

Majoon Supari Paak - A Polyherbal Unani Formulation Used in the Management of Sayalan al-Rahim (Leucorrhoea)

Fouzia Bashir^{1*}, Jamal Akhtar², Nighat Anjum² and Shah Alam¹

¹Research Associate, Central Council for Research in Unani Medicine, Janakpuri, New Delhi, India

²Research Officer, Central Council for Research in Unani Medicine, Janakpuri, New Delhi, India

*Corresponding Author: Fouzia Bashir, Research Associate, Central Council for Research in Unani Medicine, Janakpuri, New Delhi, India.

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Abstract

The Unani Medicine (Greek medicine) is a broad system of medicine, which specifically deals with a variety of states of wellbeing and disease. It deals in prevention of disease so that it can be checked in early stages and also helps to restore the function of body. This System of medicine is one of the oldest conventional systems of medicine, which has its root from the time of Hippocrates (460 - 377 BC). In modern medicine, Leucorrhoea is described as a thick discharge from vagina which is whitish, or yellowish in colour. It is commonly a non-pathological symptom which occurs after inflammation of the vagina or cervix. In Unani system of medicine, the modern counterpart name for leucorrhoea is Sayalan al-Rahim. A huge number of drugs, either single or compound formulations, have been described for the management of Sayalan al-Rahim. Majoon Supari Paak is a polyherbal Unani formulation that contains twenty-five herbal ingredients, of which Foful (*Areca catechu*) is the main ingredient along with Zafran (*Crocus sativus*), Darchini (*Cinnamomum zeylenicum*), Zanjabeel (*Zingiber officinalis*), Qaranfal (*Cinnamomum verum*) and many more. The medicine has been used to treat leucorrhoea, as a uterine tonic and also to treat infertility along with different gynaecological disorders. The ingredients have been considered to perform as an antioxidant, anti-inflammatory, and boost fertility. Scientific researches of the above-mentioned constituents have also reinforced their beneficial anti-inflammatory, astringent, and antiseptic properties.

Keywords: Majoon Supari Paak; Leucorrhoea; Sayalan al-Rahim; Unani Medicine

Introduction

From the time when mankind exists, it has been correlated with the factors of pain, illness and death and has been caught up with the question of domineering and eradicating the ailments of existence [1-3]. The Unani System of Medicine (USM) believes in the self-resistance ability (Tabi'at) of the individual. Unani Medicine's approach in dealing with the disease is quite different.

USM believes that the actual physician is the body's natural power of healing and maintaining its normal state of health (Tabi'at). This system is one of the long-established systems of medicine, which originates from the period of Buqrat (460 - 377

BC). It is based on the theory of four temperaments (Mizaj) and four humours (Akhlat), anticipated by Buqrat, who is also known as "Father of Unani medicine". This system particularly seeks to prevent diseases by means of certain drugs which can be of plant, animal or mineral origin. Various modes of treatment which are mentioned in Unani classical literature are four that is Pharmacotherapy (Ilaj-Bil-Dawa), Dietotherapy (Ilaj-Bil-Ghidha), Regimenal therapy (Ilaj-Bil Tadbeer), and Surgery (Ilaj-Bil-Yad) [4].

In USM, many herbs are used for centuries to manage Sayalan al-Rahim and a variety of other gynecological diseases which have Muhallil al-waram (anti-inflammatory), Qabiz (astringent), and

Dafi'-i- 'ufunat (antiseptic) properties. "Majoon Supari Paak" is one of the age-old Unani formulations used by Unani physicians in diseases especially for women. It helps to provide strength, treats symptoms associated with monthly problems like backache, anxiety, uneasiness, and bodily fatigue [5-8].

Material and Methods

The Google scholar, Embase, Science Direct, and Pubmed databases were searched to review literature related to Leucorrhoea. A review of Urdu version of Unani literary books was also carried out to search for a description of Leucorrhoea and its aetio-pathogenesis by utilizing certain Unani manuscripts e.g., Al-Qanoon fit Tibb, Dhakhira Khawārizm Shāhi, Ikseer e Azam, Kitāb al Mansūrī, Al-asbab wal alā'imat, Kitāb al-Kulliyāt, and Ghina Muna. The literary review of "Majoon Supari Paak" was carried by using standard Unani pharmacopeial manuscripts such as "Makhzanul mufradat maroof ba khawasul advia", "Qarabadeen Qadri", "Kamil al Sanaa", "Qarabadeen Najmul Ghani", "Al Qarabadeen", Al Hawi, Firdaus al Hikmat and Tibb-e-Akbar etc. Above mentioned databases were also utilized to explore new studies on ingredients of "Majoon Supari Paak" by searching through their frequent and botanical name for their astringent, anti-inflammatory, and antiseptic actions.

Concept of leucorrhoea in modern medicine

Leucorrhoea can be defined as an abnormal discharge from vagina. It is a frequent gynaecological complaint of women that involves more than 1/4th gynaec patients who visit the gynaecologist [1]. The discharge may vary from normal to excess flow, which might lead to a few ailments. It could be yellowish, stained with blood or may be contaminated with urine or stool [2]. The usual discharge is in fact a liquid form that is constituted of all worn out and dead cells from the vaginal area with other contaminated materials. The unusual discharge from vagina can be pale white, with a yellowish tint, reddish or blackish in colour [3]. Bad smell discharge from vagina makes an awkward position for women to move in public gatherings and even to keep in their private relationships. The unusual condition of the reproductive organs of women, if not treated in the preliminary stages, may become persistent and leads to PID (Pelvic Inflammatory Diseases), which is a cause of infertility. Women who suffer from pale colour vaginal discharge are not capable to conceive [1]. Strange vaginal discharge is usually linked with body aches and thirst [1]. Excessive vaginal discharge is physiological when linked with various phases of menstrual cycle. However, when it changes into pathological state, it produces oth-

er trouble like low back pain, itching, burning sensation of vulva, poor desire for food, uneasiness, generalised weakness and pain in legs etc. Persistent poor health, tiredness, malnutrition, emotional conflict, unhealthy condition, inappropriate diet, constipation and chronic retro-verted uterus are responsible for excessive vaginal discharge. The most frequent reason of disproportionate discharge is physiological which is due to increase in conditions, when the oestrogen levels become high during the puberty, menstruation cycle, pregnancy and sexual excitement; followed by vaginal and cervical causes. Vaginal infections are because of microorganisms, viruses, fungi and some parasites. Other reasons comprise of foreign bodies, cervicitis, and atrophic vaginitis [2,10]. Infections of vaginal mucosa caused by Trichomonas vaginalis and Candida are the most frequent cause of excessive vaginal discharge. These are curable as well as preventable causes as both these infections are transmitted sexually. However, 25% of both infections are without any symptom [10].

Concept of leucorrhoea in unani medicine

The word leucorrhoea is originated from Greek word (leukos which means white) and (rhoia which means flow) [9]. In the Unani system of medicine "Sayalan al-Rahim" means excessive uterine discharge. The concept of Sayalan al-Rahim existed even in ancient era. In the age of Buqrat (Hippocrates) Sayalan al-Rahim (leucorrhoea) was referred as the flowing away of seeds of women. According to Arastu (Aristotle) opinion, distinguishing Suzak (Gonorrhoea) from Sayalan al-Rahim is difficult in females. Jalinoos (Galen 130-200 AD) said that Sayalan al-Rahim gave rise to Suzak [10,45].

Majoosi (930-994 AD) described that Sayalan al-Rahim is an excessive discharge from the uterus. This discharge is secreted directly by the uterus due to the weakness of the Quwat e jazeba. Sometimes the waste of the body passed out through the uterus. The wastes of the body (fuzlat) are diverted towards the uterus in order to eliminate them by natural means (istefragh). It is the cleaning of the body; the type of discharge can be assessed on the basis of its color [7].

Razi (Razes 850-925 AD) has given a comprehensive description of this disease. According to him, sometimes excessive body fluid is evacuated as Sayalan al-Rahim. There will be bad odor discharge if there is an infection in the uterus [11].

According to Ibn Sina (Avicenna 980-1037 AD) uterus contains excessive waste products, and recurrent occurrence of infection

leads to weakening of Quwate Hazema (digestive faculty) of uterine vessels which results in Sayalan al-Rahim [5].

Ismail Jurjani defined that unnecessary flow of uninfected discharge from the uterus is known as Sayalan al-mani and drift of infected discharge is labeled as Sayalan al Rahim [12].

Ibn Hubal mentioned that ejection in Sayalan al-Rahim is a waste product of the uterus. Discharge is usually phlegmatic, viscous, and sometimes watery [8].

Another renowned physician Akbar Arzani quoted that Sayalan al-Rahim is a continuous- discharge from the uterus which is due to the weakness of the nutritive ability of the uterus. This discharge may be phlegmatic, or bilious in nature [13].

Azam Khan specified that Sayalan al-Rahim is produced due to the deprived nutritive facility of the uterus or maybe the occurrence of extra products in the body. This undue waste product of the body is ejected from the uterus or through the vagina which is termed as istafragh [14].

Ajmal Khan (1868-1927 AD), mentioned that Sayalan al-Rahim is a disease that badly marks the wellbeing of women and must not be ignored as it can disturb the vital organs along with the productivity of a woman [15].

Hasan Qarshi specified that Sayalan al-Rahim is the secretion from the mucosa of uterus and vagina. Qarshi also mentioned that vaginal cells also exist in the discharge [16].

“Majoon Supari Paak” as prophylactic medicine against leucorrhoea

Background of “Majoon Supari Paak”

Unani literature suggests that Unani scholars were well experienced in diagnosing and managing gynecological disorders. By their immense bits of knowledge, they used numerous medicinal plants as preventive medicine for diseases related to women. The Unani physicians have castoff these single and compound Unani medicines in healthy as well as ill people and found positive results. “Majoon Supari Paak” is one of the compound formulations that is used by Unani practitioners [12,44].

S. No.	Constituent (Unani Name)	Botanical Name	Parts used	Temperament	Actions (mentioned in Unani literature)	Proportion in Compound
	Khurma Khushk	<i>Phoenix dactylifera</i> L.	Dried fruit	Hot and dry	Anti-inflammatory, general tonic, haematinic	500 gms
	Fufal	<i>Arecacatechu</i>	Ripe seed	Cold and dry	Astringent	250 gms
	Majeeth	<i>Rubia cordifolia</i>	Stem	Hot and dry	Brain tonic, nervine tonic, haemostatic, antipyretic, analgesic	125 gms
	Sheer e Gao	Cow's Milk	-	-		10 lit
	Maghz Badam Shireen Biryani	<i>Prunus dulcis</i> Mill (Roasted)	Kernel	Hot and dry	Brain Tonic, memory enhancer, aphrodisiac, laxative, diuretic	500 gms
	Nishasta-e- Gandum Biryani	Starch powder	Starch	-		250 gm
	Samagh e Arabi Biryani	<i>Acacia arabica</i>	Gum	Hot and dry	Demulcent, astringent, emollient, styptic, tonic	250 gm
	Aarad Moong	<i>Vigna radiata</i>	Kernel	Hot and dry	Tonic	125 gm
	Raughan Zard	Clarified Butter		-		1 kg
	Qand Safaid	Sugar	Crystals			3 kg
	Khar e Khasak Khurd	<i>Tribulus terrestris</i> Linn.	Fruit	Hot and Dry	Emmenagogue, lithotriptic	500 gm

	Samagh e dhak	<i>Butea frondosa</i> gum	Gum	Hot and Dry	Anti-inflammatory, analgesic, anthelmintic	250 gm
	Maghz Narjeel Khushk	<i>Lodoicea maldivica</i>	Androecium	Hot and Dry	Analgesic, nervine tonic	250 gm
	Salab Misri	<i>Orchis latifolia</i> Linn	Tuber	Hot and Moist	Increases the production of Semen	55 gm
	Darchini	<i>Cinnamomum zeylenicum</i>	Stem bark	Hot and Dry	Antiseptic, carminative, expectorant	55 gm
	Qaranfal	<i>Myrtus caryophyllus</i> Spreng	Flower bud	Hot and Dry	Rubefacient, antiseptic, carminative, appetizer	55 gm
	Heel Khurd	<i>Elettaria cardamomum</i>	Fruit	Hot and Dry	Carminative, digestive	55 gm
	Zanjabeel	<i>Zingiber officinale</i>	Dried rhizome	Hot and Dry	Stimulant, carminative, appetizer, aphrodisiac	55 gm
	Jauzbawa	<i>Myristica fragrans</i>	Androecium	Hot and Dry	General tonic	25 gm
	Gul e Supari	Flowers of <i>Arecha catechu</i>	Flower	Cold and Dry	Astringent	15 gm
	Gul e Pista	<i>Pistacia vera</i>	Flower	Hot and Moist	Expectorant, tonic	15 gm
	Post e Kachnal	<i>Bauhinia variegata</i> Blume	Stem bark		Astringent	10 gm
	Post e Mughilan	<i>Acacia arabica</i>	Stem bark	Cold and dry	Astringent, cicatrizing	10 gm
	Post Sankhaholi	Bark of <i>Evolvulus alsinoides</i> Linn.	Stem & Bark	Cold and Moist	Astringent, aphrodisiac, Anti-inflammatory, digestive, blood purifier, general tonic	10 gm
	Zafran	<i>Crocus sativus</i>	Style and stigma	Hot and Dry	Anti-inflammatory, antiseptic, detergent	50 gm

Table 1: Constituents of Majoon Supari Paak [17].

Method of preparation of “Majoon Supari Paak”

For preparing Majoon, Qiwan (base) of diverse consistencies (tar) is commonly made. It totally lies on the type of ingredient drugs that are used. The qiwan is mostly completed by the addition of Aab (water), Araq (distillate) or Aab e samar (fruit juices), etc in any of the bases of purified honey, sugar, candy or jaggery, etc. Thereafter, it is boiled on low heat till it attains the essential consistency. The bases are mostly decontaminated by adding Aab e lemu (lemon juice), Satt e lemu (extract of lemon), or Shib e yamani (Alum) before producing perfect qiwan. Then the constitu-

ents are mixed in qiwan to make Majoon. Qiwan for majoon is of two tar (consistency) [18-21]. Majoon Supari Paak is formulated in the same manner until proper qiwan (consistency) of two tar is achieved [22,23]. All the dry ingredients, after being crushed together and sifted through 80-mesh, are ended into a sufoof (powder). When the appropriate qiwan (consistency) forms, the powdered ingredients are slowly mixed to it during stirring till both blends properly. The freshly prepared “Majoon Supari Paak” is preserved in glass jar [18-21]. Photographs of some of the ingredients of Majoon Supari Paak are here with.

<i>Phoenix dactylifera</i>	<i>Areca catechu</i>	<i>Rubia cordifolia</i>	<i>Prunus dulcis Mill</i>
<i>Zingiber officinale</i>	<i>Elettaria cardamomum</i>	<i>Cinnamomum zeylenicum</i>	<i>Myrtus caryophyllus</i>
Gum of <i>Butea frondosa</i>	<i>Orchis latifolia</i> Linn	<i>Myristica fragrans</i>	<i>Crocus sativus</i>
<i>Tribulus terrestris</i> Linn.	<i>Evolvulus alsinoides</i> Linn.	Gum of <i>Acacia Arabica</i>	Bark of <i>Bauhiniavariegata</i>

Figure 1

The dose of “Majoon Supari Paak” and expiry

10 - 15g of Majoon Supari Paak with lukewarm water is generally advised. Renowned physicians of the Unani system specified that the effectiveness of “Majoon Supari Paak” remains for two years. Though, they have not revealed the temperature and state of packing where it can be kept for up to 2 years [22].

Actions and indications of usage of “Majoon Supari Paak”

Many Unani scholars, including Ibn Sina and Akbar Arzani advised using Majoon Supari Paak in a variety of conditions such as to improve sexual debility, premature ejaculation, leucorrhoea. It also improves the functions of liver, spleen and helps the uterus in the implantation of the foetus. It also helps in the delivery of a child [22].

Physicochemical standards of Majoon Supari Paak [24]

Appearance	Semi-solid
Colour	Brown
Smell	Pleasant
Taste	Sweet
Alcohol soluble matter	45.92 - 49.84%
Water soluble matter	48.72 - 51.20%
Successive extractives	
Pet. Ether	16.75 - 18.20%
Chloroform	0.19 - 0.23%
Ethanol	1.56 - 1.91%
pH of 1% aq soln	5.85 - 6.36
pH of 10% aq soln	5.25 - 5.96
Bulk density	1.33
Total ash	3.30 - 3.70%
Water soluble ash	0.24 - 0.45%
Acid insoluble ash	1.13 - 1.94%
Volatile oils	0.30% v/w
Alkaloids	0.27%
Tannins	0.75%
Resins	0.58%
Reducing sugars	52.3%
Crude fibres	2.6%
Total Nitrogen	0.42%
Sodium	18.3 mg%
Potassium	333.0 mg%
Calcium	32.3 mg%
Phosphates	1.7 mg%

Table 2

Evidence-based research

Table 3 signifies a summary of evidence-based research on a few

ingredients of “Majoon Supari Paak” showing anti-inflammatory, anti-fungal/anti-bacterial/anti-microbial and astringent activities.

Components of “Majoon Supari Paak”

S. No.	Ingredients	Anti-inflammatory	Anti-fungal/anti- bacterial/anti- microbial	Astringent
	Khurma Khushk	The ethyl acetate, methanolic, and water extracts of Ajwa dates inhibited the lipid peroxidation cyclo-oxygenase enzymes COX-1 and COX2 which shows their anti-inflammatory property [25].	The methanol and acetone extract of the <i>P. dactylifera</i> pits inhibited the growth of Gram-positive and Gram-negative bacteria [26,27].	A study on <i>Phoenix dactylifera</i> L. seed extract showed the presence of good number of tannins which are responsible for its astringent activity [28].
	Fufal	The ethanolic extract of <i>A. catechu</i> at a dose of 250, 500, and 1000 mg/kg p.o. produced dose-dependent and significant anti-inflammatory and analgesic activities [29].	The Areca nut extract inhibited 100% growth of single-cell fungus e.g. <i>Candida albicans</i> [30].	Tannins are one of the most distinctive constituents of <i>A. catechu</i> which inhibit lipid peroxidation, thus activating the inhibition of cyclooxygenase, responsible for the astringent activity [31].
	Majeeth	<i>R. cordifolia</i> (100-300 mg/kg, p. o.) showed significant (P < 0.05) reduction in the paw edema produced by the carrageenan and significant (P < 0.05) increased reaction time in the tail flick test [32].	<i>R. cordifolia</i> was significantly active against <i>B. subtilis</i> and <i>S. aureus</i> compared with streptomycin and penicillin G used as standards drugs [33].	
	Samagh e Arabi	The ethyl acetate fraction was found to contain yellow pigment “isoquercetin” which was found to have promising results with respect to acute and chronic anti-inflammatory studies [36].	The crude methanolic plant extract of <i>A. arabica</i> showed considerable anti-fungal activity against <i>Streptococcus cereviceae</i> [35].	A single-blind, RCT on 45 married women With the abnormal vaginal discharge was carried out in which decoction of Chal babool showed significant improvement against standard drug Tab. Metronidazole (400 mg twice daily) in the management of Bacterial Vaginosis (P = 1.000) statistically [34]. An RCT was conducted to evaluate the efficacy of <i>Acacia arabica</i> powder in Uterine Prolapse cases. The drug showed significant improvement due to the presence of tannins [37].

	Samagh e dhak	The methanolic extract of leaf of <i>B. monosperma</i> at the dose level of 400 mg/kg body weight exhibit significant ($P < 0.05$) anti-inflammatory activity against carragenan induced paw edema in rats [38]	The ethanolic extract of <i>B. monosperma</i> exhibits anti-bacterial action against <i>B. subtilis</i> , <i>S. typhimurium</i> , <i>S. aureus</i> , <i>P. vulgaris</i> . and <i>E. coli</i> [39]	
	Kachnal	The extract of <i>Bauhinia variegata</i> at a dose of 400 mg/kg, showed significant inhibition of rat paw Oedema [40].	The chloroform and methanolic fractions of <i>B. variegata</i> were found to be active against <i>Staphylococcus aureus</i> , <i>Klebsiella pneumoniae</i> , <i>Bacillus subtilis</i> and showed high inhibitory zone of (14 nm) at the concentration of 22 mg/ml [41].	
	Post Sankhaholi	The ethanolic, chloroform and ethyl acetate extracts of <i>Evolvulus alsinoides</i> showed anti-inflammatory activity with graded dose response on formalin induced paw odema in rats [42].	In a study carried out on methanolic extract <i>Evolvulus alsinoides</i> showed a clear antibacterial effect against Methicillin sensitive <i>Staphylococcus aureus</i> [43].	

Table 3

Conclusion

Unani physicians were well aware of the gynaecological problems related to women. Therefore, they formulated certain Unani preparations such as “Majoon Supari Paak” to prevent and manage various diseases. Constituents of “Majoon Supari Paak” have proved their effectiveness against uterine problems, which are not only found in married women but also in teenagers and young women, besides its anti-inflammatory and astringent potential. It’s very unfortunate that Unani system needs more attention and further logical research so that it would be explored for its benefits in the management of uterine problems which upgrade humanity.

Authors’ Contribution

Fouzia Bashir developed the original idea of writing “Majoon Supari Paak” in management of Leucorrhoea as a manuscript. Introduction, the Unani concept of Leucorrhoea, review of “Majoon Supari Paak” were written by Fouzia Bashir, Shah Alam, Jamal Akhtar and Nighat Anjum. The modern concept of Leucorrhoea was written by Fouzia Bashir. Scientific study on “Majoon Supari

Paak” constituents was written by Fouzia Bashir and Shah Alam. All of the authors did the final review of the manuscript.

Conflict of Interests

The authors declare no conflict of interest.

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