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Review Article

## Safūf-i Aslussūs: A time-tested polyherbal formulation for the management of Premature Ejaculation- A comprehensive review

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### Abstract



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Premature Ejaculation (PE) is the most prevalent male sexual complaint worldwide. The ability to control the timing of ejaculation is very important to get pleasure and to maintain the couple's sexual health. PE is believed to have a multifactorial etiology which mainly includes psychogenic and biogenic factors. Currently available conventional drugs are based on mere assumptions and their use in PE is considered off-label as they have not been approved by the regulatory bodies. On the other hand, Unani System of Medicine has a holistic approach to the prevention and treatment of diseases and provides a line of treatment for PE which is mainly focused on the internal and external use of specific drugs for the restoration of lost powers, elimination of morbid humor and strengthening of organs, muscles, and nerves. In classical Unani literature, PE/*Sur'at-i-Inzāl* are described in detail under the heading of *Amrāz-i-Bāh*. In the series of drug therapy a polyherbal Unani formulation, *Safūf-i Aslussūs* mentioned in different Unani Pharmacopoeias for the management of PE, and Spermatorrhea is widely prescribed and recommended for a long time by Unani physicians and it is a time-tested drug. This manuscript is an attempt to summarize scientific studies in support of the claim made by Unani physicians regarding *Safūf-i Aslussūs*.

**Keywords:** *Safūf-i Aslussūs*, *Sur'at-i-Inzāl*, Premature ejaculation, Unani System of Medicine

## INTRODUCTION

The sexual act is an imperative biological need and an important component of quality of life. It is a kind of intimate expression of love and it cannot be avoided for the propagation of the human race. Human sexuality is believed to be a multidimensional phenomenon that possesses biological, psychological, behavioral, clinical, moral, and cultural aspects<sup>1</sup>. One of the defining aspects of human sexuality is to get pleasure, so men need to control ejaculation to enhance their own and their partner's joy fulfillment. In the evolution of human sexuality, one of the most important features is the ability to control the timing of ejaculation to get pleasure and maintain the couple's sexual health. Premature Ejaculation (PE) is the most prevalent male sexual complaint<sup>2</sup>. Numerous epidemiological studies suggest that PE has an estimated prevalence of approximately 20% to 30% across all reproductive age groups of the global male population<sup>3,4,5</sup>. Male sexual dysfunction leads to psychological stress and loss of self-esteem, which results in significant adverse effects on the quality of life, of both the patient and the partner. International Society of Sexual Medicine defines PE as "a male sexual dysfunction characterized by ejaculation that always or nearly

always occurs before or within one minute of vaginal penetration, and the inability to delay ejaculation on all or nearly all vaginal penetrations, and negative personal consequences, such as distress, bother, frustration and/or the avoidance of sexual intimacy".<sup>6</sup> PE can be classified as either a primary/lifelong condition (present since the first sexual experience) or a secondary/ acquired condition that develops later after an interval of normal sexual function<sup>7</sup>.

Currently available conventional therapies for PE are based on mere assumptions and it includes selective serotonin reuptake inhibitors (SSRIs), tricyclic antidepressants (TCAs), and topical anesthetic agents. However, these medications were usually prescribed to treat other medical disorders like depression or erectile dysfunction, and their use in PE is considered off-label as they have not been approved by the regulatory bodies for the treatment of PE<sup>8</sup>. It results in adverse side effects associated with their use, such as decreased libido, impotence, erectile dysfunction, reduced ability to express feelings, dizziness, fatigue, headache, etc.<sup>9</sup> Hence there is an essential need to search for alternate treatment options which have a high rate of efficacy and should be devoid of side effects. A holistic

approach incorporating psychotherapy and pharmacotherapy is considered the best approach for the management of PE.

## MATERIAL AND METHODS

The literature on Premature ejaculation and *Safūf-i Aslussūs* was searched from the Urdu translation of the classical books such as Zakhira khwarzam shahi of Ismail Jurjani, Al-mukhtar fit Tib of Ibn Hubl, Jame Al-Aksir; Qarabadeen Qadri, Qarabadeen Majeedi, Ilajul Amraz and Bayaz Kabeer, Al Jami ul Mufradat Al Advia Wal Aghzia of Ibn al Baitar, Muheet Azam of Hakeem Mohammad Azam Khan, Khazainul Advia of Najmul Ghani, etc.,. Published works available on PubMed, Science Direct, and Google Scholar were referred to collect all the available information regarding the title using key word 'Safuf Aslussus', 'Premature ejaculation', 'Surat-i-inzal' between 1996 AD to 2023 AD. Standard Unani Medical Terminology published by Central Council for Research in Unani Medicine in collaboration with the World Health Organization was used to write the appropriate Unani terminologies.

## RESULT

### Factors responsible for Premature Ejaculation

The pathophysiology of PE is not well understood and it is believed to have a multifactorial etiology that includes "psychogenic" and "biogenic" factors. Psychogenic causes include anxiety, an unpleasant early sexual experience, infrequent sexual intercourse, and poor ejaculatory control techniques. Biogenic causes include penile hypersensitivity, hyper-excitability ejaculatory reflex, hyper-arousability, endocrinopathy, genetic predisposition, and 5-hydroxy tryptamine (5-HT) receptor dysfunction<sup>10</sup>. 5-HT is the major neurotransmitter involved in the process of ejaculation and inhibits the ejaculation reflex. Thus, a low level of 5-HT or the 5-HT receptor hyposensitivity leads to PE.

### Unani System of Medicine (USM) and Premature Ejaculation

USM has a holistic approach to the prevention and treatment of diseases that covers the physical, mental, and spiritual dimensions of an individual's health. In classical Unani texts, *Sur'at-i-Inzāl* are dealt with in detail under the heading of *Amrāz-i-Bāh* (sexual disorder). *Sur'at-i-Inzāl*, an Arabic term is derived from two words; *Sur'at* means hastiness, and *Inzāl* means the emission of semen, hence the term *Sur'at-i-Inzāl* stands for premature ejaculation. USM widely explains the management of sexual disorders including PE. Numerous pathological causes of PE are mentioned viz., hypersensitivity (*Zakāwat-i-Hiss*), debility in retentive power (*Du'f-i-Quwwat-i-Masika*), the low viscosity of semen (*Riqqat-i-Manī*), the acuteness of semen (*Hiddat-i-Manī*), excessive semen volume (*Kathrat-i-Manī*), debility of vital organs (*Du'f-i-A'dā' Ra'isa*), dilation of penile vessels and ducts including urethra (*Ittisā'-i-majārī-i-Qazīb*), etc. Other causes may be hot climate, working in hot conditions, inflammations of seminal vessels, etc.<sup>11, 12, 13</sup>.

### Management of Premature Ejaculation

The goal of management of PE is to delay ejaculation by achieving voluntary control. The line of treatment/*Usool-i-Ilāj* for PE consists of internal and external use of specific drugs for restoration of lost powers, correction of deranged temperament, elimination of morbid humor, and strengthening of organs, muscles, and nerves<sup>12, 13</sup>. There are several single and compound formulations mentioned in the literature for the management of PE. Some of them are *Afjun* (*Papaver somniferum* L.), *Ajwain Khurasani* (*Hyoscyamus niger* L.), *Isapghol* (*Plantago ovata* Forssk.), *Kafūr* (*Cinnamomum camphora* L.), *Kishneez* (*Coriandrum sativum* L.), *Tukhm Kāhū* (*Lactuca sativa* L.), *Tukhm Dhatura* (seeds of *Datura stramonium* L.), *Roghan Khar Khasak* (*Tribulus terrestris* oil), *Sandal safaid* (*Santalum album* L.), etc. In addition to the above-mentioned single drugs, there are some compound formulations used effectively in the treatment of PE like *Majun Mughalliz* (*Majun*: a semi-solid dosage form of the compound drug), *Majun Piyaz*, *Majun Jalali*, *Majun Aspand*, *Majun Mumsik*, *Habb Mumsik*, *Qurş Jiryān*, *Sharbat Khashkhash*, *Safūf Aslussūs*, *Safūf Beejband*, *Safūf Asghand*, *Safūf Sailan*, *Safūf Maghz Kanwal Gatta*, and *Safūf Thalab*. *Safūf-i Aslussūs*, is one of the classical polyherbal Unani formulation that possesses beneficial effects for PE and widely prescribed for a long time by Unani physicians<sup>11, 12, 13</sup>.

### Safuf (Powder)

*Safūf* is the powdered form of medicinal preparations made by powdering and mixing crude ingredients of formulations. Other names for *Safūf* are *Phanki* and *Churan* but *Churan* is the specific term for the powder which is used for the digestion of foods. The powder is the first polyherbal dosage form used in the history of medicine. Aristotle has been credited for the discovery of this dosage form<sup>14, 15</sup>. Because of the greater specific surface area of powders, this dosage form disperses and dissolves more readily than compacted dosage forms<sup>16</sup>.

### Safūf-i Aslussūs

*Safūf-i Aslussūs* is a polyherbal powder preparation mentioned in different Unani Pharmacopoeias (*Qarābādīn*) for the treatment of PE and spermatorrhoea. In *Qarābādīn-i-Majīdī*<sup>14</sup> and *Qarābādīn-i-Ḥamdard*,<sup>17</sup> *Safūf-i Aslussūs* is mentioned as comprising six ingredients described in Table 1. In *Al-Qarābādīn*<sup>18</sup> and *Ilaj-ul-Amrāz*<sup>19</sup> the same formulation (in the same proportion as in *Qarābādīn-i-Majīdī* and *Qarābādīn-i-Ḥamdard*) is mentioned without any specific name of formulation simply written as *Safūf-i deegar* (other powder) for the treatment of spermatorrhoea and PE. In *Al-Qarābādīn* another formulation with the title of *Safūf-i Aslussūs* comprising three ingredients is mentioned for the treatment of respiratory disorders like asthma, cough, etc. In *Bayāz-i-Kabīr*,<sup>20</sup> *Safūf-i Aslussūs* for the treatment of PE is mentioned with only five ingredients as described in Table 2. This formulation is devoid of *Tukhm Kāhū*. For the management of spermatorrhoea and PE, a similar formulation but devoid of *Tukhm Suddāb* as described in Table 1 is mentioned in *Qarābādīn-i-Qādri*<sup>21</sup>.

**Table 1: Composition of *Safūf-i Aslussūs* classified in various Unani Pharmacopoeias** <sup>14,17,19,20,21</sup>

S. No	Botanical Name	<i>Qarābādīn-i-Majīdī, Al-Qarābādīn, Ilaj-ul-Amrāz &amp; Qarābādīn-i-Ḥamdard</i>		<i>Bayāz-i-Kabīr</i>		<i>Qarābādīn-i-Qādrī</i>		<i>Al-Qarābādīn</i>	
1	<i>Glycyrrhiza glabra</i> L.	<i>Aslussūs</i>	50 g	<i>Aslussūs</i>	24 g	<i>Aslussūs</i>	7 g	<i>Aslussūs</i>	2 Parts
2	<i>Rosa damascena</i> Herrm.	<i>Gule Surkh</i>	130 g	<i>Gule Surkh</i>	24 g	<i>Gule Surkh</i>	17.5 g	-	-
3	<i>Vitex negundo</i> L.	<i>Tukhm Sambhālu</i>	130 g	<i>Tukhm Sambhālu</i>	24 g	<i>Tukhm Sambhālu</i>	17.5 g	-	-
4	<i>Ruta graveolens</i> L.	<i>Tukhm Suddāb</i>	130 g	<i>Tukhm Suddāb</i>	24 g	-	-	-	-
5	<i>Punica granatum</i> L.	<i>Gule Anār</i>	100 g	<i>Gulnār Fārsi</i>	24 g	<i>Gulnār</i>	14 g	-	-
6	<i>Lactuca sativa</i> L.	<i>Tukhm Kāhū</i>	75 g	-	-	<i>Tukhm Kāhū</i>	10.5 g	-	-
7	<i>Foeniculum vulgare</i> Mill.	-	-	-	-	-	-	<i>Badiyān</i>	1 Part
8	Sugar	-	-	-	-	-	-	<i>Qand Safed</i>	3 Parts
Therapeutic Uses		PE		PE		PE		Respiratory Disorder	

### Preparation method of *Safūf-i Aslussūs*

According to Unani pharmacopoeias, Collect the ingredients of pharmacopoeial quality; dry under shade, remove any physical impurities or foreign matter present in them, and take in the prescribed amount. Grind the main ingredient *Aslussūs*, after the process of peeling off the external root bark (*Aslussūs Muqasshar*). Prepare the powder of the remaining ingredient separately. Mix the powder of ingredients to obtain a uniform mixture then sieve through 80 mesh size and store in an airtight glass container<sup>14, 15</sup>.

*Safūf-i Aslussūs* have been reported for diverse actions, therapeutic uses, doses, and modes of administration as in

Unani pharmacopoeias which have been used for a long span for premature ejaculation (*Sur'at-i-Inzāl*), spermatorrhoea (*Jarayān-i-Manī*). The dose of the formulation ranges from 5 - 12g as a powder with suitable *Badraqa* (vehicle) like lukewarm water or milk<sup>14,17-21</sup>. The details of *Safūf-i Aslussūs* is given in Table 2.

The detailed information about the ingredients of *Safūf-i Aslussūs* and its proven pharmacological studies are summarised in Table 3, which mainly reflects the efficacy of its actions towards various diseases.

**Table 2: Details of *Safūf-i Aslussūs* mentioned in different Unani pharmacopoeias**

Pharmacopoeias	Actions	Therapeutic Uses	Dose	Mode of Administration
<i>Qarābādīn-i-Majīdī</i> <sup>14</sup>	Semen retentive ( <i>Mumsik-i-Manī</i> ), Semen desiccator ( <i>Mujaffif-i-Manī</i> ) <i>Qāṭi' Manī</i> (Anaphrodisiac)	Premature ejaculation ( <i>Sur'at-i-Inzāl</i> ), Spermatorrhoea ( <i>Jarayān-i-Manī</i> ), and Hypersensitivity ( <i>Zakāwat-i-Hiss</i> )	5 g	Orally with 250 ml lukewarm milk or water in the morning
<i>Al-Qarābādīn</i> <sup>18</sup>		Spermatorrhoea	10.5 g	Orally with 250 ml lukewarm milk or water in a divided dose
<i>Ilaj-ul-Amrāz</i> <sup>19</sup>		Spermatorrhoea	10.5 g	Orally with <i>Sharbat-i-Bazoori</i> in a divided dose
<i>Qarābādīn-i-Ḥamdard</i> <sup>17</sup>		Premature ejaculation, Spermatorrhoea, and Hypersensitivity	5 g	Orally with 250 ml lukewarm milk or water in the morning
<i>Bayāz-i-Kabīr</i> <sup>20</sup>	Semen desiccator Anaphrodisiac	Premature ejaculation, Spermatorrhoea	12 g	Orally with <i>Sharbat-i-Bazoori</i> in a divided dose
<i>Qarābādīn-i-Qādrī</i> <sup>21</sup>	Semen Retentive, Semen desiccator, Anaphrodisiac	Premature ejaculation	10.5 g	Orally with 250 ml lukewarm milk or water in a divided dose

<i>Al-Qarābādīn</i> <sup>18</sup>	Expectorant ( <i>Mukhrij-i-Balgham</i> ), Demulcent ( <i>Mulaṭṭif</i> ), Deobstruent ( <i>Mufattiḥ</i> )	Asthma ( <i>Dhīq al-Nafas</i> ), Cough ( <i>Su'āl</i> ), Coryza ( <i>Zukām</i> ), and Catarrh ( <i>Nazla</i> )	9 g	Orally with 250 ml water in a divided dose
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Table 3: Properties of ingredients of *Safuf-i Aslussus* in Unani medicine and their scientific studies

Ingredients	Vernacular	<i>Afa'al</i> (Pharmacological actions)	<i>Dawai Iste'māl</i> (Therapeutic Uses)	Pharmacological Studies
<i>Aslussūs</i>	Arabic- <i>Aslussūs</i> English- Sweet wood Liquorice Hindi- Mulethi Persian- Bekh-e-Mahak Sanskrit- Yashtimadhu Tamil- Atimadhuram Telugu- Yashtimadhukam	<i>Mukhrij-i-Balgham</i> (Expectorant), <sup>22, 23, 26-29</sup> <i>Mulayyin-i-Am'ā'</i> (Laxative), <sup>22,25,27-29</sup> <i>Muqawwī-i-A'sāb</i> (Nervine tonic), <sup>22, 25, 26, 28, 29</sup> <i>Mundij-i-Akhlat-i-Ghalizah</i> (Concoctive of viscous humour), <sup>25, 26, 28, 29</sup> <i>Muqawwī-i-Bāh</i> (Aphrodisiac), <sup>23, 29</sup> <i>Dāf'-i-Khashunat-i-Halaq</i> (Removes throat irritation), <sup>22, 25, 26</sup> <i>Musakkin-i-'Atash</i> (Relieves thirst), <sup>23, 25, 26, 28, 29</sup> <i>Kāsir-i-Riyāh</i> (Carminative), <sup>25,26,28,29</sup> <i>Mudirr-i-Hayḍ</i> (Emmenagogue), <sup>22, 26-29</sup> <i>Mudirr-i-Bawl</i> (Diuretic), <sup>22,23,26-29</sup> <i>Mulaṭṭif</i> (Demulcent), <sup>22,23,27</sup> <i>Jālī</i> (Detergent) <sup>28,29</sup>	<i>Su'āl</i> (Cough), <sup>22-24, 26-29</sup> <i>Khashunat-i-Halaq</i> (Throat irritation), <sup>22-24, 28,29</sup> <i>Qurūh-i-Hudumī</i> (Peptic ulcer), <sup>22, 24-29</sup> <i>Buḥḥa al-Ṣawt</i> (Hoarseness of voice) <sup>22, 25, 26, 28, 29</sup> , <i>Dhīq al-Nafas</i> (Bronchial asthma), <sup>22, 24-29</sup> <i>Ḥurqa al-Bawl</i> (Burning micturition), <sup>25-29</sup> <i>Waja' al-Mafāṣil</i> (Polyarthritis), <sup>24, 27</sup> <i>Amrād-i-Kabid</i> (Liver diseases), <sup>22, 25-28</sup> <i>Ṣudā'</i> (Headache), <sup>23, 25, 28</sup> <i>Shaqīqa</i> (Migraine), <sup>25, 26</sup> <i>Waja' al-A'sāb</i> (Neuralgia), <sup>25, 28</sup> <i>Sozāk</i> (Gonorrhoea), <sup>25, 28, 29</sup> <i>Zafara</i> (Pterygium), <sup>25, 28, 29</sup> <i>Araq Muntin</i> (Bromhidrosis), <sup>25, 26</sup> <i>Intithār al-Sha'r</i> (Alopecia) <sup>26</sup>	Antitussive, <sup>31</sup> Anti-bacterial, <sup>32,33,34</sup> Antiviral, <sup>35</sup> Memory enhancing, <sup>36</sup> Antidepressants, <sup>37</sup> Aphrodisiac, <sup>38</sup> Estrogenic, <sup>39</sup> Antimalarial, <sup>40</sup> Anticonvulsant, <sup>41</sup> Probiotics, <sup>42</sup> Immunomodulatory, <sup>43</sup> Anti-ulcer, <sup>44</sup> Hepatoprotective, <sup>45</sup> Anticancer, <sup>46</sup> Cardioprotective, <sup>47</sup> Anti-atherosclerotic, <sup>48</sup> Antioxidant, <sup>49</sup> Hair growth stimulating, <sup>50</sup> Anti-fungal, <sup>51</sup> Anxiolytic, <sup>52</sup>
<i>Tukhm Suddāb</i>	Arabic- Sadab Bangla- Titli English- Garden Rue Hindi, Persian and Sanskrit- Sadapaha Tamil- Arvada Telugu- Sadapaka	<i>Mujaffif</i> (Desiccant), <sup>25,28</sup> <i>Qābiḍ</i> (Astringent), <sup>25,28</sup> <i>Mujaffif-i-Manī</i> (Semen desiccator), <sup>25,26,28-30</sup> <i>Qāṭi'-Bāh</i> (Anaphrodisiac), <sup>22,23,25,26,30</sup> <i>Hādīm</i> (Digestive), <sup>23,25,26,29</sup> <i>Mudirr-i-Hayḍ</i> , <sup>22,23,25-30</sup> <i>Mudirr-i-Bawl</i> , <sup>22,23,24,26-30</sup> <i>Kāsir-i-Riyāh</i> , <sup>25,26,28,30</sup> <i>Muḥallil</i> , <sup>24,25,28,29</sup> <i>Mushtahī</i> (Appetizer), <sup>25,26,28,29</sup>	<i>Qūlanj</i> (Colic), <sup>22,23,25-27</sup> <i>Nafkh al-Mi'da</i> (Flatulence), <sup>22,23,25-30</sup> <i>Tukhma</i> (Indigestion), <sup>23</sup> <i>Iḥtibās al-Ṭamth</i> (Amenorrhoea), <sup>22-24,27</sup> <i>Irq al-Nasā</i> (Sciatica), <sup>25-30</sup> <i>Niqris</i> (Gout), <sup>25,26,28,29</sup> <i>Waja' al-Mafāṣil</i> (Polyarthritis), <sup>23-30</sup> <i>Jarayān-i-Manī</i> (Spermatorrhoea), <sup>25,30</sup> <i>Sur'at-i-Inzāl</i> (Premature ejaculation), <sup>25,30</sup> <i>Istisqā'</i> (Edema), <sup>25,26,28-30</sup> <i>Ra'sha</i> (Tremor), <sup>25,26,30</sup> <i>Ṣar'</i> (Epilepsy), <sup>23,25</sup> <i>Fālij</i> (Paralysis), <sup>22,23,25,26,30</sup> <i>Intithār al-Sha'r</i> (Alopecia), <sup>25,30</sup>	Anti-inflammatory, <sup>53,54</sup> Anti-oxidant, <sup>55</sup> Anti-tumour, <sup>56</sup> Anti-androgenic, <sup>57</sup> Anti-fertility, <sup>58</sup> Anti-arrhythmic, <sup>59</sup> Antimicrobial, <sup>60</sup> Antihyperglycemic, <sup>61</sup> Antihyperlipidemic, <sup>61</sup> Antinociceptive, Antipyretic, <sup>62</sup> Contraceptive <sup>63</sup>
<i>Tukhm Sambhālu</i>	English- Five leaved chaste tree Hindi- Nirgandi, Sambhalu Persian- Panjkisht Sanskrit- Nirgundi Tamil- Nirkkundi Telugu- Sindhuvaruma	<i>Qābiḍ</i> , <sup>22,23,27</sup> <i>Mulaṭṭif</i> , <sup>28,29,30</sup> <i>Mujaffif-i-Manī</i> , <sup>25,26,28-30</sup> <i>Muḥallil</i> , <sup>26-29</sup> <i>Mufattiḥ-Sudad</i> , <sup>22,28,29</sup> <i>Mudirr-i-Hayḍ</i> , <sup>22,26,28,30</sup> <i>Mudirr-i-Bawl</i> , <sup>22,24,26,28</sup> <i>Mudirr-i-Laban</i> , <sup>28-30</sup> <i>Mujaffif</i> , <sup>28,30</sup> <i>Jālī</i> , <sup>28-30</sup> <i>Musakkin-i-Alam</i> (Analgesic), <sup>26-29</sup> <i>Dāf'-i-Ta'affun</i> (Antiseptic), <sup>28,29</sup> <i>Qāṭi'-Bāh</i> <sup>28-30</sup>	<i>Waja' al-Mafāṣil</i> (Polyarthritis), <sup>22-24,26,27</sup> <i>Nafkh al-Mi'da</i> , <sup>25,28-30</sup> <i>Su'āl</i> , <sup>23,25,26</sup> <i>Jarayān-i-Manī</i> , <sup>25-30</sup> <i>Dīdān-i-Am'ā'</i> (Intestinal Worms), <sup>22,23,25-30</sup> <i>Indīmal</i> (Wound healing), <sup>22-30</sup> <i>Waja' al-Halaq</i> (Throat pain), <sup>28,29</sup> <i>Qulā'</i> (Stomatitis), <sup>28</sup> <i>Warm al-Raḥim</i> (Metritis and Endometritis), <sup>22,28-30</sup> <i>Waram al-Khuṣyatayn</i> (Orchitis), <sup>22,28-30</sup> <i>Iltihāb al-shu'ab</i> (Bronchitis), <sup>28</sup> <i>Niqris</i> (Gout), <sup>26,29</sup> <i>Ṣudā'</i> (Headache), <sup>22-26, 29,30</sup>	Anti-inflammatory, <sup>64</sup> Analgesic, <sup>64</sup> Anti-oxidant, <sup>65</sup> Enzyme-inhibitory, <sup>66</sup> Anti-cancer, <sup>67</sup> Anti-bacterial, <sup>68,69</sup> Anti-filarial, <sup>70</sup> Anti-fungal, <sup>71</sup> Anxiolytic, <sup>72</sup> Laxative, <sup>73</sup> Hepatoprotective, <sup>74</sup> Antitussive, <sup>75</sup> Estrogenic, <sup>76</sup> Immunomodulatory <sup>77</sup>



<i>Tukhm Kāhū</i>	Arabic- Khas English- Garden Lettuce Hindi- Kahu, Salad Persian- Kahu Tamil- Salattu Telugu- Kavu	<i>Musakkin</i> (Sedative), <sup>23,26,28,30</sup> <i>Munawwim</i> (Hypnotic), <sup>23,26,28,30</sup> <i>Mubarrid</i> (Refrigerant), <sup>28</sup> <i>Mujaffif-i-Manī</i> , <sup>26,28,30</sup> <i>Qāṭi'-Bāh</i> , <sup>26,30</sup> <i>Muqawwī-i-Mi'da</i> (Stomachic), <sup>23,25,28,30</sup> <i>Mudirr-i-Bawl</i> , <sup>23,25,26,28,30</sup> <i>Mudirr-i-Hayḍ</i> , <sup>25,26</sup> <i>Muṣaffi-i-Dam</i> (Blood purifier), <sup>23,25,26,28</sup>	<i>Sahr</i> (Insomnia), <sup>24,26,28,30</sup> <i>Sudā'</i> , <sup>23,28,30</sup> <i>Dhīq al-Nafas</i> (Bronchial Asthma), <sup>23,24</sup> <i>Khafaqān</i> (Palpitation), <sup>24,25</sup> <i>Jarayān-i-Manī</i> , <sup>26,28,30</sup> <i>Su'āl</i> , <sup>24,28</sup> <i>Taqṭir al-Bawl</i> (Dribbling of urine), <sup>24,26-30</sup> <i>Ḥurqa al-Bawl</i> (Burning micturition), <sup>23</sup> <i>Yaraqān</i> (Jaundice), <sup>24,28-30</sup> <i>Qulā'</i> (Stomatitis), <sup>24,26</sup> <i>Sur'at-i-Inzāl</i> , <sup>24,26</sup> <i>Qurūh al-Qarniyya</i> (Corneal Ulcer), <sup>24,26,30</sup>	Analgesic, <sup>78,79</sup> Anti-inflammatory, <sup>78,79</sup> Anti-depressant, <sup>79</sup> Anticoagulant, <sup>79</sup> Sedative and hypnotic, <sup>80</sup> Anxiolytic, <sup>81</sup> Antioxidant, <sup>82,83</sup> Anti-bacterial, <sup>83</sup> Antiviral, <sup>83</sup> Hypolipidemic, <sup>84</sup> Immunomodulatory, <sup>85</sup> Neuroprotective, <sup>86</sup> Diuretic, <sup>87</sup> Anticancer, <sup>88</sup>
<i>Gule Anār</i>	Arabic- Rumman English- Pomegranate Hindi- Anar Persian- Gulnar Sanskrit- Dadimāh Tamil- Madalai, Mathulai Telugu- Dadimba	<i>Qābiḍ</i> , <sup>22,24,25,27-30</sup> <i>Mujaffif</i> , <sup>29</sup> <i>Dāf'-i-Isāhl</i> (Anti diarrhoeal), <sup>24</sup> <i>Hābis-i-Dam</i> (Hemostyptic), <sup>22,23</sup> <i>Muqawwī-i-Jigar</i> (Hepatotoxic), <sup>25</sup> <i>Dāf'-i-Isāhl</i> <i>Ṣafrāwī wa Damwī</i> (Anti bilious and bloody diarrhoea), <sup>25</sup> <i>Mudammil</i> (Cicatrizant), <sup>25,30</sup> <i>Qatīl-i-Dīdān-i-Am'ā'</i> , <sup>22,23,27</sup> <i>Muqawwī-i-Mi'da</i> , <sup>22,25,27</sup> <i>Mubarrid</i> (Refrigerant), <sup>22,27</sup> <i>Jāli</i> (Detergent), <sup>25</sup>	<i>Isāhl</i> (Diarrhoea), <sup>22-27,30</sup> <i>Zahīr</i> (Dysentery), <sup>22,23,27</sup> <i>Jarayān al-Dam</i> , <sup>26</sup> <i>Jarayān-i-Manī</i> , <sup>24</sup> <i>Hikka</i> (Pruritis), <sup>25</sup> <i>Saylan al-Rahim</i> (Leucorrhoea), <sup>22-25,28-30</sup> <i>Kathrat-i-Hayḍ</i> (Polymenorrhoea), <sup>28,29</sup> <i>Litha Dāmīya</i> (Bleeding gums), <sup>24-30</sup> <i>Waram al-Litha</i> (Gingivitis), <sup>24-30</sup> <i>Naft al-Dam</i> , <sup>22,24,25,28-30</sup> <i>Ru'āf</i> (Epistaxis), <sup>22-24,26</sup> <i>Khafaqān</i> , <sup>25,27,30</sup>	Anti-inflammatory, <sup>89</sup> Antimicrobial, <sup>90</sup> Hepatoprotective, <sup>91</sup> Anti-Diabetic, <sup>92</sup> Antioxidant, <sup>92</sup> Antifungal, <sup>93</sup> Antidiarrheal, <sup>94</sup> Anti-cancer, <sup>95</sup> Cardioprotective, <sup>96</sup> Wound healing, <sup>97</sup> Antiplatelet and antingivitic, <sup>98</sup> Immunomodulatory, <sup>99</sup> Antihistaminic, <sup>100</sup>
<i>Gule Surkh</i>	Arabic- Ward English- Damask rose Hindi- Gulab Persian- Gul e Surkh Sanskrit- Shatapatrī Tamil- Golappu Telugu- Rajapuva	<i>Qābiḍ</i> , <sup>22-24,26,27,29,30</sup> <i>Mulayyin</i> (Laxative), <sup>22-28,30</sup> <i>Mulaṭṭif</i> , <sup>25-27</sup> <i>Muqawwī-i-A'ḍā' Ra'īsa</i> (Tonic for vital organs), <sup>23,25,29</sup> <i>Mufarriḥ</i> (Exhilarant), <sup>25,26,28,29</sup> <i>Muqawwī-i-Qalb</i> (Cardiac Tonic), <sup>22-27</sup> <i>Qāṭi'-Bāh</i> , <sup>26,30</sup> <i>Mujaffif</i> , <sup>28</sup> <i>Musakkin-i-Alam</i> (Analgesic), <sup>25,28-30</sup> <i>Hābis-i-Dam</i> , <sup>25,26</sup> <i>Muqawwī-i-Mi'da</i> (Stomachic), <sup>25,26,28-30</sup>	<i>Ṣudā'</i> , <sup>25,26,28-30</sup> <i>Waja' al-Mi'da</i> (Gastralgia), <sup>25,28</sup> <i>Qarḥa</i> (Ulcers), <sup>26</sup> <i>Naft al-Dam</i> , <sup>25,26,28-30</sup> <i>Isāhl</i> , <sup>28</sup> <i>Sudad-al-Kabid</i> (Intrahepatic obstruction), <sup>30</sup> <i>Amrāq-i-Halaq</i> (Disease of the throat), <sup>26,27,30</sup> <i>Khafaqān</i> , <sup>24,25,28,29</sup> <i>Qulā'</i> , <sup>23,26,28-30</sup> <i>Khashunat-i Halaq</i> (Sore throat), <sup>22,26,30</sup> <i>Āshob-i-Chashm</i> (Conjunctivitis), <sup>26,29,30</sup> <i>Waja' al-Udhun</i> (Otagia), <sup>28,29</sup> <i>Waja' al-Asnān</i> (Tooth ache), <sup>28,29</sup> <i>'Araq Muntin</i> (Bromhidrosis), <sup>26,28-30</sup>	Antibacterial, <sup>101</sup> Antioxidant, <sup>102</sup> Anticonvulsant, <sup>103</sup> Neuroprotective, <sup>103</sup> Analgesic, <sup>104</sup> Anti-inflammatory, <sup>104</sup> Antidepressant, <sup>105</sup> Anti-diabetic, <sup>106</sup> Immunomodulatory, <sup>107</sup> Antimalarial, <sup>108</sup> Antihypertensive, <sup>109</sup> Antispasmodic, <sup>110</sup> Antitussive, <sup>111</sup> Laxative, <sup>112</sup> Cardiac stimulant, <sup>113</sup>

## DISCUSSION

Unani System of Medicine has a rich legacy of efficacious drugs in sexual disorders, which is supported by many preclinical and clinical types of research on scientific parameters. Mostly the drugs have not reported any adverse effects in preclinical and clinical studies. Therefore, Unani medicine can offer the necessary, affordable, and effective management of a wide range of sexual disorders. USM has developed definite practical principles to prepare polyherbal formulations containing multiple ingredients affecting synergistically such as acting on different targets, affecting bioavailability, reducing adverse effects and altering drug metabolism, etc.

The concept of premature ejaculation as a disease was first described by *Ismail Jurjani* in his book *Zakhira Khuwarzām Shahi* and mentioned the four causes of PE as excessive semen volume (*Kathrat-i-Manī*), the low viscosity of semen (*Riqqat-i-Manī*), debility in retentive power (*Ḍu'f-i-Quwwat-i-Masika*) and acuteness of semen (*Ḥiddat-i-Manī*)<sup>114</sup>. According to *Ibn Hubal*, the cause of acquired or secondary PE is *Sū'-i-Mizāj Hār* (hot morbid temperament) of testicles, kidneys, or whole body. He has mentioned that sometimes the cause of PE is a predominance of coldness (*burūdat*) and wetness (*ruṭūbat*)

which leads to the weakening of reproductive organs. He also mentioned that lifelong or primary PE has no cure<sup>115</sup>. Unani Scholars of the recent era like *Hakim Akbar Arzani*, *Hakim Azam Khan*, and others encouraged the view of *Ibn Hubal* and *Ismail Jurjani* and stated a few other causes which include hypersensitivity (*Zakāwat-i-Hiss*), dilation of penile vessels and ducts including urethra (*Ittisā'-i-Majārī-i-Qazīb*), anxiety, excessive sexual thoughts, the guilt associated with masturbation, abnormalities in prepuce, etc.<sup>11,13</sup>

As there are many factors involved in the etiology of PE, consequently the management of PE is also multimodal. Unani scholars suggested different treatment modalities like *Ilāj Bil Ghizā* (diet-o-therapy), *Ilāj Bil Tadbīr* (regimental therapy), and *Ilāj Bil Dawā* (pharmacotherapy) for the management of PE<sup>11,114,115</sup>. For diet therapy *aghzia barida ratba* and an easily digestible diet are used; cupping, Bloodletting, massage, and irrigation are recommended in regimental therapy<sup>116</sup>. In pharmacotherapy different single and compound, drugs are recommended according to the causes of PE. If hypersensitivity and acuteness of semen are the cause of PE, anesthetic, febrifuge, and sedative drugs are recommended as the main line of drugs. In *Safūf-i Aslussūs*, the ingredients like *Tukhm Kahu*, *Aslusos*, *Gul Surkh*, and *Gul Anar* decrease the irritation

and burning of nerves, prostrate and vas deference, etc. due to their anesthetic, febrifuge, and nervine sedative properties. If the cause is debility in retentive power and low semen viscosity, ingredients like *Tukhm Suddab*, *Tukhm Kahu*, *Tukhm Sambhalu*, *Gul Anar*, and *Gul Surkh* obstruct and delay the discharge of semen by their semen desiccator action. If the causative factor is excessive semen volume, ingredients like *Tukhm Kahu*, *Tukhm Sambhalu*, and *Gul Surkh* are beneficial due to their *Qāṭi'-i-Manī* property. In dilation of penile vessels, astringent's action ingredients viz. *Gul Anar*, *Gul Surkh*, *Tukhm Suddab*, and *Tukhm Sambhalu* are supportive to overcome the cause<sup>11,13,25-30</sup>. The formulation *Safūf-i Aslussūs* has poly herbal single drugs in different compositions that cover most of the causes defined by the Unani scholars and exhibit their efficacy synergistically towards the treatment of premature ejaculation. Hence, it is recommended for the management of PE for a long time by Unani physicians.

## CONCLUSION

*Safūf-i Aslussūs* is one of the Unani pharmacopoeial formulations mentioned in many official Unani Pharmacopoeias. It is widely prescribed and recommended for a long time by Unani physicians for the management of Premature ejaculation and spermatorrhoea, so it is a time-tested drug. However, more scientific studies and clinical trials are needed on this compound formulation to ensure its scientific validation for clinical use in patients. So, the compiled data on the drug in this review can be used to design further scientific studies.

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The authors declared that no competing interests exist.

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