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Therapeutic Evaluation of Majoon e Azaraqi in the Management of Rheumatoid Arthritis: A Case Study

Nusrath Thasneem*[1], Mushtaq Ahmed C[2], Mubasheera begum[1] and S. Mussadiq Ahmed[1]

[1]*Department of Moalajat, Government Unani Medical College, Chennai, Tamil Nadu 600106, India*
[2]*Government Unani Medical College, Chennai, Tamil Nadu 600106, India*

ABSTRACT

Rheumatoid arthritis (Hudar) represents a systemic autoimmune condition marked by persistent inflammatory processes that predominantly affect the synovial joints in a symmetrical pattern, particularly targeting the smaller articulations of the hands and feet. This multisystem disorder frequently presents with manifestations extending beyond the joints. Contemporary medical approaches offer various therapeutic interventions; however, complete disease remission remains elusive. Disease exacerbations commonly occur following treatment discontinuation, underscoring the chronic and progressive nature of this condition.

Within the framework of traditional Unani medicine, rheumatoid arthritis falls under the broader classification of Waja al-Mafasil. The Unani therapeutic system employs numerous preparations, both for systemic administration and topical application, demonstrating considerable therapeutic potential in addressing Waja al-Mafasil. This investigation sought to assess both the therapeutic effectiveness and safety profile of the traditional Unani compound formulation Majoon e Azaraqi in managing rheumatoid arthritis symptoms.

Materials and Methods: *The study involved a 35-year-old female participant who met the diagnostic criteria established by the 2010 American College of Rheumatology/European League Against Rheumatism (ACR/EULAR) classification system for rheumatoid arthritis. The intervention protocol consisted of administering Majoon e Azaraqi over an eight-week treatment period.*

Results: *Pre-treatment assessment revealed a Visual Analog Scale (VAS) pain rating of 7, representing substantial pain intensity. Following the completion of the eight-week therapeutic regimen, the VAS measurement decreased markedly to 2. Concurrent improvements were documented in the Disease Activity Score-28 (DAS28), which declined from an initial value of 5 to 2 upon treatment completion. Additional laboratory parameters demonstrated favorable changes, including reductions in C-reactive protein levels, anti-streptolysin O titers, and rheumatoid factor concentrations.*

Statistical analysis using paired t-test methodology revealed significant improvement in subjective symptom measures ($p = 0.0051$, $p < 0.05$), providing statistical validation for the therapeutic benefits of Majoon-e-Azaraqi in rheumatoid arthritis management.

Conclusion: *The present case documentation indicates that Majoon-e-Azaraqi demonstrates therapeutic value in managing Hudar (rheumatoid arthritis), likely attributable to its inherent anti-inflammatory and pain-relieving mechanisms. Nevertheless, the study's limitations, including the single-subject design and absence of comparative controls, restrict the broader applicability of these findings. Comprehensive randomized controlled trials with larger patient populations are essential to establish definitive therapeutic efficacy.*

Keywords*: Majoon e Azaraqi; Rheumatoid arthritis; Unani medicine; Waja al-Mafasil; Traditional medicine; Case study.*

INTRODUCTION

Traditional Unani medicine encompasses arthritic conditions within the comprehensive terminology of Waja al-Mafaṣil, derived from Arabic nomenclature signifying "articular pain." The clinical manifestations of this condition demonstrate remarkable similarity to rheumatoid arthritis as recognized in contemporary medical practice.

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*Corresponding Author: **Nusrath Thasneem**
Email Address: **nusraththasneem@gmail.com**

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The etymological breakdown reveals "waja" denoting pain and "mafasil" referring to articulations, thus providing a literal interpretation of "joint pain." Historical documentation of this pathological state spans ancient Egyptian, Unani, and Roman medical literature.

The renowned physician Ibn Sina (Avicenna) characterized Waja al-Mafaṣil as a pathological state featuring pain, accompanied by varying degrees of stiffness, affecting single or multiple joints. This condition manifests as Hudar (Rheumatoid arthritis), representing a chronic systemic inflammatory process predominantly targeting the smaller articulations of hands and feet in bilateral distribution. The pathophysiology encompasses deforming polyarthritis, synovial inflammation affecting joints and tendon sheaths, progressive articular cartilage deterioration, juxta-articular bone erosion, osteopenia development, and the presence of IgM rheumatoid factor along with anti-cyclic citrullinated protein antibodies (ACPAs) in the majority of patients. Furthermore, rheumatoid arthritis frequently presents with diverse extra-articular complications.

The global prevalence of rheumatoid arthritis approximates 1% of the population, while Indian epidemiological data indicates prevalence rates ranging from 0.5% to 0.75%. Gender distribution demonstrates female predominance with a 3:1 ratio.

Within Unani medical theory, rheumatoid arthritis results from the accumulation of ruṭūbat ghariba (pathological substances) within joint spaces. The predominant pathological substance identified is Ṣafrā'-e-Balghamī (phlegmatic bile), succeeded by Balgham-e-Khām (raw phlegm), Dam (sanguine humor), Ṣafrā (yellow bile), and infrequently Sawdā (black bile) [2].

Clinical presentation encompasses pain, edema, tenderness, and morning rigidity primarily affecting hand, foot, knee, and ankle articulations. When the causative agent (maddah) infiltrates joint spaces, inadequate absorptive capacity (Qawwat-e-Jazibah) prevents proper assimilation, while diminished expulsive power (Quawwat-e-dafia) impedes elimination, resulting in substance retention within joints [3]. Prolonged retention increases viscosity (Ghilazat) and viscidity (Lazoojat), leading to hardening processes, joint ankylosis initiation (Tahajjur-e-mafasil), and progression toward incurability [4].

Contemporary rheumatoid arthritis management incorporates nonsteroidal anti-inflammatory medications (NSAIDs), disease-modifying anti-rheumatic drugs (DMARDs), tumor necrosis factor-α inhibitors, and corticosteroids, all associated with significant adverse effects during extended administration. Given the chronic nature requiring prolonged treatment, identifying safe and effective therapeutic alternatives becomes paramount. Unani medicine encompasses extensive pharmacological resources, including individual and compound preparations historically employed by ancient practitioners for Waja'al-Mafasil management. However, these therapeutic approaches require rigorous scientific validation to establish safety and efficacy profiles. Consequently, this investigation was designed to evaluate the safety and therapeutic effectiveness of Majoon e Azaraqi, a polyherbal Unani formulation, in treating Waja'al-Mafasil (rheumatoid arthritis).

Unani Concept of *Waja al-Mafasil*

Ibn-e-Sina characterizes *Waja'al-Mafasil* as a clinical entity distinguished by pain and stiffness affecting one or multiple joints, attributed to ratubat-e-ghariba (foreign humor) accumulation within joint structures [6]. Zakariya Razi conceptualizes "*Waja al-Mafasil*" as a condition manifesting through recurrent or paroxysmal episodes resulting from excessive fluid accumulation within joint cavities. His classification system groups gout, *Irq-un-nisa* (sciatica), and Waja'al-Mafasil within the same disease category [7]. Ismail Jurjani defines Waja'al-Mafasil as the consequence of morbid matter accumulation within joint organs, precipitating discomfort and inflammatory responses [8]. Akbar Arzani describes Waja'al-Mafasil as discomfort affecting hand and foot joints accompanied by inflammation, noting that pain may manifest with or without concurrent joint inflammation [9].

Samar Qandi provides an expanded definition encompassing pain and inflammation within joint-surrounding tissues, including synovium, ligaments, tendons, musculature, and muscular covering membranes. The pathological process occasionally affects organ-encasing membranes such as cardiac and pulmonary structures, resulting in inflammation and erythematous appearance. Mandibular, spinal, and auditory ossicle involvement may occur, creating diagnostic complexity [10,11]. Historical medical authorities including Ibn Rushd (1188 AD) in Kitab-ul-Kulliyat [13], Rabban Tabri (898 AD) in Firdaws al-Hikma fi'l Tibb [14], and Majoosi (930 AD) in Kamil al-Sana'a al-Tibbiyya [15] documented this condition in their respective treatises.

2. Materials and methods

This investigation employed a single-patient, open-label clinical methodology to evaluate *Majoon-e-Azaraqi* efficacy in managing *Hudar* (Rheumatoid Arthritis) according to ACR/EULAR 2010 classification criteria. A 32-year-old female patient with confirmed rheumatoid arthritis diagnosis was recruited from the Unani Outpatient Department, Aringar Anna Government Hospital of Indian Medicine & Homoeopathy, Chennai, Tamil Nadu. Primary complaints included bilateral interphalangeal joint pain and stiffness with associated finger movement difficulties, predominantly morning stiffness.

The patient reported significant impact on social and professional functioning, with daily activities becoming challenging due to pain and stiffness symptoms. This resulted in emotional distress, frustration, and feelings of helplessness. While anxiety and depression were not prominently expressed, ongoing symptoms substantially reduced quality of life. Family history revealed no relevant similar conditions. Physical examination demonstrated unrestricted flexion and extension of bilateral interphalangeal joints. Radiographic evaluation of both hands and wrist joints (anterior-posterior and lateral views) remained within normal parameters. Laboratory findings revealed positive ASO titer, supporting rheumatoid arthritis diagnosis.

Inclusion criteria required symptom persistence for minimum 6 months, while exclusion criteria eliminated patients with comorbidities including hypertension, diabetes, or severe joint deformity. Ethical approval was secured, and informed consent obtained prior to participation, ensuring compliance with Declaration of Helsinki and ICMR guidelines.

The intervention protocol involved *Majoon-e-Azaraqi* administration (5g twice daily with lukewarm water) for 8 weeks. The formulation was prepared according to pharmacopoeial guidelines at Anna Hospital Pharmacy, comprising polyherbal ingredients with established anti-inflammatory, analgesic, and antioxidant properties.

S:NO	Unani names	*Botanical names*	parts	Medicinal properties
1.	*Azaraqi Mudabbar*	*Strychnos nuxvomica* Linn.	Seed	Anticonvulsant activity Analgesic and anti - inflammatory activity Antioxidant activity[16]
2.	*Berg-e-Gaozaban*	*Borago officinalis* Linn.	Leaf	Rheumatism[17]
3.	*Ustukhuddus*	*Lavandula stoechas* Linn.	Flower	Anti-inflammatory activity[18]
4.	*Kateera*	*Cochlospermum religiosum* Linn.	Gum	Antioxidant activity[19]
5.	*Narjeel*	*Cocosnucifera* Linn.	Endosperm	Anti-inflammatory, Anti-bacterial,and Analgesic[20]
6.	*Maghz-e-Chilghoza*	*Pinus gerardiana* Wall.	Kernel	Anitoxidant,Antibacterial [21]
7.	*Dana Heel Khurd*	*Eletarria cardamomum* (L.) Maton	Seed	Anti-inflammatory[22]
8.	*Zarambad*	*Curcuma zeodaria* Linn.	Rhizome	Antioxidant[23]
9.	*Shaqaq-ul-Misri*	*Pastinaca secacul* Linn.	Rhizome	Analgesic, anti-inflammatory [24]
10.	*Sandal Safaid*	*Santalum album* Linn.	Heartwood	Astringent[25]
11.	*Aamla*	*Emblica officinalis* Gaertn.	Fruit	Rheumatism[26]
12.	*Halela Siyah*	*Terminalia chebula* Retz.	Fruit	Anti-inflammatory, Antioxidant.
13.	*Ood Hindi*	*Aquilaria agallocha* Roxb.	Heartwood	Antibacterial28
14.	*Qaranfal*	*Syzygium aromaticum* (L.) Merr. L M Perry	Flower bud	Allergen exposure29

2.1 Drug preparation and mode administration [13]

The raw drugs, namely *Azaraqi Mudabbar, Berg-e-Gaozaban, Ustukhuddus, Kateera, Narjeel, Maghz-e-Chilghoza, Dana Heel Khurd, Zarambad, Shaqaq-ul-Misri, Sandal Safaid, Aamla, Halela Siyah, Ood Hindi, Qaranfal, and Qand Safaid*, were procured from the local market. Ingredients 1 to 4 and 7 to 14 were cleaned, dried, powdered, and sieved through an 80 mesh, and kept separately. Ingredients 5 and 6 were coarsely powdered and sieved through a 60 mesh. Ingredient 15 was dissolved in 750 ml of water on slow heat, and at the boiling stage, 0.1% citric acid was added and mixed thoroughly. The mixture was boiled, and 0.1% sodium benzoate was added at a 72% consistency of quiwam and mixed well. The quiwam was then corrected to 77% consistency. The vessel was removed from the fire, and while hot, the powders of ingredients 1 to 14 were added and mixed thoroughly to form a homogenous product. Finally, the mixture was cooled to room temperature and packed in tightly closed containers to protect it from light and moisture. The medicine was prepared in the ANNA HOSPITAL PHARMACY according to the guidelines of the Anna Hospital Pharmacopoeia.

3. Analysis: The patient was assessed at baseline and then again on the 8th week, after completing the treatment. The assessment was conducted using subjective parameters such as pain, tenderness, and joint stiffness based on the Visual Analog Scale (VAS), as well as objective parameters including the DAS 28 Questionnaire to evaluate the improvement in quality of life. Inflammatory markers, such as ASO, CRP, and RA Factor, were also measured. A paired t-test was used for the pre- and post-treatment comparison for the subjective parameters
Mean (Baseline): 7.00;Mean (Post Treatment): 2.33
Standard Deviation (Baseline): 1.00;Standard Deviation (Post Treatment): 0.58
p-value (Paired t-test): 0.0051

3.1 Subjective parameter's (see bar diagram fig 1)

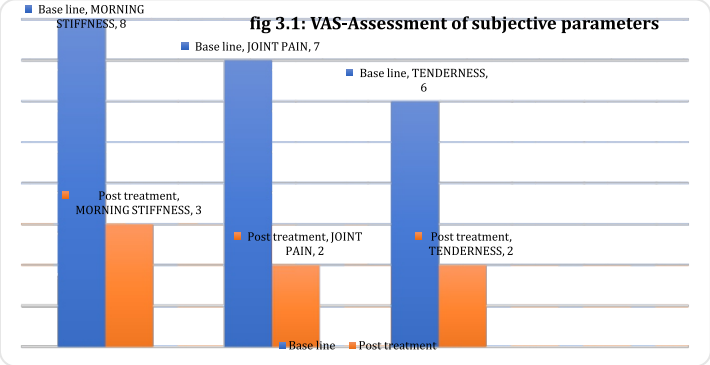
Table: 1

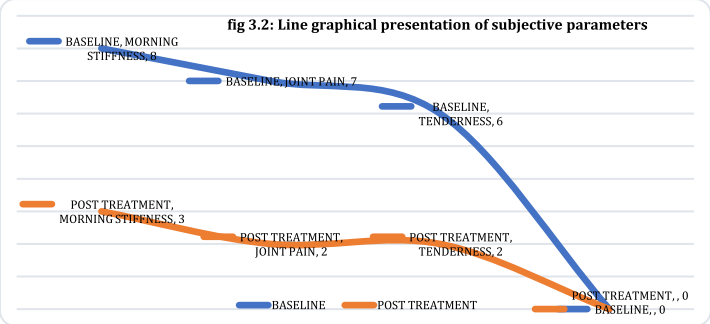
Subjective parameters	Baseline	Post Treatment	Paired t-test	p-value	Changes (%)
Morning stiffness (VAS)	8	3	14.0	0.0051	-62.5%
JointsPain (VAS)	7	2	14.0	0.0051	-71.4%
Tenderness (VAS)	6	2	14.0	0.0051	-66.7%

3.2 Objective parameter's

Table: 2

Objective Parameters	Pre test	Post test	Changes(%)
CRP	1. 1mg/dl	0.1mg/dl	-90.9%
ASO TITER	237iu/ml	57iu/ml	-75.9%
RA FACTOR	40 liu/ml	12iu/ml	-70%





4. Results

Based on the patient's statement and pain assessment using the VAS scale, the initial pain level upon arrival at the outpatient department was approximately 7, indicating severe pain. After 8 weeks of medication, the pain level was reassessed, and the VAS score dropped to around 2, indicating a significant reduction in pain. Additionally, objective parameters, including the DAS28 score, showed notable improvement, decreasing from 5 at baseline to 2 after 8 weeks. There was also a marked improvement in inflammatory markers such as CRP, ASO titer, and RA factor. These therapeutic interventions led to significant improvements in both subjective and objective parameters. A paired t-test was performed on the VAS scores for morning stiffness, joint pain, and tenderness to assess the statistical significance of symptom reduction. The results indicated a statistically significant reduction in symptoms, with a p-value of 0.0051 ($p<0.05$), confirming the efficacy of *Majoon-e-Azaraqi* in managing rheumatoid arthritis symptoms. These findings align with the care guidelines for the management of rheumatoid arthritis, demonstrating the effectiveness of this therapeutic intervention.See fig :3.1,3.2

5.Discussion

This case report highlights the potential of Unani formulations, particularly Majoon-e-Azaraqi, in managing rheumatoid arthritis (RA). The patient showed significant improvements across both subjective and objective parameters, including a substantial reduction in pain (as measured by the VAS score), joint stiffness, and key inflammatory markers such as CRP, ASO titer, and RA factor. These improvements suggest that *Majoon-e-Azaraqi* may possess valuable anti-inflammatory properties that could complement conventional RA treatments and help manage symptoms more effectively. However, several diagnostic challenges arose during the study. One primary difficulty was differentiating RA from other inflammatory joint disorders like osteoarthritis or psoriatic arthritis, given the overlap in clinical presentations. Additionally, interpreting blood tests, particularly the positive ASO titer, proved challenging since similar results can be found in other autoimmune conditions.

The study's limitations include the lack of a control group and a short duration of treatment, which hinder the ability to draw definitive conclusions about the long-term efficacy of *Majoon-e-Azaraqi*. These factors highlight the need for further high-quality research, such as randomized controlled trials, to more thoroughly evaluate the therapeutic potential of this Unani formulation. Despite these limitations, the case supports the possibility of integrating traditional remedies like *Majoon-e-Azaraqi* into modern medical care, provided there is sufficient evidence to support their safety and efficacy. Furthermore, the case emphasizes the importance of accurate early diagnosis in RA to differentiate it from similar conditions and ensure effective treatment. The favorable tolerability of *Majoon-e-Azaraqi*, along with the patient's good adherence to the treatment regimen, further underscores its potential as a complementary approach to managing RA symptoms.

Patient Perspective: The patient has reported notable improvements in managing her osteoarthritis since initiating treatment with *Majoon e Azaraqi*. She describes a reduction in pain and stiffness, particularly in the interphalangeal joint, which has facilitated increased mobility and the ability to perform daily activities with less discomfort. Additionally, the patient mentions improved sleep quality, as joint pain no longer interrupts her rest. While the pain has not been completely alleviated, it is now more manageable, allowing for greater physical activity and engagement in light exercises and physical therapy, which may further contribute to her improvement. The patient's feedback indicates a positive impact on her overall mobility and quality of life, suggesting potential therapeutic benefits for osteoarthritis management.

Informed Consent Statement: Informed consent as obtained from the subject.

Ethical compliance statement: The authors confirmed that patients provided written informed consent for the publication of the literature.

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Data availability statement: The data are available from the corresponding author on reasonable request.

References

1. Khan AA, Bashir F, Akhtar J, Anjum N, Alam S. Concept and Management of Waja' al-Mafāṣil (Arthritis) in Unani System of Medicine. J Drug Deliv Ther. 2019;9:634-639.

2. Sīnā I. Al Qānūn fi'l Ṭibb. Vol.3. Urdu translation by Ḥakīm Ghulām Ḥasnayn Kintūrī. New Delhi:Idārā Kitāb al-Shifā. YNM. p.1119-1121.

3. Majoosi, Ali Bin Abbas, Kamil-Us-sanah (Translated by GulamHasnainKantoori), Vol. II, MunshiNawal Kishore Press, Lucknow, 1889; 507-513.

4. Jurjani, A.H., Zakheerah Khwarizm Shahi, vol.6 (Translated by Hadi Hussain Khan) Munshi Nawal Kishore Press, Lucknow, 1903; 637-646.

5. Warrell DA, Cox TM, Firth JD. Oxford Textbook of Medicine. 5th ed. USA: Oxford University Press. 2010. p.35813600.

6. Management of Waja al Mafasil (Arhtritis) in Unani System of Medicine: A review "International Journal of Research in Ayurveda and Pharmacy" 5(1): January – February 2014, p 60-64.7

7. Sina I. Al-Qanoon-fit-Tib (Urdu translation by Kantoori GH), Part II. Idara Kitab-us-Shifa, New Delhi, 2007;3:375-393.

8. Razi Z. Kitab al-Hawi fi Tib. Vol. 11, Central Council for Research in Unani Medicine, Ministry of Health and Family Welfare, New Delhi, Govt. of India; c2004.

9. Jurjani I. Zhakhira Khawarizm Shahi (Urdu translation by Hadi Husain Khan). Idara Kitab-us-Shifa, New Delhi, YNM.

10. Arzani HMA. Tibb-e-Akbar (Urdu Translation by Hussain HM). Idara Kitab-us-Shifa, New Delhi, 617-628. 11. Ahmad AUAM, Qamar Uddin, Ismail BA, Jabeen J. Etiopathogenesis and management of Waja'al-mafaṣil (Rheumatoid arthritis): An evidence-based comprehensive review. International Journal of Research in Ayurveda and Pharmacy 2021;12(6):96-103.

11. Khan MS, Ali SJ, Nayab M, Aziz A. Effect of massage with *Roghan Biskhapra* (oil of *Trianthena portulacastrum* L.) in Rheumatoid Arthritis: case reports of two patients. Journal of Herbal Sciences 2015;4(3):1-3.

12. Kulliyat (Urdu translation). CCRUM, New Delhi. 1987;384-385:420-421.

13. Tabri AR. Firdaus al Hikmat (Urdutranslation). Sheikh Mohammad Bashir & Sons, Lahore, 1417, 291-293, 308.

14. Majusi AA. Kamil-us-Sana (Urdu translation). Vol.2, Matba Munshi Nawal Kishore, Lucknow, 1889, 503-513, 521-522, 531- 534.

15. Zaidi Z. The concept and management of waja-ul-mafasil in Unani Medicine. Asian Journal of Pharmaceutical Clinical Research. 2021;14(12):7-13.

16. Azaraqi (*Strychnos nux-vomica* L.) herb for nervous and muscloskeletol system.

17. Khan, Mohd Nafees, et al. "STUDY OF A CONTROVERSIAL UNANI DRUG GAOZABAN-A." (2018).

18. Nasir, Abdul, et al. "Ustukhuddoos (Lavandula stoechas linn)-an importment Drug in Unani Medicine." European Journal of Pharmaceutical and Medical Research 7.6 (2020): 412-416.

19. Alam, Shah, et al. "An appraisal of medicinal properties of Katira (Cochlospermum religiosum (Linn.) Alston.): A review.

20. Dua, Kamal, et al. "Anti-inflammatory, antibacterial and analgesic potential of cocos nucifera linn.: a review." *Anti-Inflammatory & Anti-Allergy Agents in Medicinal Chemistry (Formerly Current Medicinal Chemistry-Anti-Inflammatory and Anti-Allergy Agents)* 12.2 (2013): 158-164.

21. Bhardwaj, Kanchan, et al. "Studies of phytochemicals, antioxidant, and antibacterial activities of Pinus gerardiana and Pinus roxburghii seed extracts." *BioMed Research International* 2022.1 (2022): 5938610.

22. Kumar, Sanjay, and Reshma Kumari. "Traditional, Phytochemical and Biological activities of Elettaria cardamomum (L.) Maton–A review." *International Journal of Pharmaceutical Sciences and Research* 12.8 (2021): 4122.

23. Chemical composition and antioxidant activities of essential oil and oleoresins from *Curcuma zedoaria* rhizomes, part-74

24. Yarnell, Eric, and Alain Touwaide. "Accuracy of Dioscorides,'De materia medica (First Century CE), regarding diuretic activity of plants." *The Journal of Alternative and Complementary Medicine* 25.1 (2019): 107-120.

25. Santulum album: Medicinal and Pharmacological Properties

26. Dasaroju, Swetha, and Krishna Mohan Gottumukkala. "Current trends in the research of Emblica officinalis (Amla): A pharmacological perspective." *Int J Pharm Sci Rev Res* 24.2 (2014): 150-9.

27. Pharmacognostical studies of Halela Siyah (*Terminalia chebula* Retz.): An important Unani medicinal plant

28. Ghosh, Tarun Kanti, et al. "In-vitro antibacterial study of Aquilaria agallocha heart wood oil and Citrullus lanatus seed oil." *Scholars Journal of Applied Medical Sciences (SJAMS)* 1.1 (2013): 13-15.

29. Hussain, Syed Asif; Khan, A.B.; Siddiqui, M.Y.; Latafat, T.; Kidwai, T.. Evaluation of a combination of a unani pharmacopeal preparation (itrifal ustukhudoos) with cloves (qaranfal) in allergic rhinitis – a preliminary clinical study. Ancient science of life 229(4) (4):p 152-159, apr–jun 2003.