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Clinical study for validation of safety and efficacy of Laooq Sapistan for symptomatic relief in Nazla (Common Cold)

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Abstract

Nazla, also known as acute viral rhinopharyngitis, nasopharyngitis, common cold, acute coryza, or just cold, is a viral infection of the upper respiratory tract that mostly affects the voice box, sinuses, throat, and nose. It is primarily caused by rhinoviruses and coronaviruses. The literature of Unani medicine describes Nazla-o-Zukām as a catarrhal fluid that flows from the anterior ventricles of the brain towards the throat and nose. A clinical study was conducted from 2016 to 2018 at the Central Research Institute of Unani Medicine (CRIUM), Basaha, Lucknow, to scientifically establish the safety and efficacy of the Unani pharmacopoeial formulation "Laooq Sapistan" for the symptomatic relief of patients suffering from Nazla (common cold). Of all the cases that registered for the study, 65 patients completed the trial. After a seven-day course of treatment, it was found that, in comparison to the baseline, the following symptoms of the disease were decreased: Khushuna-al-Halaq (sore throat), Buhha al-Sawt (hoarseness of voice), 'Utas (sneezing/nasal irritation), Rhinorrhoea/runny nose, Suda' (headache), Su'al (cough), and I'ya' (malaise). The variations between the results of the liver function test (LFT) and kidney function test (KFT) before and after the treatment were found to be within the normal range. It was found that the experimental medication was well tolerated, and the trial showed no adverse effects. The results of the study validate the safety and efficacy of "Laooq Sapistan" in the treatment of Nazla, or common cold.

Keywords: Common cold, laooq sapistan, nazla

Introduction

Nazla-o-Zukam is described in the literature of *Unani* medicine as a condition in which catarrhal fluids flow from the anterior ventricles of the brain toward the throat and nose. Some *Unani* physicians established the distinction between both, naming the fluid flow toward the nose *Zukām* and the flow toward the throat *Nazla*. The causes of *Nazla-o-Zukam* can be classified broadly into two primary groups:

1. Either intrinsic or extrinsic *Harārat* becomes predominant.

2. Either intrinsic or extrinsic Burûdat becomes predominant.

Therefore, this disease has been classified into two categories: Har and Barid. If the symptoms are severe, the condition is called *Nazla-o-Zukam* Har (acute). When the symptoms are not as severe, they are referred to as *Nazla-o-Zukam* Barid (chronic) ^[1-6]. *Nazla-e-Harr*, which is caused by excessive *rutubat* (moisture/wetness), and *Zuf-e-Dimagh* (brain weakness), commonly affect children. In the case of *Nazla Harr*, usually, the predominance of heat appears with more severe symptoms including flushing and burning sensations on the face, burning sensations in the nose and throat, watery eyes, elevated body temperature, thin yellow fluid discharge from the nose, excessive thirst, and malaise. *Nazla Barid* is characterized by nasal blockage, fatigue, and thick yellow fluid discharge. These symptoms are mild to moderate in severity. *Nazla Wabaiyah* is considered the third type of *Nazla-o-Zukam* by some *Unani* physicians. Compared to *Nazla Harr*, this type of disease has more severe symptoms. Physicians of the *Unani* system of medicine have described a complete and comprehensive treatment plan for *Nazla Har*, including a regimen according to the underlying causes. *Usool e Ilaj* is *Taskhin* in the case of *Nazla-Bārid* (to induce warmth), and *Taghliz-i Madda* in the case of *Nazla Harr* (to make the matter viscous).

Nakhuna, Babuna, Marzanjosh, and Soya can be applied as Inkibab (steam inhalation) when the Burudat in Nazla-e-Barid is severe. Shamum/Lakhlakha of Kalonji Biryan and Anisun is also used for Nazla Barid. In the case of Nazla-e-Harr, oral administration of Post-e-Khashkhash decoction for Taghlīz-i-Mādda will be effective. Various single drugs, including Behedana, Unnab, Sapistan, Tukhm-e-Khatme, and Gaozaban, are commonly prescribed to treat Nazla. Compound medicines such as Tiryaq-e-Nazla, Sharbat Faryad ras, and Sharbat-e-Nazla are used to treat Nazla. Because diet plays a significant role in the disease and its treatment, meat, wine, Mubakhkhir (flatulent) food, and foods high in fat should be avoided. Consuming sufficient fluids and easily digestible foods is recommended.

For quick reduction of symptoms, *Kalonji Biryan, Anisoon*, and *Qust* can be used as *Lakhlakha* (inhaling the vapor from drugs kept in a wide-mouthed bottle) or they can be placed in a cotton towel and smelled multiple times ^[1-10].

Nazlais an upper respiratory tract viral infection that mostly affects the nose and is usually caused by rhinoviruses and coronaviruses. It is also known as the common cold, acute viral rhinopharyngitis, nasopharyngitis, acute coryza, or simply cold ^[11, 12]. Further effects on the voice box, sinuses, and throat could appear. Signs and symptoms may manifest earlier than two days post-exposure. They include sneezing, fever, runny nose, headache, sore throat, and coughing. In most cases, individuals recover in 7 to 10 days. Some symptoms might persist for up to three weeks. Pneumonia may also occasionally occur in people with additional medical conditions ^[13]. This is a highly prevalent illness globally that mainly affects babies under one year old. 6–10 times a year, and adults 3-4 times a year ^[14]. The most commonly implicated virus is the rhinovirus (30%-80%), a kind of picornavirus with 99 known serotypes. Other predominantly implicated viruses comprise the human coronavirus (about 15%), influenza viruses (10%-15%), adenoviruses (5%), human respiratory syncytial virus, human para influenza viruses, enteroviruses other than rhinoviruses, and metapneumovirus. Multiple viruses are frequently present. More than 200 different viral types have been linked to common colds ^[15]. They have a specific effect on every single individual. Colds are the most prevalent illness in modern society [16-18]. The three primary viral transmission routes associated with respiratory particle shedding are droplet, contact, and airborne ^[19]. The incidence of illness is higher in adults who are exposed to children during their jobs or in their own houses, as well as in children who have been cared for in childcare centers. A common cold may occur at any time of the year in regions with a temperate climate, but it becomes much more prevalent between early autumn and late spring ^[15]. Viruses penetrate the body through the respiratory tract and adhere to the cells that line the nose, throat, and bronchial tubes. When individuals get exposed to wind, rain, cold, or sudden changes in temperature, they become more vulnerable. During cold, virus particles enter the mucous membranes of the throat and nose and attach themselves to cells there. When viruses rupture cell membranes, genetic material from the viruses may infiltrate cells. The virus takes control of the cells quickly, forcing them to produce hundreds of more viral particles ^[20, 21]. In comparison with adenoviruses, which have an incubation period of up to thirteen days, the common cold typically has a short incubation period of two to eight days. What individuals commonly consider for

symptoms of the cold is infact the body's natural immunological response. Frequently, the first sign that manifests is a scratchy or sore throat. Sneezing isanother typical early symptom. On the second or third day after the onset of the disease, rhinorrhea and nasal congestion normally appear quickly, however, cough usually develops later and often is without an elevated temperature. Flu symptoms include fever, sore throat, aches in the muscles, fatigue, and cough that develops more rapidly. Such illnesses may last nearly between a few days to a week, but if treated improperly, they could worsen and progress into bronchitis, strep throat, or asthma ^[15, 22, 20]. The upper respiratory tract is the only site wherein physical findings appear. An increase in nasal discharge might be observed. Throughout the course of the illness, it is typical for nasal secretions to change in color or consistency; this is not an indication of sinusitis or a bacterial super infection. Allopathic medicines used in the treatment of the common cold are Antihistamines such as chlorpheniramine, anticholinergics such as ipratropium bromide sprays, topical adrenergic agents such as oxymetazoline sprays, and oral adrenergic agents such as pseudoephedrine. Specific antiviral therapy is generally not effective in treating common cold conditions. Dealing with the symptoms associated with the common cold is the initial approach to treating it. While remedies for nasal congestion, sore throat, and rhinorrhea have shown effectiveness in adults, they do not appear to be useful in children and should not be administered to those under the age of four [23-25].

Materials and Methods

The present study was conducted at Central Research Institute of UnaniMedicine (CRIUM), Lucknow on 65 patients of Nazla (common cold) selected from those who visited the OPD of the institute for treatment of cold during 2016-2018. Patients of either sex in the age group of 18 to 65 years were included in the study. Inclusion criteria were Khushuna al-Halaq (Sore Throat), Buhha al-Sawt (Hoarseness / Change of Voice), Utas (Sneezing/ Nasal irritation), Rhinorrhoea/Runny nose, Suda (Headache), Su'al (Cough), I'ya (Malaise) and Low-grade fever (100 -101°F). The patients below 18 years and above65 years of age, Patients with acute or chronic lower respiratory tract infections like pneumonia, Bronchitis, Asthma and Bronchiectasis., High-Grade Fever > 101°F, History of hepatic, renal disorders, diabetes mellitus, hypertension, anaemia, COPD or any other ailment requiring long term therapy, Known cases of any other acute illness, Pregnant and lactating women were excluded from the study. The clinical study protocol was approved by the Institutional Ethics Committee (IEC) of the institute on 02/04/2016. After obtaining written informed consent from the patients, they were enrolled in the study and then subjected to pathological and biochemical investigations.

Pathological investigations included Haemogram [Haemoglobin (Hb), Erythrocyte sedimentation rate (ESR), Total leukocyte count (TLC), and Differential leukocyte count (DLC: Neutrophils, Eosinophils, Basophils, Lymphocytes, Monocytes)], Urine examination (routine and microscopic). Bio-chemical investigations included liver function tests (LFTs) comprising serum bilirubin, serum glutamicoxaloacetic transaminase (SGOT), serum glutamic pyruvic transaminase (SGPT)and alkaline phosphatase (ALP), and kidney function tests (KFTs) comprising serum creatinine and serum urea. The parameters for assessment of efficacy of the formulation were Khushuna al-Halaq (Sore Throat), Buhha al-Sawt (Hoarseness / Change of Voice), Utas (Sneezing/ Nasal irritation), Rhinorrhoea/Runny nose, Suda (Headache), Su'al (Cough), I'ya (Malaise), Low-grade fever (100-101°F). These parameters were graded according to the visual analogue scale (VAS) score except fever which is in Fahrenheit. The clinical follow-up of all the cases was carried out on the 7th day of the treatment. The pathological and bio-chemical investigations were conducted at the baseline and end of the study. The safety of trial drugs was evaluated by haematological and biochemical investigations and clinically by monitoring adverse effects carefully at follow-up. The Mizaj (temperament) of the patients was assessed as per the parameters described in Unani classical literature. The clinical and laboratory findings observed in every case were recorded on a separate case record form (CRF) designed especially for clinical study on Nazla (common cold). The duration of treatment was 7 days. No concomitant treatment was allowed during the study. Baseline and follow-up values of bio-chemical and pathological investigations were statistically analyzed using t-test. Study Drug, Dosage, Schedule, and Mode of Administration of The Unani pharmacopoeial formulation "Laooq Sapistan" used in the study was supplied by the Central Research Institute of Unani Medicine (CRIUM), Hyderabad. It was prepared according to the National Formulary of Unani Medicine Part IV at the pharmacy unit of CRIUM, Hyderabad. "Laoog Sapistan" was given in a dose of 5gm orally twice a day with lukewarm water. "Laooq Sapistan" is made up of five ingredients in different proportion (Table No-1)^[26, 27].

Table 1: Ingredie	nts of Laooq Sapistan
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S. No	Unani Name	Botanical Name	Weight
1.	Sapistan	Cordia latifolia	100 g
2.	Unnab	Zizyphus vulgaris	50 g
3.	Koknar	Papaver somniferum	20 g
4.	Asl-us-Soos	Glycyrrhiza glabra	10 g
5.	Parsiyaoshan	Adiantum cappilus-vereris	10 g
6.	Tukhm-e-Khatmi	Althoea officinalis	5 g
7.	Tukhm-e-Khubbazi	Malva syluestris	5 g
8.	Behidana	Cydonia oblonga	5 g
9.	Qand Safaid	Sugar	1.5 kg
10.	Sheera-e-Maghz-e- Badam	Prunus amygdalus	10 g
11.	Maghz-e-Tukhm-e- Khashkhash	Papaver somniferum	10 g
12.	Kateera	Sterculiaurenus/ Cochlospermumreligiosum	5 g
13.	Samagh-e-Arabi	Acacia arabica	5 g
14.	Rubb-us-soos	Glycyrrhiza glabra	5 g

Results

In this study, 64.62% (42) patients were male and 35.38% (23) female. Besides, 35.40% (23) patients were of *Damvi* (Sanguine), 46.15% (30) patients of *Balghami* (Phlegmatic), 18.45% (12) patients of *Safravi* (Bilious), and 0% () patients of *Saudawi* (Melancholic) *Mizäj*. (Table No. 2) Out of 65

patients included in the trial, the highest incidence (60.00%) was observed in the age group of 18-30 years and the least incidence (03.08%) was seen in the age group of 51-60 years and 16.92% incidence was seen in the age group of 31-40 years then 20.00% incidence was seen in the age group of 41-50 years. As far as the chronicity of the symptoms is concerned, 69.23% of patients had symptoms for one or less than one month and 10.76% of patients had symptoms for 2-3 months, almost 20.00% of patients had symptoms for more than 3 months. (Table No.2).

Table 2: Distribution of patients according to age and sex

Temperament	Male	Female	Total	Percentage
Damvi	17 (26.15)	06 (09.23)	23	35.40%
Balghami	17 (26.15)	13 (20.00)	30	46.15%
Safravi	08 (12.30)	04 (06.15)	12	18.45%
Saudavi	00	00	00	00%
Total	42(64.62%)	23(35.38%)	65	100%

Table 3: Distribution of Patients according to Age Group

Age Group	No of patients	Percentage
18-30	39	60.00%
31-40	11	16.92%
41-50	13	20.00%
51-60	02	03.08%
Total	65	100.00%

Visual analogue scale (VAS) score was calculated in all the patients before and after the treatment. The mean value of the VAS score for *Khushuna al-Halaq* (sore throat), *Buhha al-Sawt* (hoarseness of voice), '*Utas* (sneezing/ nasal irritation), Rhinorrhoea/Runny nose, *Suda*' (headache), *Sual* (cough) and *I'ya*' (malaise) were 5.76 ± 3.96 , 2.49 ± 3.75 , 7.26 ± 3.26 , 5.98 ± 3.27 , 3.61 ± 3.83 , 3.29 ± 3.73 and 2.92 ± 3.17 respectively before the treatment. At the end of the study, these scores were 2.41 ± 2.48 , 95 ± 2.23 , 3.24 ± 2.91 , 2.29 ± 1.81 , 1.10 ± 1.96 , 1.23 ± 2.20 and 1.8 ± 2.52 respectively. The mean value of low-grade fever (<101 0F) was $98.42\pm.43^{\circ}$ Fbefore treatment and $98.43\pm.25^{\circ}F$ after treatment.

Out of eight parameters studied, 52.95% improvement in the case of *Khushuna al-Halaq* (sore throat), 61.84% in *Buhha al-Sawt* (hoarseness of voice), 55.37% in '*Utas* (sneezing/ nasal irritation), 61.70% in Rhinorrhoea/Runny nose, 69.52% in *Suda*' (headache), 85.10% in *Su'al* (cough) and 38.35% in *I'ya*' (malaise). Low-grade fever (< 101 0F) was within normal limits. The overall improvement was good (Table No.4).

Laooq Sapistan demonstrated significant improvement in symptoms and signs of *Nazla* (common cold). Out of 65 patients, 06 (09.23%) patients showed 90-100% relief in overall symptoms and signs (Cured), 25 (38.46%) patients showed 60- 89% relief in overall symptoms and signs (Relieved), 25 (38.46%) patients showed 30- 59% relief in overall symptoms and signs (Partially Relieved) and 09 (13.85%) patients showed less than 30% relief in overall symptoms and signs (Not Relieved) of *Nazla* (common cold), (Table No 5).

Table 4: Mean Values of Clinical Parameters at the Baseline and After the Treatment

S. No.	Signs and Symptoms	Baseline	After Treatment	Decrease (%)	P Value
1	Khushuna al-Halaq (Sore throat)	5.76 ± 3.96	2.41 ± 2.48	3.05 (52.95)	<.00001 Significant
2	Buhha al-Sawt (Hoarseness of Voice)	2.49 ± 3.75	95±2.23	1.54(61.84)	< 0.00001

					Significant
3	Utas(Sneezing/ Nasal irritation)	7.26 ± 3.26	3.24 ± 2.91	4.02 (55.37)	< 0.00001
5	Otas(Sheezing/ Wasar Initation)	7.20±3.20	5.24±2.91	4.02 (33.37)	significant
4	Runny nose	5.98 ± 3.27	2.29 ± 1.81	3.69(61.70)	< 0.00001
4	Runny nose	J.98±3.27	2.29±1.01	3.09(01.70)	Significant
5	Suda (Headache)	3.61±3.83	1.10 ± 1.96	2.51(69.52)	< 0.00001
5	Suda (meadache)	5.01±5.85	1.10±1.90	2.51(69.52)	significant
6	Su'al(Cough)	3.29 ± 3.73	1.23 ± 2.20	2.8 (85.10)	< 0.00001
0	Su al(Cough)	3.29±3.73	1.23±2.20	2.8 (85.10)	Significant
7	I'ya' (Malaise)	2.92 ± 3.17	1.8 ± 2.52	1.12 (38.35)	< 0.000025
/	i ya (Malaise)	2.92±3.17	1.0±2.32	1.12 (38.33)	Significant
8	Low Grade fever (<102 0F)	98.42±.43	$98.43 \pm .25$		39 not significant
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Using t-statistics

** Differences are statistically significant

Table	5: Ther	apeutic	Response
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Response	Cured (90-100%)	Relieved (60-89%)	Partially Relieved (30-59%)	Not Relieved (0–29%)	Total
No. of Patients	06	25	25	09	65
Percentage	(09.23)	(38.46)	(38.46)	(13.85)	(100)

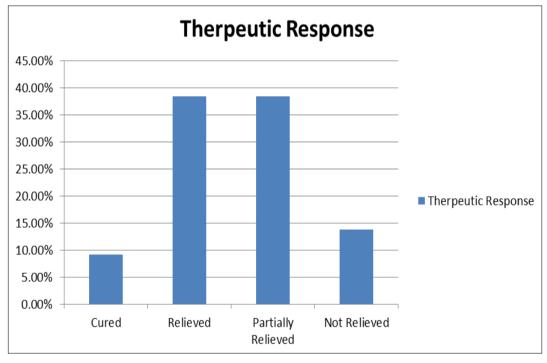


Fig 1: Therapeutic Response

The mean values of haematological and biochemical parameters at the baseline and after the treatment is given in Tables No. 6 and 7 respectively. The values of safety parameters [Haemoglobin, ESR, TLC, DLC, LFTs, and KFTs] remained within normal limits after the treatment. Levels of serum SGOT, SGPT, ALP, S. Bilirubin, S. Urea, and S. Creatinine also remained within normal limits after the treatment as compared to the baseline. There was no

significant change in the value of Haemoglobin, ESR, TLC, DLC, SGOT, SGPT, ALP, S. Bilirubin, S. Urea, and S. Creatinine was seen after the treatment as compared to the baseline except Monocytes and ALP which was also within normal limits. The study drug was found well-tolerated and no unbearable adverse effects were reported clinically during or after the treatment.

Table 6: Mean Values of Pathological Investigations at the Baseline a	nd After the Treatment
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Pathological In	vestigations	Period	Mean SD	P Value
Hemoglobin	Hemoslohin		12.78 ± 1.71	1.29 Not significant
nemogioum		AT	12.83 ± 1.68	1.29 Not significant
ESR (mm/ 1 st hr)		BT	18.27 ±15.49	20 Not significant
		AT	18.86 ± 15.62	29 Not significant
Total Leucocytes Count (mm)		BT	9123.07 ± 947.98	22 Not significant
		AT	9184.61 ± 817.62	23 Not significant
DLC	Neutrophils	BT	59.89±8.23	12 Not significant
DEC	Neurophils	AT	59.78 ± 6.33	43 Not significant

Lymphocytes	BT	33.92±7.98	12 Not significant
Lymphocytes	AT	34.69 ± 6.02	12 Not significant
Eosinophil	BT	4.55±2.97	10 Not significant
Eosmophii	AT	4.2±2.56	19 Not significant
Monocytes	BT	1.61±.99	02 significant
Wonocytes	AT	1.32±.93	03 significant

Using t-statistics

*Differences are statistically insignificant

BT= Before Treatment; AT= After Treatment

Biochemical Investigations	Period	Mean ± SD	P Value
	BT	23.80 ± 12.31	08 not significant
SGOT (Units/ml)	AT	21.72 ± 8.22	08 not significant
SGPT (Units/ml)	BT	34.36±23.13	12 not significant
SGPT (Units/IIII)	AT	32.61±21.33	12 not significant
ALP (K&A Units/100ml)	BT	248.48±74.01	0006 Significant
ALP (K&A UIIIIS/100IIII)	AT	234.61±67.75	0006 Significant
Same Dilimitin (ma 0/)	BT	66±.31	41 not significant
Serum Bilirubin (mg %)	AT	65±.33	41 not significant
	BT	79±.17	22
Serum Creatinine (mg %)	AT	78±.16	33 not significant
$S_{\text{compared Linese}}(m \neq 0/)$	BT	26.52 ± 5.74	44 Not significant
Serum Urea (mg %)	AT	26.62 ± 5.95	44 Not significant

Table 7: Mean values of biochemical investigations at baseline and after treatment

Using t-statistics

*Differences are statistically insignificant BT= Before Treatment; AT= After Treatment

Discussion

An adjustment in temperament (Ta'del-o-Tabdel-i-Mizaj) or the removal of vitiated or morbid matter in the case of Su'-i-Mizaj Maddi (impaired temperament due to abnormal humour) could be the reason for the improvement of numerous clinical parameters of Nazla (common cold). Laooq-Sapistan has 13 ingredients: Sapistan acts as Mulayvin-e-halq wa sadr (emollient of throat and chest), Munaffis-e-balgham (expectorant), Musakkin-e-safra (refrigerant of bile heat), Mulazziq-wa-mulayyan e taba and used in Nazla Harr (common cold), Khushuna al-Halaq wa Sadr (Irritation of throat and chest), Su'al-e-yabis (dry cough), Humma Şafrawi wa Damawi (Bilious and haemolytic Fevers), Jiryan (spermatorrhoea), Shuzak (Gonorrhea), Zaheer (dysentery). Unnab acts as Munzij-wa-*Mulyyin-e-Akhlat-e-Galeeza* (concoctive & emollient of viscoushumours), Mushil e akhlat-e-Rageega (Purgative of delicate humours), Munaffis-e-balgham (expectorant), Dafe Sual wa Rabu (Antitussive and for asthma), Musaffi-e-Khoon (blood purifier) and used in Nazla wa Zukam (Cold), Su'al(cough), Khushuna al-Halaq(sore throat), Humma Safrawi wa Damawi (bilious and haemolytic Fevers), Amraz-e-JildwaFasad-e-Khoon (skin diseases and blood Koknar/Khashkhash putrefaction). (Maghz-e-Tukhm-e-Khashkhash) acts Munawwim (Hypnotic), Mukhaddir (anaesthetic), Khushuna al-Sadr (Irritation of chest), Dafae-Sual (antitussive), Qabiz (Constipative), Musakkin-e-Alam (Analgesic), Dafi'e Malankhuliya (Anti-melancholic), Dafi'e Junun (Anti-insanity), Muqawwi-e-Dimagh (Brain Tonic), Muqawwi-e-Bah (Aphrodisiac), In excess Qat-e-Bah (Anaphrodisiac). It is used in Sahr (Insomnia), Malankhuliya (Melancholia), Junun (Insanity), Nazla Harr (common cold), Su'al haar wa yabis (Hot and Dry Cough), Nafas-ul-dam (haemoptysis), Tap-e-Diq (Tuberculosis) and Ishal (Diarrhea). Actions of Aslussoos are Musakkin (sedative), Mukhrij-ī-balgham (expectorant), Munzij-i-

akhlat-i-ghalizah (Concoctive of viscous humour), Muhallil (anti-inflammatory), Mulayyin (emollient), Muqawwi-ī-asāb (nervine tonic), Daf-e- Tapha-e-Muzmina (as antipyretic in chronic fevers) Mudir e baul wa haiz and beneficial in Khushunat-e- sadr, riva wa qazbat-ul-riva (Irritation of chest, lungs, and trachea), Su'āl (cough), Buhuat al-Sawt (Hoarseness), Dīg al-Nafas/Ribo (Bronchial asthma), Tap-ekohna (Chronic fever), amrad-ī-jigar, tihal wa asāb (hepatic, splenic and Nervine disorders), hargat-e-baul (Burning Micturation). Actions of Parsiyaoshan are Muhallil (anti-inflammatory), Mulattif (demulcent), Munzij (Concoctive), Mufatteh (Deobstruent), Mujaffif (siccative), *Munaffis-e-balgham*(expectorant), Dafa-e-Nazla (Cold reliever), Mushil-e-sauda, Safra, balgham (Purgative of black bile, yellow bile and phlegm), Mudir-e-baul (diuretic), Mudirr-e-haiz (emmenagogue). Parsiyaoshan used in Nazla wa Zukam (Cold), Su'al(cough), Dīq al-Nafas/Ribo (Bronchial asthma), Dhât al-Sadr (pleuritis), Suda (Headache), Hummiyat-e-Balghamiyah (Phlegmatic fevers), Hargat-e-baul (burning Micturation), Ihtibâs al-Mashīma (retained placenta), Ihtibâs al-Nafâs (Retention of lochia), Yargan(Jaundice), Dâ'al-Hayya, Dâ'al-Tha'lab. Tukhm-e-Muhalli-e-Waram (anti-inflammatory), *Khatmi*acts as Munzij (Concoctive), Raad-e-Mawâd (divertive), Mulayyine-warm (Emollientof inflammation), Musakkin-e-dard (analgesic) and used in Nazla wa Zukam (cold), Su'al (cough), Dhat al-Janb (Pleurisy), *Dhat* al-Ri'a (Pneumonia), Sozish-e-Baul (burning micturation), Warm-e-Ama' (intestinal inflammation), Waja-ul-Mafaasil (arthritis). Tukhm-e-Khubbazi acts as Mulayyin-e-Taba' (Emollient), Mugharrī Munzij (Concoctive), (mucilaginous), Muzalliq (demulcent), Raade' (divertive), Muhalli-e-Awram (anti-inflammatory), Mudir-e-baul (diuretic), Muwallid-i-Laban (galactopoietics) and used in Su'al yabis (dry cough), Buhha al-Sawt (hoarseness of voice), Quruh al-Mathana (urinary bladder ulcer), Quruh-e-ama' (intestinal ulcer),

Yarqan(Jaundice). Behidana acts as Muzalliq (demulcent), Mufarrih (exhilarant), Muqawwi-i-Qalb (Cardiotonic), Muqawwi-i-Dimagh (Brain tonic), Muqawwi-i-Mi'da (Stomachic), Muqawwi-i-Jigar (Hepatotonic), Musakkin-i-Harārat (antipyretic/febrifuge), Habis-e ishal (antidiarrhoeal) Mudir-e-Baul (diuretic) and used in Nazla wa Zukam (Cold), Su'al Harr (hot cough), Khushuna al-Halaq (sore throat), Sozish-e- lisan (burning of tongue), Sil-wa-Dia (Tuberculosis), Zaheer (Dysentry), ishal (diarrhea), Tabkheer (Acidity). *Sheera-e-Maghz-e-Badam*acts as Murattib-e-Dimag (brain homectant), Muqawwi-i-Dimagh (Brain tonic), Mugawwi-i-Qalb (Cardiotonic), Mugawwi-ibasar (Eye tonic), Muqawwi-i-Bah (Aphrodisiac), Muwallid-i-Manī (Spermatogenic), Jali (detergent), Mulayyin-i-halaq wa sadr (emollient of throat and chest), Mukhrij-i-Balgham (*Expectorant*), Mulayyin-i-Shikam(emollient of stomach), Daf-e-sudad (deobstruent), Musammin-i-badan (weight gainer) and used in Su'al (cough), Dīq al-Nafas/Ribo (Bronchial asthma), Dhat al-Janb (Pleurisy), Zaheer (Dysentry), Qolanj (colic), Zof-e-Bah (Sexual Weakness), Zof-e-Qalb (Weakness of the heart). Zof-e-Dimagh (Weakness of the brain). Kateera acts as Mulayyin wa Mugarri (emollient and adessive), Mulayyin-i-Sadr (emollient of the chest), Musakkin (sedative), Habis-ī-dam (Haemostatic), Musammin-i-badan (weight gainer), and used in Khushuna al-Halaq wa sadr (Irritation of throat and chest), Buhha al-Sawt (Hoarseness), Su'āl (cough), Qurha-i-riya (wound of lungs), Nafas-ul-dam (haemoptysis), Bawl al-Dam (Haematuria). Actions of Samagh-e-Arabi are Mugharrī (mucilaginous), Mujaffif (siccative), Qabiz (astringent), Musaddid (obstruent), Muqawwi-i-Mi'da (Stomachic), Mulayyin-i-sadr (emollient of the chest). It is used in Su'āl (cough), Buhha al-Sawt (Hoarseness of voice), Khushuna al-Halaq (sore throat), Khushuna al-Sadr (Irritation of chest), Sil (Tuberculosis), Zakhm-e-riya (Wounds of Lungs), Jaryan (spermatorrhea), Sailan-ur- Rahem (Leucorrhoea), Zaheer (Dysentry), Ishal (diarrhea), Bawaaseer Damvi (Bleeding Piles). Rubb-ussoos used in Su'āl (cough). Buhha al-Sawt (Hoarseness of voice), Nafas-ul-dam (haemoptysis), Ribo (Bronchial asthma), Sozish-e-mida (Retrosternal burning) [27, 28]. When each of the drugs is combined with one another, "Laooq Sapistan" becomes a unique formulation with several characteristics that are explained in the Usul-i-Ilaj (treatment concept) of Nazla (common cold). By enhancing the body's natural defense mechanism, it provides comprehensive protection against infection. Additionally, medication works effectively this for digestive. neurological, hepatic, and urinary system conditions. Regarding the treatment of the common cold in the contemporary medical system, numerous research have been conducted to verify the safe and efficacious management by new and existing medications; nonetheless, a comprehensive, safe, and effective medication for the common cold has not yet been established.

The following research demonstrates that the medications currently used for the common cold are not effective in reducing symptoms. The common cold cannot be treated with antibiotics ^[29]. When it comes to treating cold symptoms, antihistamines work not more effectively than a placebo when taken alone ^[30, 31]. When treating a cough induced by the common cold, expectorants and antitussives are approximately as effective as a placebo ^[31, 32]. Antivirals

have been linked to clinical syndromes that resemble the common cold, and they are neither prescribed nor effective for the treatment of URIs ^[33]. There is no proof that intranasal corticosteroids reduce cold symptoms has been found in three short trials ^[34]. Consuming the vitamin D pill does not alleviate cold symptoms ^[35]. The duration or severity of symptoms is unaffected by vitamin C once the symptoms have started ^[36]. In older adults, vitamin E could potentially worsen symptoms ^[37]. The nasal saline irrigation works well for treating chronic rhinosinusitis, but its effectiveness in treating URIs is only partially supported by low-quality evidence ^[38]. Oral albuterol appeared to lead to an increase in adverse effects in a randomized controlled trial including 59 children without asthma, but it did not relieve acute cough after seven days in comparison with the placebo ^[39]. A placebo is similarly beneficial as a Carbocysteine ^[40]. Codeine was not found more effective than a placebo in controlling cough ^[41]. After analysis of the data mentioned above, it is understood that the medications that are used in the modern medical system for the treatment of the common cold do not significantly improve the symptoms and signs of the disease and have different types of side effects. However, a study drug "Laoog Sapistan" has demonstrated an amazing improvement in symptoms and signs of *Nazla*, without any reported side effects. The study confirms the effectiveness and safety of "Laooq Sapistan" in the treatment of Nazla, or common cold.

Conclusion

The results indicate that "Laooq Sapistan" had a significant impact on various symptoms and signs of Nazla, such as (sore throat), Khushuna-al-Halaq Buhha al-Sawt (hoarseness of voice), 'Utas (sneezing/nasal irritation), Rhinorrhoea/runny nose, Suda'(headache), Su'al (cough) and I'ya' (malaise) and low-grade fever (100-101F). Similarly, the safety parameters (Hb%, ESR, TLC, DLC, LFT, and KFT) remained within the normal ranges following the treatment, indicating that the therapy is considered to be safe and well-tolerated. Overall, patient compliance with the trial drug was good, and no severe side effects were observed. Therefore, it is likely considered that "Laooq Sapistan" is a safe and effective regimen for managing the symptoms of Nazla (common cold).

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Conflict of Interest

Not available

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