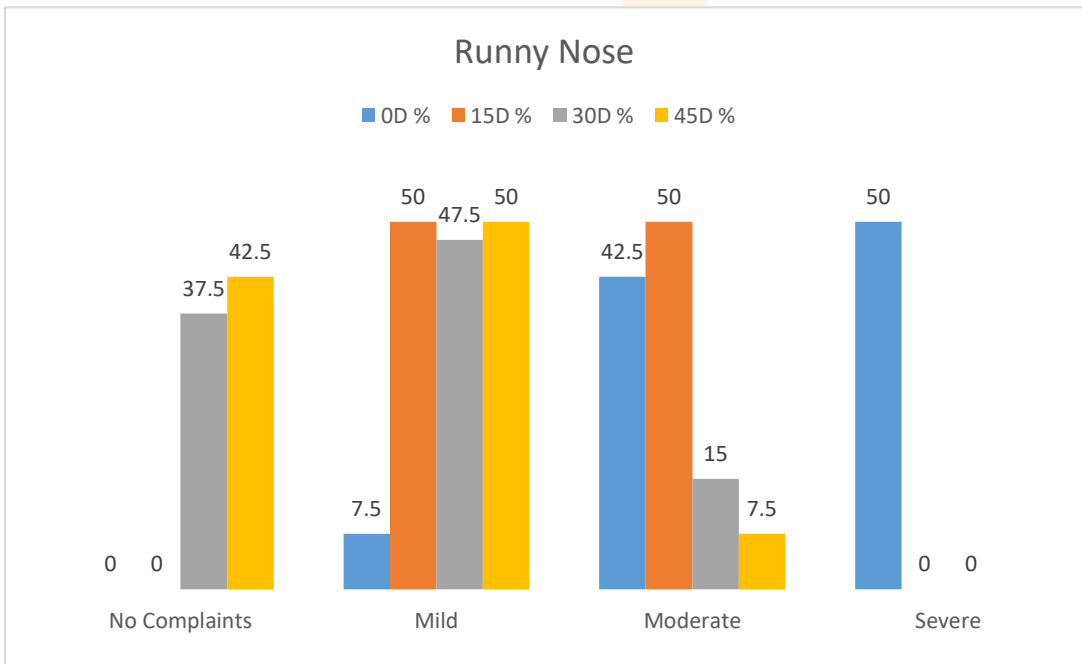


Table no: 10 Patients according to clinical symptom Sneezing on 0day, 15th day, 30th day, 45th day.

Grade	0 Day	15th Day	30th Day	45th Day
No Compliants	0	0	17 (42.5)	17 (42.5)
Mild	17 (42.5%)	31 (77.5%)	20 (50.0%)	20 (50.0%)
Moderate	14 (35.0%)	9 (22.5%)	3 (7.5%)	3 (7.5%)
Severe	9 (22.5%)	0	0	0

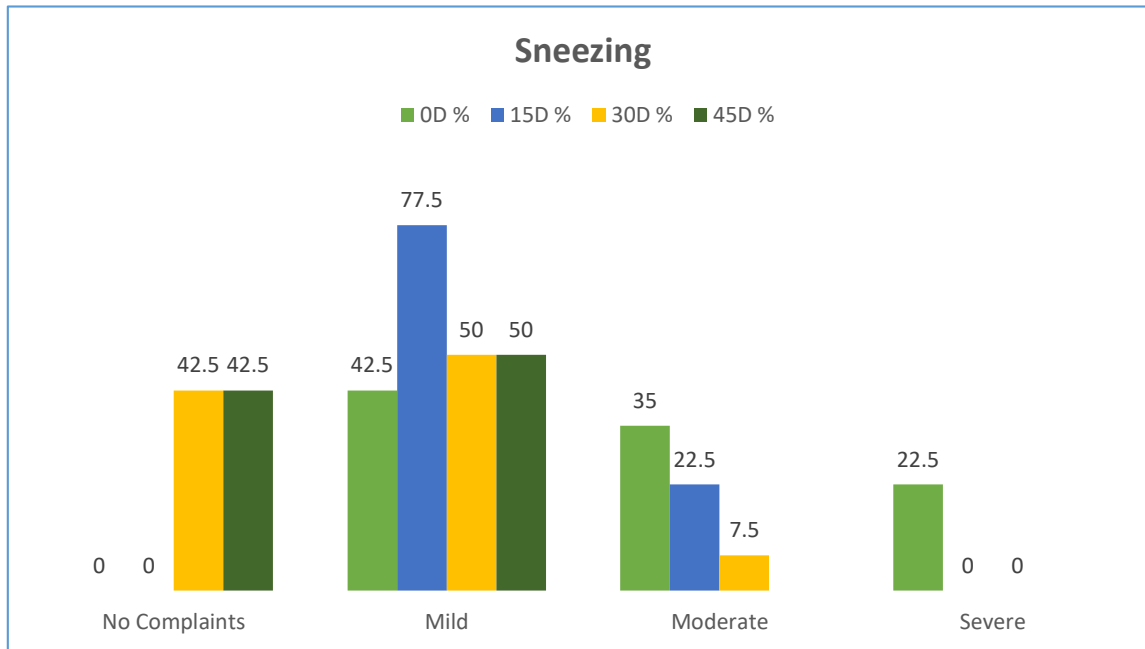


Table no:11 Patients according to clinical symptom Stiffness on 0day, 15th day, 30th day, 45th day.

Grade	0 Day	15th Day	30th Day	45th Day
No Compliants	0	9 (22.5%)	36 (90.0%)	36 (90.0%)
Mild	27 (67.5%)	22 (55.0%)	4 (10.0%)	4 (10.0%)
Moderate	10 (25.0%)	9 (22.5%)	0	0
Severe	3 (7.5%)	0	0	0

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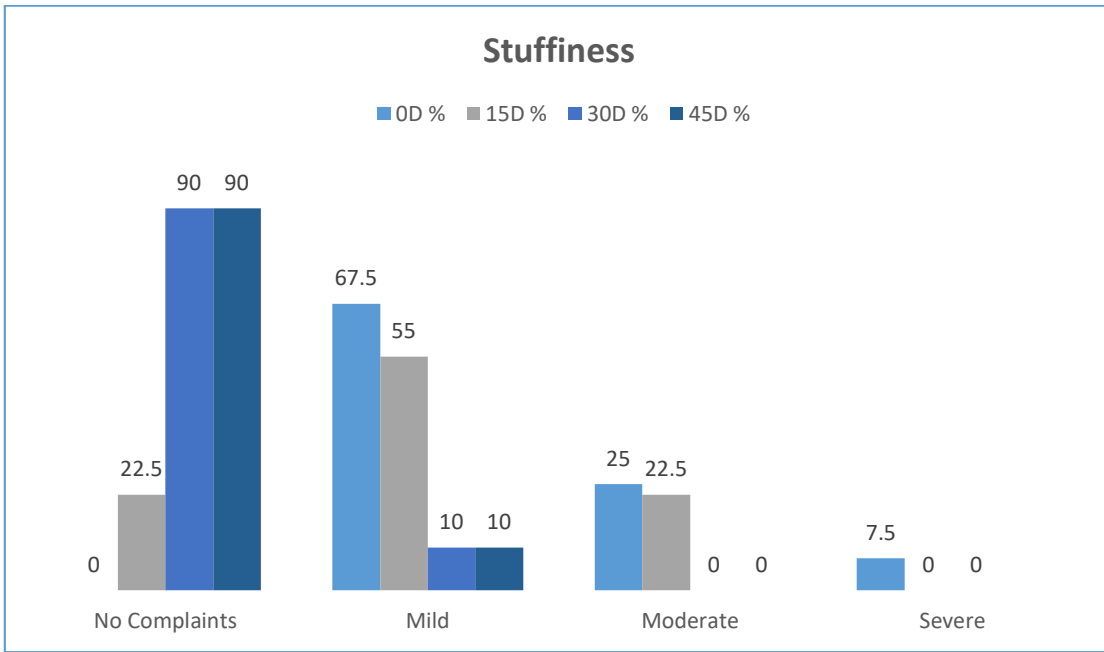


Table: 12 showing ESR status mean, \pm S.D., Before treatment, After treatment

ESR	Mean	SD
BT	22.05	6.20979
AT	13.925	3.04149

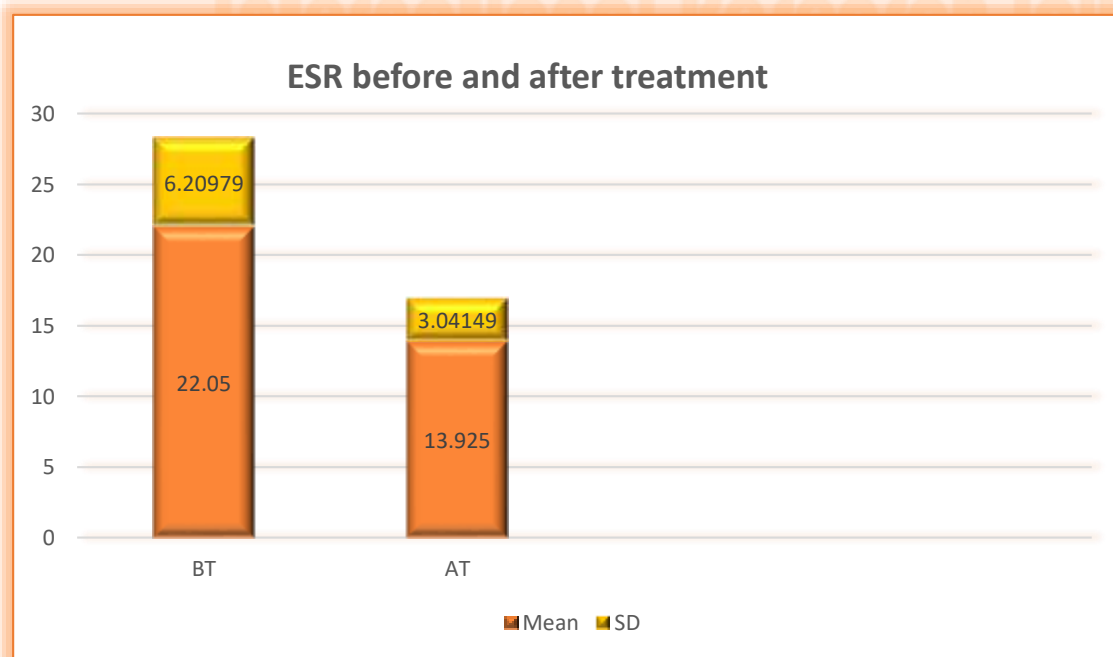
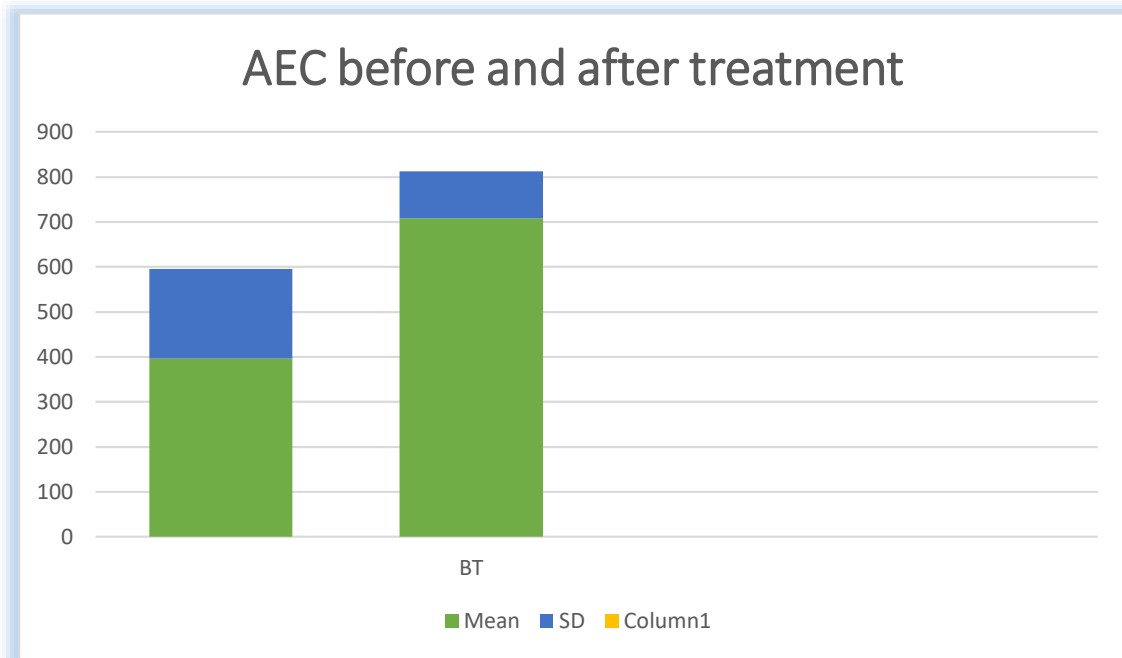


Table:13 showing AEC status mean, \pm S.D., Before treatment, After treatment

AEC	Mean	SD
AT	708.375	199.02064
BT	396.075	104.53177



DISCUSSION

Allergic rhinitis is a inflammatory disorder of nasal mucosa, which is characterised by pruritus, sneezing, rhinorrhoea, and Nasal congestion. It is mediated by early-phase and late-phase hypersensitivity responses it is the one of the common problem which has a number of causative factors. Allergic Rhinitis typically triggered by Environmental allergens such as Pollens, Animal Dander, House Dust or Molds, Dust mites, Feathers, Various Fragrances.

In the present study conducted on 40 patients those who are having symptoms of Allergic Rhinitis of either sex, different age groups with different chronicity were treated with a aim of proving the efficacy and safety of Unani drugs.

Selection of patients from inpatient and outpatient department of Govt. Nizamia General Hospital.

The drugs selected for the study which is given in the form of joshanda[decoction] are as follows

- GUL-E-BANAFSHA(Viola odorata) [5gm]
- GUL-E-GAOZABAN(Borago officinalis) [5gm]
- USTUKHUDOOS (Lavandula stoechas) [5gm]

- KALONJI(Nigella sativa) [5gm]

Followed by Mushil and Tabreed for 4 alternate days

The duration of treatment was 45 days, the severity of Allergic Rhinitis is assessed based on subjective & objective parameters. The common were closely observed on 0 day, 15th, 30th, 45th days. An investigation was done on 0, 30th, 45th. Every visit patient were asked about the progression or regression in their symptoms and were recorded.

The observation and results obtained from subjective and objective parameters that have been illustrated in tables and in Graphs. They are discussed in the following paragraphs consecutively to draw presumption and to turn up into the conclusion. According to [table no:1] the Age Groups.

Out of 40 [100] patients the highest number of patients observed

Age group 21-30, years = 14 [35%]

Age group 31-40, years = 15 [37%]

Age group 41-50, years = 8 [20%]

Age group 51-60, years =3 [7.5%]

The maximum number of patients in [table no: 2] according to gender observed during my work on Allergic Rhinitis common in Males when compared to Females. Out of 40 [100%] selected patients of Allergic Rhinitis.

Male patients = 25 [62.5%]

Female patients = 15 [37.5%]

According to religion table: 3

Out of 40 [100%] selected patients of Allergic Rhinitis are

Muslims patients = 33 [82.5%]

Hindu patients = 7 [17.5%]

This study however reflects a preponderance of muslims among the patients of allergic rhinitis. The probable reason may be the majority of muslim patients visiting GNTC & GH, as unani medicine is more popular among muslim community.

Marital status table no: 4

Out of 40 [100%] selected patients of Allergic Rhinitis Marital status is as follows

Married = 30 [75%]

Unmarried = 10 [25%]

socioeconomic status table no:5

Out of 40 [100%] selected patients of Allergic Rhinitis with socioeconomic status is as follows

LC = 10 [25.0%]

MC = 17 [42.5%]

UC = 13 [32.5%]

In the present study middle income group of people was found to have greater incidence of the disease. This can be because of exposure of this group to unnecessary climate changes because of the nature of work, they are in.

Table no: 6 According to temperament mijaz the present study also observed that dominant humoral incidence of Allergic Rhinitis more common in phlegmatic dominance. As per above study patients with.

Balgami Mizaj have Maximum incidence with =77.5%

Damavi Mizaj have Maximum incidence with =5.0%

Safrawi Mijaz have Maximum incidence with =15.0%

Saudavi Mijaz have Maximum incidence with =2.5%

Chronicity table no:7

Out of 40 [100%] selected patients of Allergic Rhinitis with chronicity of disease is as follows

Cases present with chronicity of 3-6 months =7 [17.5%]

Cases present with chronicity of 6m-1 year =9 [22.5%]

Cases present with chronicity of 1-3 year =18 [45.0%]

Cases present with chronicity of 3-8 year =6 [15.0%],

The efficacy of drugs were accessed on the basis of improvements in subjective & objective parameters. Among the subjective parameters Runny Nose, Sneezing, Nasal Stuffiness and objective parameters AEC, ESR.

Table no: 8 According to subjective parameters runny nose on first day patients with severe runny nose frequency of 20(50.0%)with moderate runny nose frequency17(42.5%) and mild runny nose frequency 3(7.5%.)

On 15th day the frequency decreases to moderate runny nose 20(50.0%), mild runny nose 20(50.0%)

On 30th day frequency decreases to moderate runny nose was 6(15%),mild runny nose 19(47.5%),no complaints was 15(37.5%)

On 45th day a gradual decreases of frequency of moderate runny nose was 3(7.5%),mild runny nose 20(50.0%), no complaints 17(42.5%)

Table no: 9 Sneezing on first day patients with severe Sneezing frequency of 9 (22.5%) with moderate Sneezing frequency14(35.0%) and mild Sneezing frequency 17(42.5%).

On 15th day the frequency decreases to moderate Sneezing 9(22.5%), mild Sneezing 31(77.5%)

On 30th day frequency decreases to moderate Sneezing was 3(7.5%),mild Sneezing 20(50.0%),no complaints was 17(42.5%)

On 45th day a gradual decreases of frequency of moderate Sneezing was 3(7.5%),mild Sneezing 20(50.0%),no Complaints 17(42.5%).

Table no: 10 Stuffiness on first day patients with severe Stuffiness frequency of 3 (7.5%) with moderate Stuffiness frequency10(25.0%) and mild Stuffiness frequency 27(67.5%).

On 15th day the frequency decreases to moderate Stuffiness 9(22.5%), mild Stuffiness 22(55.0%) no complaints 9(22.5%)

On 30th day frequency decreases to mild Stuffiness 4(10.0%),no complaints was 36(90.0%)

On 45th day a gradual decreases of frequency of mild Stuffiness 4(10.0%),no Complaints 36(90.0%)

Objective parameter:

Table no:11 showing ESR status mean, \pm S.D.,

Before treatment mean (22.05), After treatment mean (13.925)

Before treatment \pm S.D (6.20979), After treatment \pm S.D (3.04149)

The p value of ESR <0.0001

T test of ESR t=7.432

CONCLUSION AND SUMMARY

It can be concluded that Allergic Rhinitis is multifactorial disease, but most commonly due to alteration of humours either quantitatively or qualitatively. No drug is available to complete cure Allergic Rhinitis. All newly available drugs are used for their long term benefits, continuous use of anti allergic and anti inflammatory drugs always lead to number of hazardous side effects. Unani system of medicine will be much more favorable in the cure of Iltehab e Anaf e Hissasi (Allergic Rhinitis). These drugs can be used for longer duration without causing any adverse effects.

The study evidence from the results and observations the drugs showed good response. It can be concluded that the drugs Gul e Banafsha, Gul e Gaozaban, Ustukhudus, Kalonji are effective in reducing the symptoms of Allergic Rhinitis, therefore, it can be used effectively and safely in its management.

The duration of treatment was 45 days. All the patients were under strict observation and efficacy of treatment were monitored on the basis of change in subjective parameters and objective parameters before and after treatment.

The protocol for ethical clearance was approved by the institutional ethical committee cases were selected on the basis of inclusion and exclusion criteria and diagnostic criteria mentioned in the research protocol. Total 40 patients were selected for this study. The patients were allocated after consent.

Out of 40 [100] patients the highest number of patients observed in Age group 31-40, years = 15 [37%].

Allergic Rhinitis is common in males when compared to females.

Out of 40 Male patients = 25 [62.5%]

Humoral incidence of allergic rhinitis more common in phlegmatic dominance. Balgami Mizaj have maximum incidence with 77.5%.

The overall response in objective parameters ESR (Erythrocytic sedimentation rate) p value is <0.0001, and t test value $t=7.432$

Before treatment mean of ESR (22.05), After treatment mean of ESR (13.925)

Before treatment \pm S.D of ESR (6.20979), After treatment \pm S.D of ESR (3.04149)

Therapeutic response of AEC (Absolute Eosinophil count)

Before treatment mean (708.3750), After treatment mean (396.0750)

Before treatment \pm S.D (199.02064), After treatment \pm S.D (104.53177)

The p value of AEC <0.0001

T test of AEC $t=8.786$

No recurrence of exacerbation was reported by any patient after completion of trail.

No patient reported any adverse effects throughout the study and

During follow up. There is converging evidence from the above described observations the unani medicine are safe and effective in (Allergic Rhinitis) Iltehab Anaf e Hissasi.

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