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Clinical study for validation of safety and efficacy of Laooq Khayar Shambar for symptomatic relief in Nazla (Common cold)

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Abstract

Nazla, often referred to as common cold, acute viral rhinopharyngitis, nasopharyngitis, acute coryza, or just cold, is an upper respiratory tract viral infection that mostly affects the throat, nose, voice box and sinuses and is primarily caused by rhinoviruses and corona viruses. *Nazla-o-Zukām* is described in the literature of Unani medicine as a catarrhal fluid flow towards the throat and nose from the anterior ventricles of brain. At the Central Research Institute of Unani Medicine (CRIUM), Basaha, Lucknow, a clinical study was conducted from 2017 to 2019 to scientifically establish the safety as well as efficacy of the Unani pharmacopoeial formulation "*Laooq-Khayar-Shambar*" for the symptomatic relief of patients having *Nazla* (common cold). Eighty-four patients out of all the cases who registered for the study completed the trial. After a seven-day course of treatment, the symptoms of the disease, including *Khushūna al-Halaq* (sore throat), *Buhha al-Sawt* (hoarseness of voice), *Utās* (sneezing/nasal irritation), Rhinorrhoea/runny nose, *Sudā* (headache), *Su'āl* (cough) and *I'yā* (malaise) were found decreased 62.63%, 62.65%, 65.68%, 65.61%, 67.39%, 59.25% and 59.54% respectively as compared to the baseline. It was found that the variations between the values of the kidney function test (KFT) and liver function test (LFT) before and after the treatment were within normal limits. The experimental medication was found to be well-tolerated, and no adverse effects were observed during the trial. The results of the study validate "*Laooq-Khayar-Shambar's*" safety and efficacy in treatment of *Nazla*, or common cold.

Keywords: Common cold, *Laooq-Khayar-Shambar*, *Nazla*

Introduction

Nazla, also referred to as common cold, acute viral rhinopharyngitis, nasopharyngitis, acute coryza, or just cold, is an upper respiratory tract viral infection that mostly affects the nose and is primarily caused by rhinoviruses and corona viruses^[1, 2]. There may be further effects on the throat, sinuses, and voice box. After exposure, signs and symptoms could appear earlier than two days. They include sore throat, headache, runny nose, coughing, fever, and sneezing. Individuals recover in seven to ten days in general. Some symptoms may last up to a period of three weeks. Pneumonia can occasionally occur in people who have other medical issues^[3]. This is a very prevalent condition worldwide that primarily affects children under the age of one year, 6-10 times annually, and adults 3-4 times annually^[4]. The rhinovirus (30%-80%), a kind of picornavirus with 99 recognized serotypes, is the virus most frequently implicated. Human coronavirus (About 15%), influenza viruses (10%-15%), adenoviruses (5%), human respiratory syncytial virus, enteroviruses other than rhinoviruses, human para influenza viruses, and meta pneumovirus are among the other commonly implicated viruses. There are often more than one virus present. Colds have been associated to more than 200 different virus types^[5]. Every individual is affected by them in a specific manner. In modern society, colds are the most common illness^[6, 7, 8]. Droplet, contact, and airborne are the three principal viral transmission modes which involve the shedding of respiratory particles^[9]. Adults who have occupational or household exposure to children as well as children who receive care in childcare centers, have a higher incidence of disease. In temperate climates, common cold illnesses can occur throughout the year, but between early autumn and late spring, the frequency is significantly higher^[5]. Through the respiratory tract, viruses enter the body and stick to the cells lining the nose, throat, and bronchial tubes.

Individuals become more vulnerable when they are exposed to wind, rain, cold, and sudden temperature changes. Virus particles penetrate the nose and throat's mucous layer during a cold and adhere to cells there. Viral genetic material may enter cells when the viruses tear the cell membranes. The virus rapidly gains control over the cells and forces them to generate thousands of additional viral particles [10, 11]. The typical common cold illness has a short incubation period of two to eight days, whereas adenoviruses may have an incubation period up to thirteen days. The symptoms experienced as cold are actually the body's normal immunological response. The initial symptom which often appears is a sore or scratchy throat. Another common early symptom is sneezing. Day two or three following the onset of the illness, nasal congestion and rhinorrhea usually develop rapidly, while cough typically appear later and commonly without fever. Symptoms of the flu such as fever, sore throat, muscles ache, fatigue, and cough appear more suddenly. These ailments may persist for a few days to a week, but if not treated properly, it may develop into asthma, strep throat, or bronchitis [5, 12, 10]. Physical findings appearance is restricted to the upper respiratory tract. One may notice increased nasal discharge. It is common for nasal secretions to change in color or consistency in the duration of the disease; this is not a sign of bacterial super infection or sinusitis. For the treatment of common cold in allopathic medicine Topical adrenergic agents like oxymetazoline sprays, Oral adrenergic agents like pseudoephedrine, Antihistamines like chlorpheniramine and Anticholinergics like ipratropium bromide sprays are used. Common cold diseases are typically not well treated with specific antiviral therapy.

Treatment for the common cold is based on treating its symptoms. While treatments for sore throat, rhinorrhea, and nasal congestion have shown potential in adults, they are not apparently beneficial in children and should not be recommended to the children under the age of four years. [13, 14, 15].

Nazla-o-Zukām has been defined in *Unani* medicine literature as a condition in which catarrhal fluids flow from the anterior ventricles of brain towards the throat and nose. Some Physicians distinguished both of them, referring to the flow of these fluids towards the nose as *Zukām* and the flow towards the throat as *Nazla*. *Nazla-o-Zukām* causes may be broadly classified into two primary groups:

1. The predominance of intrinsic or extrinsic *Harārat*.
2. The predominance of intrinsic or extrinsic *Burūdat*.

As a result, the disease has been divided into two types: *Hār* and *Bārid*. The condition is referred to as *Nazla-o-Zukām Hār* (acute) if the symptoms are intense. If the symptoms are not so intense, it is termed to as *Nazla-o-Zukām Bārid* (chronic) [16-21]. Children are frequently affected by *nazla-e-Hār*, which is caused on by excessive rutubat (moisture/wetness) and *zuf-e-Dimagh* (brain weakness). The symptoms of disease in the case of *Nazla Hār* are usually more severe with indications of heat predominance, such as flushing and burning sensations on the face, burning sensations in the nose and throat, watery eyes, increased body temperature, nasal discharge of thin yellow fluid, excessive thirst, and malaise. Symptoms of *Nazla Bārid* include nasal obstruction, fatigue, and thick yellow fluid discharge. These are symptoms of moderate intensity. Some *Unani* physicians consider *Nazla Wabaiyah* as the third type

of *Nazla-o-Zukām*. The symptoms of this type of disease are more intense compare to those of *Nazla Hār*. Physicians of the *Unani* system have mentioned a complete and detailed treatment of *Nazla Hār*, including a treatment regimen according to the causative factors. In the case of *Nazla Bārid*, *Usool e Ilaj* is *Taskhin* (to produce warmth), and in the case of *Nazla Hār*, *Taghliz-i Madda* (to make the matter thicker). When the *Burūdat in Nazla-e-Bārid* is severe, *Nakhuna*, *Babuna*, *Marzanjosh*, and *Soya* can be used as *Inkibāb* (Steam inhalation). For *Nazla Bārid*, *Shamum/Lakhlakha* of *Kalonji Biryani* and *Anisūn* is also used. Oral administration of *Post-e-Khashkhash* decoction for *Taghliz-i Mādda* will work in the case of *Nazla-e-Hār*. *Behedana*, *Unnab*, *Sapistan*, *Tukhm-e-Khatme*, and *Gaozaban* are some common single drugs used for the treatment of *Nazla*. *Tiryāq-e-Nazla*, *Sharbat Faryadras*, and *Sharbat-e-Nazla* are some compound drugs used in treatment *Nazla*. Meat, *Mubakhhira* (flatulent) food, wine, and oily foods should be avoided because diet play a significant role in the disease and its treatment. Foods which are easily digestible and plenty of fluids should be consumed.

Kalonji Biryani, *Anisoon*, and *Qust* can be placed in a cotton towel and smelled frequently or they can be used as *Lakhlakha* (inhaling the vapour from drugs kept in a wide mouthed bottle) for immediate relief from symptoms [16-18, 20-25].

Materials and Methods

The present study was conducted at Central Research Institute of UnaniMedicine (CRIUM), Lucknow on 84 patients of *Nazla* (Commoncold) selected from those who visited the OPD of the institute for treatment of cold during 2017-2019. The patients of either sex in the age group of 18 to 65 years were included in the study. Inclusion criteria were *Khushūna al-Halaq* (Sore throat), *Buhha al-Sawt* (hoarseness of voice), *Utās* (Sneezing/nasal irritation), *Rhinorrhoea* /runny nose, *Sudā* (headache), *Su'āl* (cough) and *I'yā* (malaise) and Low grade fever (100 - 101°F). The patients below 18 years and above 65 years of age, Patients of acute or chronic lower respiratory tract infection 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 12/05/2017. After obtaining written informed consent from the patients, they were enrolled for the study and then subjected to the pathological and bio-chemical 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 glutaminoxaloacetic 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 *Khushūna al-Halaq* (sore

throat), *Buhha al-Sawt* (hoarseness of voice), *Utās* (sneezing/nasal irritation), Rhinorrhoea/runny nose, *Sudā* (headache), *Su'āl* (cough) and *I'yā* (malaise), Low grade fever (100 - 101°F). These parameters were graded according to visual analogue scale (VAS) score except fever which is in Fahrenheit. The clinical follow-up of all the cases was carried out on 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 bio-chemical 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 Unani pharmacopoeial formulation "*Laooq-Khayar-Shambar*" 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 V* at pharmacy unit of CRIUM, Hyderabad. "*Laooq-Khayar-Shambar*" was given in the dose of 10gm orally twice a day with lukewarm water. "*Laooq-Khayar-Shambar*" is made up of five ingredients in different proportion (Table No.1)

Table 1: Ingredients of *Laooq-Khayar-Shambar*.

S. No	Unani Name	Botanical Name	Weight
1	Sapistān	<i>Cordia myxa</i>	1.5 Kg
2	Asl-us-Soos	<i>Glycyrrhiza glabra</i>	1.5 Kg
3	Maghz-e-Floos-e-Khayar Shamber	<i>Cassia fistula</i>	2.0 Kg
4	Kateera	<i>Sterculia urens</i>	1.5 Kg
5	QandSafaid		18.0 Kg

[26-28].

Results: In this study, 61.90% (52) patients were male and 38.09% (32) female. Besides, 8.33% (7) patients were of *Damvi* (Sanguine), 41.67% (35) patients of *Balghami* (Phlegmatic), 50.0% (42) patients of *Safravi* (Bilious) and 0% (0) patients of *Sawdawi* (Melancholic) *Mizāj*. (Table No.2) Out of 84 patients included in the trial, the highest incidence (47.61%) was observed in the age group of 18-30 years and the least incidence (4.76%) was seen in the age group of 51-65 years and 25.00% incidence was seen in the age group of 31-40 years then 22.62% incidence was seen in the age group of 41-50 years. As far as chronicity of the symptoms is concerned, 25% patients had symptoms for one or less than one week and 70.23% patients had symptoms for 1-4 weeks, only 4.76 patients had symptoms for more than 4 weeks. (Table No. 3).

Table 2: Distribution of patients according to age and sex.

Temperament	Male	Female	Total	Percentage
<i>Damvi</i>	03	04	07	08.33%
<i>Balghami</i>	21	14	35	41.67%
<i>Safravi</i>	28	14	42	50.00%
<i>Saudavi</i>	00	00	00	00%
Total	52 (61.90%)	32 (38.09%)	84	100%

Table 3: Distribution of Patients according to Age Group.

Age Group	No of patients	Percentage
18-30	40	47.61%
31-40	21	25.00%
41-50	19	22.62%
51-65	04	4.76%
Total	84	100.00%

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	Khushūna al-Halaq (Sore throat)	5.62±2.50	2.10±1.69	3.52 (62.63%)	<0.0001**
2	Buhuat al-Sawt (Hoarseness of Voice)	3.40±2.84	1.27±1.38	2.13 (62.65%)	<0.0001**
3	Utās (Sneezing/ Nasal irritation)	5.42±2.54	1.86±1.78	3.56 (65.68%)	<0.0001**

Visual analogue scale (VAS) score was calculated in all the patients before and after the treatment. The mean value of VAS score for *Khushūna al-Halaq* (Sore throat), *Buhha al-Sawt* (hoarseness of voice), *Utās* (Sneezing/ nasal irritation), Rhinorrhoea/runny nose, *Sudā* (headache), *Su'āl* (Cough) and *I'yā* (malaise) were 5.62±2.50, 3.40±2.84, 5.42±2.54, 4.42±3.27, 3.71±2.52, 3.73±2.73 and 3.88±2.33 respectively before the treatment. At the end of the study, these scores were 2.10±1.69, 1.27±1.38, 1.86±1.78, 1.52±1.81, 1.21±1.51, 1.52±1.50, 1.57±1.90 and respectively. And the mean value of low-grade fever (<101 0F) was 98.4 ± 0.73 before treatment and 98.3±0.36 after treatment.

Out of eight parameters studied, 62.63% improvement in case of *Khushūna al-Halaq* (sore throat), 62.65% in *Buhha al-Sawt* (hoarseness of voice), 65.68% in *Utās* (sneezing/ nasal irritation), 65.61% in Rhinorrhoea/runny nose, 67.39% in *Sudā* (headache), 59.25% in *Su'āl* (cough), 59.54% in *I'yā* (malaise), and 0.1(0.10%) in low grade fever (<101 0F). The overall improvement was good (Table No.4).

Laooq-Khayar-Shambar demonstrated significant improvement in symptoms and signs of *Nazla* (common cold). Out of 84 patients, 20 (23.81%) patients showed 60-89% relief in overall symptoms and signs, 56 (66.69%) patients showed 30- 59% relief in overall symptoms and signs, 08 (9.52%) patients showed less than 30% relief in overall symptoms and signs and not any patient showed more than 90% relief in overall symptoms and signs of *Nazla* (common cold) (Table No 5).

4	Runny nose	4.42±3.27	1.52±1.81	2.9 (65.61%)	<0.0001**
5	Sudā (Headache)	3.71±2.52	1.21±1.51	2.5 (67.39%)	<0.0001**
6	Su'āl(Cough)	3.73±2.73	1.52±1.50	2.21 (59.25%)	<0.0001**
7	I'yā' (Malaise)	3.88±2.33	1.57±1.90	2.31 (59.54%)	<0.0001**
8	Low fever (<102 OF)	98.4±0.73	98.3±0.36	0.1(0.10%)	0.2618 ns

Using t-statistics

** Differences are statistically significant

Table 5: Therapeutic Response

Response	Cured (90-100%)	Relieved (60-89%)	Partially Relieved (30-59%)	Not Relieved (0-29%)	Total
No. of Patients	--	20	56	08	84
Percentage	--	(23.81)	(66.69)	(9.52)	(100)

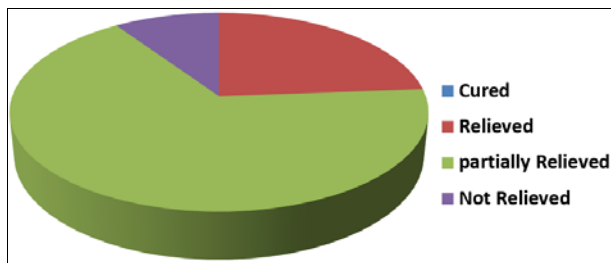


Fig 1: Therapeutic Response

The mean values of haematological and bio-chemical parameters at the baseline and after the treatment are given

Table 6: Mean Values of Pathological Investigations at the Baseline and After the Treatment

Pathological Investigations		Period	Mean SD	P Value
Hemoglobin		BT	13.91±9.46	0.3255*
		AT	12.88±1.46	
ESR (mm/ 1sthr)		BT	19.83±16.52	0.694*
		AT	20.76±14.02	
Total Leucocytes Count (mm)		BT	9203.57±829.64	0.6380*
		AT	9278.57±1199.10	
DLC	Neutrophils	BT	60.81±8.19	0.9016*
		AT	60.67±6.35	
	Lymphocytes	BT	32.45±8.38	0.8962*
		AT	32.60±6.87	
	Eosinophil	BT	4.85±2.91	0.7473*
		AT	5.00±3.11	
	Monocytes	BT	1.90±0.89	0.007
		AT	1.49±1.07	

Using t-statistics *Differences are statistically insignificant

BT= Before Treatment; AT= After Treatment

Table 7: Mean Values of Biochemical Investigations at Baseline and After Treatment

Biochemical Investigations	Period	Mean ± SD	P value
SGOT (Units/ml)	BT	20.44±10.52	0.2069*
	AT	18.56±8.57	
SGPT (Units/ml)	BT	29.20±19.28	0.7807*
	AT	28.37±19.29	
ALP (K&A Units/100 ml)	BT	224.3±56.61	0.4905*
	AT	218.67±48.69	
Serum Bilirubin (mg %)	BT	0.58±0.32	0.8373*
	AT	0.59±0.31	
Serum Creatinine (mg %)	BT	0.81±0.14	0.3430*
	AT	0.88±0.66	
Serum Urea (mg %)	BT	26.65±5.38	0.7934*
	AT	26.45±4.46	

Using t-statistics

*Differences are statistically insignificant

BT= Before Treatment; AT= After Treatment

Discussion: The improvement in various clinical parameters

in Table No. 6 and 7 respectively. The values of safety parameters [Haemoglobin, ESR, TLC, DLC, LFTs and KFTs] remained within normal limits after the treatment. There was no significant change in serum level of SGOT, SGPT, ALP, S. Bilirubin, S. Urea and S. Creatinine after treatment as compared to the baseline. Likewise, no significant change in value of Haemoglobin, ESR, TLC and DLC was seen after the treatment as compared to the baseline except Monocytes 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.

of *Nazla* (common cold) might be due to alteration of temperament (*Ta'del-o-Tabdel-i-Mizaj*), or by evacuation of vitiated or morbid matter in case of *Su'-i-Mizaj Maddi* (Impaired temperament due to abnormal humour). *Laoq-Khayar-Shambarhas* five ingredients: *Sapistan* acts as *Mulayyin-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), *Khushūnat-e-Hālaq wa Šadr* (Irritation of throat and chest), *Su'āl-e-yabis* (dry cough), *Humma Šafrawi wa Damawi* (Bilious and haemolytic Fevers), *Jiryan* (Spermatorrhoea), *Suzak* (gonorrhoea), *Zaheer* (Dysentery). Actions of *Aslussoos* are *Mukhrij-ī-balgham* (Expectorant), *Musakkin* (Sedative), *Mulayyin* (Emollient), *Munzij-i-akhlat-i-ghalizah* (Concoctive of viscous humour), *Muqawwi-ī-asāb* (nervine tonic), *Muhallil* (anti-inflammatory), *Daf-e-tapha-e-muzmina* (As antipyretic in chronic fevers) *Mudir e baul wa haiz* and beneficial in *Su'āl* (Cough), *Buhuat al-Sawt*

(Hoarseness), *Dīq al-Nafas/Ribo* (Bronchial asthma), *Khushunāt-e- sadr, riya wa qazbatul riya* (Irritation of chest, lungs and trachea), *Tap-e-kohna* (Chronic fever), *harqat-e-baul* (Burning Micturation), *amrad-ī-jigar, tihal wa asāb* (Hepatic, splenic and Nervine disorders). *Magz-ī-khayar Shambar* acts as *Mulayyin-e-sadr* (emollient of chest), *Muhallil-ī-awram* (Anti-inflammatory), *Mushil-i-akhtat-i-salasaḥ* (Purgative of three humours) and used in *Khushunāt-i- Ṣadr* (Irritation of chest), *Waram-i-Halaq* (Pharyngitis), *Su'āl* (Cough), *Dīq al-Nafas/Dama* (Bronchial asthma), *Humma* (Fever), *Yarqan* (Jaundice). *Kateera* acts as *Mulayyin wa mugarri* (Emollient and aedessive), *Mulayyin-i-sadr* (Emollient of chest), *Musakkin* (sedative), *Habis-ī-dam* (Haemostatic), *Musammin-i-badan* (weight gainer), and used in *Khushunāt-i-Halaq wa sadr* (Irritation of throat and chest), *Buhuat al-Sawt* (Hoarseness), *Su'āl* (cough), *Qurha-i-riya* (Wound of lungs), *Nafs ud dam* (haemoptysis), *Bawl al-Dam* (Haematuria) [29, 30].

The combination of all the drugs makes *Laoq-Khayar-Shambara* special drug which has several properties described in the *Usul-i-Ilaj* (Principle of treatment) of *Nazla* (Common cold). It provides comprehensive protection from the virus by strengthening the body defense system. It is also effective in the liver, nervous, urinary, and digestive system disorders. As far as the management of the common cold in the modern system of medicine is concerned, several studies have been done to validate the effective and safe management by the existing/new medications, but a comprehensive effective, and safe drug for the common cold could not be figured out. The existing drugs which are used in cold do not help to reduce the symptoms as shown in the following studies. Antibiotics have no role in the treatment of the common cold [31]. Antihistamines when used alone, are no more effective than placebo for the treatment of cold symptoms [32, 33]. Antitussives and expectorants have little benefit not more than placebo in the treatment of cough due to the common cold [33, 34]. Antivirals are not indicated or effective for the treatment of URIs, and they have been associated with clinical syndromes similar to the common cold [35]. Three small trials found no evidence that intranasal corticosteroids relieve symptoms of the common cold [36]. Vitamin D supplementation not improve symptoms of the common cold [37]. Once symptoms have developed, vitamin C has no effect on symptom duration or severity [38]. Vitamin E can actually make symptoms worse in older adults [39]. Although nasal saline irrigation is effective for the treatment of chronic rhinosinusitis, only low-quality evidence supports its benefit in URIs [40]. In a randomized controlled trial of 59 children without asthma, oral albuterol did not improve acute cough at seven days compared with placebo, but it was associated with increased adverse effects [41]. Carbocysteine is no more effective than placebo [42]. Codeine was found no more effective than placebo for cough [43]. In the light of the above observations, it is obvious that medications used for the management of common cold in the modern system of medicine do not exhibit any significant improvement in the symptoms and signs of common cold and have side effects in varying degree. On the hand contrary, study drug i.e. *Laoq-Khayar-Shambar* has shown a significant improvement in symptoms and signs of *Nazla* without any known side effect. The study proves efficacy as well as safety of *Laoq-Khayar-Shambar* in the treatment of *Nazla* (Common cold).

Conclusion

It is clear that *Laoq-Khayar-Shambar* produced significant improvement in various symptoms and signs including *Khushūna al-Halaq* (sore throat), *Buhuat al Sawt*, (hoarseness of voice), *Utās* (sneezing/nasal irritation), *Sudā* (headache), *Su'āl* (cough), runny nose, *I'yā* (malaise) and low grade fever (100-101°F). Likewise, the therapy was found to be safe and well-tolerated as the safety parameters (Hb%, ESR, TLC, DLC, LFT and KFT) remained within the normal limits after the treatment. No unbearable side effects were seen and overall compliance to the trial drug was good. Thus, it may be concluded that *Laoq-Khayar-Shambar* is an effective and safe regimen in the symptomatic management of *Nazla* (Common cold).

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Conflict of Interest

Not available

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Not available

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