A review on Unani concept of purgative drugs

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Abstract
The concept of purgation (Istifragh) is comprised fundamentally in six essential governing life style factors for life, which are called as Asbab e Sit e Zarooriyah in Unani. It is included as one of the natural and safety method in Unani regional therapy in treating different diseases and to eliminate toxic and other unnecessary materials from the body. Unani physicians attempt to use trouble-free physical ways to cure diseases. They are not only curative but are also widely used for the prevention of diseases. Mainly most of the diseases are caused by imbalance of humours in the body. So it will be corrected by eliminating the causative factors through one of the natural way, most commonly through intestine. Mullayin (Laxative) drugs pass only the matter from intestine and Mushil (Purging) drugs pass the matters from intestine together with unnecessary matter from other parts of the body. These drugs have selective power to eliminate only morbid matter from the body. Munzij (Concoctive) and Mushil (purgatives) therapy (M.M. Therapy) that chiefly implemented for the correction of metabolic disorders (i.e. humoureal de-arrangements) is a specific treatment. This therapy is very useful for appropriate treatment in chronic and established diseases of various systems of the body. During Unani treatment, the whole body or intestine is cleansed of accumulated toxins through the use of laxative and purgative drugs, by this technique. Mild, moderate and strong purgative and laxative drugs may be used depending upon the prevailing condition. There are number of laxative and purgative drugs used as single and compound forms in different diseases in the line of Unani treatment. In this review, these drugs will be discussed briefly focusing on the concept of purgation in certain diseases in order to realize the concept of purgative drugs in Unani.

Keywords: Istifragh, Asbab e Sit e Zarooriyah, Mullayyin and Mushil drugs, Munzij and Mushil therapy

Introduction
Indigenous medical systems are becoming more and more popular in recent years in the world. Hence herbal treatment and various types of medical systems are becoming famous among the people. As a result, the demand for medicinal herbs and concepts of the medical system are to be clarified according to the needed demand and development of particular medical system. Past and present immense health care service of Indigenous medical system plays an important role in today need of primary healthcare and helps to reach the goal of WHO healthcare system. On that basis, Unani medical system which contains a specific concept of (Istifragh) purgation and Mushil (purgative) drugs in treating diseases, is one of the best medical systems.

Concept of (Istifragh) purgation in Unani is principally included in six essential governing life style factors that is one of the method of elimination accepted in treating various diseases \[1\]. Meanwhile (Istifragh) purgation is one of the methods used in Unani medicine to preserve the health in healthy individual and to cure the various diseases in diseased people \[2\]. It is also considered as one of the natural and safety method in Unani regional therapy. Regimental therapy is a best and simple way of treating a disease as well as the means of preserve health in Unani system of medicine. More stress has been given on regimental therapy because of its easy, harmless and practicable nature \[3\].

According to Unani medical system the human body is composed of seven natural and fundamental components. These are called as remote principles (Awamil e ba’ida) for the human body. These are responsible for the maintenance of health. The loss or excess of any one of these components can lead to diseases in an individual \[1, 2\]. There are four (Akhlat) humours which is a mixture of various compounds that are formed from primary combination of fundamental components (Arkan) in the human body. The (Mizaj) temperament is maintained mainly by the (Kaifiat) quality and (Kammiyat) quantity of the (Akhlat) humours which are responsible for the nutrition of different structures.
Any derangements from normal (Mizaj) temperament of (Akhlat) humours cause diseases or any toxic or morbid matter or unwanted matter which are to be eliminated remained, cause diseases in the body [4].

The principle of treatment in Unani system of medicine is quite diverse from that modern system of medicine. Because of only the action of the drug is considered in modern system during the treatment. But action and temperament of the drug are considered in treating diseases. This procedure is called "flajhblizid" [5].

According to Unani medical system, most of the diseases are caused by imbalance of (Akhlat) humours in the body. So they are corrected by eliminating the causative factors through one of the natural way. Even though there are much (Istifragh) purification methods in Unani medical system, most commonly causative factors are eliminated through intestine [6]. So Mullayyin (Laxatives) and Mushil (purgatives) drugs are important in this concept. Mullayyin (Laxatives) drugs pass only the matter from intestine, that increase peristaltic movement of intestine or making these slippery or diluting the stool to pass through anus easily [6], or these drugs stimulate the mucus membrane of intestine tissue and increase the Quwwat-e-Dafia (Excretion power). So, the feces become loose and push easily. Eg: Roghan-e-Bedanjeer, Maweez Munaqqa, Roghan-e- Badam, Thamar Hindi, and Honey [7].

Mushil (purgatives) drugs pass the matters from intestine together with unnecessary matter from other parts of the body, such as phlegm from lungs, black bile from the spleen, watery part from the blood and fluid accumulated areas [7]. These purgative drugs also increase the frequency of stool or increase watery contents of the intestines or increase peristaltic movement or lubricate the intestine further they allow the evacuation of morbid (Akhlat) humours such as abnormal phlegm by Mushil e Balgham (Phlemagogue / phlegm purgative) drugs, abnormal black bile by Mushil e Sawda (Melanagogue black bile purgative) drugs and abnormal yellow bile by Mushil e Safra (Chologogue / yellow bile purgative) drugs. These drugs have selective power to eliminate only selective morbid matter from the body [9]. These drugs not only increase the Quwwat-e-Dafia (Excretion power) but also increase secretion. So, the matters become liquefy and several stools are passed. Eg: Senna, Saqmonia, Revancheen, and Jamalgota [7].

Munzij (Concoctive) and Mushil (purgatives) therapy (M.M. Therapy) is specially accepted by the Unani Physicians, for the correction of metabolic disorders (i.e. humoural de-arrangements). Munzij (Concoctive) drug brings the correction of the metabolic disorder at the level of Hazm-e-Uzvi (which is the digestion at the tissue level) hence facilitating the nutrients to pull together and prepare the waste product for excretion which occurs by the expelling process of the Mushil (purgatives) drugs. This therapy is very useful for chronic and established diseases in Unani treatment [9].

The mode of action of Munzij (concoctive) and Mushil (purgative) drugs may be detoxification and excretion of morbid materials out of the body. The free radicals are also considered as one of the morbid materials. Therefore even the cancer can be treated by using Munzij (concoctive) and Mushil (purgative) drugs. Detoxification helps to eliminate the accumulated waste and fermenting bacteria from the digestive tract and it stimulates the immune system of the body [10]. The whole body or intestines are rinsed out of accumulated toxins through the use of Mullayyin (Laxative) and Mushil (purgative) drugs by this technique. Mild, moderate and strong Mushil (purgative), Mullayyin (laxative) drugs may be used depending upon the prevailing condition in the diseased body [11].

In modern medicine, Purgation means the act of purging; specifically: dynamic evacuation of the bowels (as from the action of a cathartic or an infective agent) or inducing bowel movement with a laxative [12].

According to the Unani medical system, the (Mushil) purgative drugs draw morbid matters from upper parts of the body and release them below. Purgation is therefore, an attractive power in two different directions -to the near and to the remote region of the body. It is most useful when the morbid material is inactive. Because the morbid matter is either above or below is drawn by the (Mushil) purgative drugs to opposed direction, away from the site in which it has lodged [13].

Sometimes the drug to be selected as purgative must have a (Kaiifiat) quality responding to that of (Akhlat) humour to be eliminated. Hence, (Saqmoniya) scummony is needed for evacuating (Safra) bilious humour. A drug which is of a different (Mizaj) temperament should be mixed with it as an addition for the (Mushil) purgative drug without preventing proper evacuation. For example (Haleela e Zard) Myrobalan which is in different temperament should be added to (Saqmoniya) Scammony to correct the (Mizaj) temperament and support the (Safra) bilious humour evacuation [13].

(Mushil) purgative drugs expel humours in co-operation with the attractive power concerned with the given humours, may be drawing the course and rejecting the fine humour. This happens in the case of expulsion of ill-natured humour [13].

Every (Mushil) purgative medicine which has specific affinity for a given humour, produces agitation and confusion (disorderly movements) if it does not reach the humours and the purgation is difficult. The same thing happens if a contrary be prescribed with it. The immediate action of a purgative medicine is to draw out the humour for which it has affinity; it then draws out whatever humours comes next in amount and in degree of attenuation, and so on in turn with others with the exception of blood itself. For the "nature" retains and stop up the blood to the very last [13].

The Mushil (purgative) drugs act in good rank of five kinds of property. 1. Specific resolving property (e.g: Turbud), 2. Power of compress (squeeze) (e.g: Myrobalan), 3. Lenitive property (e.g: Manna), 4. Lubricant quality (E.g: Mucilage of prunes or (liquid paraffin)) [13].

A certain poisonous character, in the case of violent purges, which itself produces the purgation by direct violent action upon the natural faculty [13].

So with the increasing demand of the Unani medical system, there is a need to ensure the concept of purgation and purgative drugs through Unani concepts. It is also an urgent need. These types of conceptual investigation in the treatment and drugs through literary review lead to successful and positive treatment method than other medical system.

Materials and Methods

Searching of Concepts of Purgative drugs in Unani was
carried out through reviewing of Unani classical text books, reference books, review articles and computer database searches.

**Discussion and Result**

In Unani medical system, abnormal humours and abnormal temperament are mostly considered as causative factors in various diseases. Even though there are different types of medical systems are being used, the present study was undertaken to assess the effect and safety of (Mushil) Purgative drugs through Unani medical concept. The treatment of diseases and the correction of abnormal process and derangements needs are an idea and logic in Unani medical system. For the accurate and efficient treatment in Unani medical system needs Unani concepts of disease process, diagnosis, knowledge of availability of single and compound purgative drugs.

Unani treatment is not a label therapy. Unani treatment constitutes some basic principles like Ilajbilzid [3], considering the cause of disease first then planning the line of treatment according to the cause, that may be one of the four akhlat (humours) then different mode of treatment are considered according to the causative akhlat (humour) specially M.M Therapy [5]. But modern medicine has only single way in treatment of diseases.

<table>
<thead>
<tr>
<th>Tibbi Name:</th>
<th>Botanical name</th>
<th>Family</th>
<th>Part used</th>
<th>Chemical constituents</th>
<th>Temperament</th>
<th>Dose</th>
<th>Compound drug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isapog</td>
<td>Plantago ovata</td>
<td>Plantaginaceae</td>
<td>Seeds and Husk</td>
<td>Mucilage - Albuminous matter, Tannin, glycoside (Aucubin), fixed oil and protein.</td>
<td>Cold &amp; Dry</td>
<td>10gm</td>
<td>Saafo e Theen</td>
</tr>
<tr>
<td>Amalatha-</td>
<td>Cassia fistula linn</td>
<td>Caesalpiniaceae</td>
<td>Pulp, Root, Bark, Flower, pods and leaves</td>
<td>Volatile oil, butyric acid, anthraquinone, glycoside, sennosides, kaemterol, soluble tannin, pectin, mucin, glutin and sugar</td>
<td>Hot &amp; Moist</td>
<td>3-5gm</td>
<td>Lavoog e Khiyarsharanbar Lavoog e Sapistan</td>
</tr>
<tr>
<td>Badam Sheereen</td>
<td>Prunus amygdalus</td>
<td>Rosaceae</td>
<td>Seeds</td>
<td>glycosides and mucilage</td>
<td>Hot &amp; Moist</td>
<td>7-11 seeds</td>
<td>Lavoog e Badam Lavoog e Kabeer</td>
</tr>
<tr>
<td>Haleel Siya-</td>
<td>Terminalia chebula</td>
<td>Combretaceae</td>
<td>fruits</td>
<td>Steroids, tannin, flavinoide</td>
<td>Cold &amp; Dry</td>
<td>9-12gm</td>
<td>Ithrifal e Sagheer Ithrifal e Musqer</td>
</tr>
<tr>
<td>Muqil</td>
<td>Commiphora mukul</td>
<td>Burseraceae</td>
<td>Gum and resin</td>
<td>Volatil oil, resin, gum</td>
<td>Hot &amp; Dry</td>
<td>1-11/2 gm</td>
<td>Ithrifal e Muqil</td>
</tr>
<tr>
<td>Mawez munqqa</td>
<td>Vitis vinifera linn</td>
<td>Vitaceae</td>
<td>Deseeded fruit, ripe &amp; unripe fruit and leaves</td>
<td>Steroids, flavinoide, phenolics, reducing sugar, tannin</td>
<td>Hot &amp; Moist</td>
<td>9-11 fruits</td>
<td>Ithrifal e Usthakhudoos M.a^joon e Anjeer, M.a^joon e Falasifa</td>
</tr>
<tr>
<td>Gul e Banafsha</td>
<td>Viola odorata linn</td>
<td>Violaceae</td>
<td>Flower, root, leaves and seeds</td>
<td>Glycosides, phenolic compounds, tannin, flavinoide</td>
<td>Cold &amp; Moist</td>
<td>10-20gm</td>
<td>Sharbat e Banafsha Khamere e Banafsha</td>
</tr>
<tr>
<td>Jamalonga</td>
<td>Croton tigillum linn</td>
<td>Euphobiaceae</td>
<td>Seeds, bark and leaves</td>
<td>Tigliinic acid, crotonic acid, alkaloids, globulin</td>
<td>Hot &amp; Dry</td>
<td>0.5-1irathi</td>
<td>Habb e Dabba</td>
</tr>
<tr>
<td>Reevandcheeni</td>
<td>Rheum emodi wall</td>
<td>Polygonaceae</td>
<td>Root-Rhizome</td>
<td>Glycosides, steroids, phenolics and flavinoide</td>
<td>Murakkabul Quwa</td>
<td>125-375gm.</td>
<td>Sharbat e Deenar Hab e Shifa</td>
</tr>
<tr>
<td>Baidanjee</td>
<td>Ricus communis linn</td>
<td>Euphobiaceae</td>
<td>Leaves, root and seeds</td>
<td>Ricinolic acid, ricinime, stearic acid, acinime, mucilage and ricin</td>
<td>Hot &amp; Dry</td>
<td>3-5 nos / 25-35 ml</td>
<td>Roghan e Khas Roghan e Haft e Barg</td>
</tr>
</tbody>
</table>

**Table 1: Selected examples for purgatives and laxatives single drugs**

Mushilat (purgative) and Mulayyinat (Laxative) were used in Unani Medicine to achieve the following

- To treat the diseases of humoral imbalance caused due to vitiated matter successfully.
- To eliminate toxic and disease producing matter from body, especially in chronic and established diseases in Unani treatment.
- To eliminate excess watery matter from the body. Especially in different types of ascitic conditions.
- To eliminate Phlegm. It is performed for head diseases.
- To eliminate yellow bile. It is indicated for liver disorders such as jaundice.
- To eliminate Black bile. It is used in disease like melancholia, where drugs such as Aftimoon (Cuscuta reflexa) are used.
- To purify Blood. It is indicated in skin diseases through the use of blood purifying medication (Musaffi dam) such as Chiraita (Swertia chirata).
- To divert the Matter. It is performed in the initial stages of brain disorders and for inflammation Drugs such as Sheerkihsit (Fraxinus ornus exudate) divert the matter towards the intestine.
- To eliminate matter from the intestine in conditions such as constipation, colic and colitis. Isapghol (Plantago ovata) husk is used.
- To reduce the heat of temperature in fevers.
- To bring down the pressure in Hypertension.
- Some times to carry out as prophylaxis in preventing the attack of gout, bronchial asthma and epilepsy [8, 14].
The following types of substance are excreted by (Mushil) Purgative drugs in Unani treatment

- Diet matter, digested or undigested through the intestines.
- Toxic and non-toxic matter produced in the intestines as a result of digestion.
- Phlegmatic secretions from the mucosa of the intestines.
- Watery Part of blood and all accumulated unnecessary matter, which is white, yellow or black in colour.
- Yellow bile, from the liver and gall balder.
- Pancreatic juice secreted from pancreas [9].

Mushil (purgatives) drugs can be classified according to power of Quwwat-e-Dafiya into following types

1. Mushil-e-Zaeef (light purgative/ Ma^mooli Mus-hil)
These drugs increase the frequency of loose motion, severity is not increased. Mild Purgatives result in the discharge of one or two loose motions. Eg: Senna, khyiarshambar, Erand [7].

2. Mushil Qawi (Strong purgative)
These drugs increase frequency and severity of loose motion. So, severe purgative action and watery stools are passed. Sometime dehydration and death may occur. These result in the discharge of frequent watery loose motion. Eg: Jamalgota, Revancheeni [21].

According to mode of Afaal (actions)

1. Mushil bil jazib (Cathartic purgative)
These drugs break the matter into small pieces and pass toward intestine and increase the stool frequency. These drugs divide fasid matter into small parts and pull it toward the intestine and increase the Quwwat-e-Dafiya and pass the stool. Eg: Thurbud

2. Mushil bil Aasir (Squeeze purgative)
These drugs increase the power of astringent and squeezing in the intestine and pass the diseased matter from the intestine. Eg: Haleela

3. Mushil bil Talyeen (Laxative purgatives)
These drugs pass the stool by making it somehow soft Eg: Sheirkhist

4. Mushil bil Izlaq (Slippery movement producing Purgatives)
These drugs produce slippery movement in the intestine and pass the stool. Eg: Isapgo, khatmi

5. Mushil bil Iradi (intentionally cathartic purgatives)
These drugs pass the stool by making the fasid matter intentionally breaking or melting the matter. Eg: Thuranjabeen

6. Mushil bil Jali (Detergent purgative)
These drugs act as detergent and pass stool by cleansing mucosa of the intestines. Eg: Honey, Borax [7, 8]. Further Mushil (purgatives) drugs can be classified into following types according to matter excreted from the body. These drugs pass the matter according to their Soorat-e-Navveya (molecular structure) they are,

1. Mushil-e-Bulgham (Phlegmagogue)
These drugs excrete phlegm through intestine due to their particular structural property. These drugs effort to pass phlegm through the intestines due to their specific structure. Several drugs may be used, each having a particular proportion of chemical constituents, in that way allowing for different actions as necessary. Eg: Turbud, Khyiarshambar

2. Mushil-e-Safra (Cholagogue)
These drugs increase secretions of bile from whole body towards intestine through liver. Then pass the Safta (bile) by the particular structural property. Eg: Saqmooniya, Revancheeni [6, 7, 8],

3. Mushil-e-Sawda (Malanogogue)
These drugs pass the Sawda (black bile) from the intestine by the particular structural property. Eg: Aftimoon

4. Mushil-e-Mayee (Hydrogogue)
These drugs absorb watery matter from blood and pass through the intestine. These produce loose motion and pass body fluids particularly excess watery parts as in ascitic conditions, where water eliminations are required in large quantities. Eg: Jamalgota [6, 7, 8].

In Unani treatment, Mushil (purgatives) should eliminate the diseased matter from the body but Munjiz (Concoctives) of specific humour is used prior to Mushil (purgatives) for easy removal of diseased matter from the body. As a principle of treatment, Unani medicine stresses the neediness of correcting humeral imbalance through various means for an example Munjiz (Concoctives) drugs are used to make Galeez Balgham (Thick phlegm) or pathogenesis matter removable then Mushil (purgative) drugs are used to eliminate them easily in the treatment of paralysis. This method is also used for treating common diseases and other chronic obstinate diseases.

In case of Taqashshur e Jild (Psoriasis), Ibnu Zohar, Majooesi clearly explain the pathogenes of Taqashshur e Jild (Psoriasis) on the basis of humoural theory. Taqashshur e Jild (Psoriasis) is a chronic inflammatory disease. According to excessive amount of khhil e Ghaleez (Abnormal Sawda) gets accumulated in the skin and obstruct its nutrition and functions, due to which skin becomes dead and fallout in the form of scale. Therefore Unani physicians treated this by eliminating of khhil e Ghaleez (Abnormal Sawda) by Fasad (Venesection) or Irsal e Alaqq (Leach application) or Hijama (Cupping) or M M therapy along with local application [14].

In case of Shaqeeqa (Migrain), Shaqeeqa (Migrain) is caused by Soo ul Hazm (Bad digestion) then this Soo ul Hazm (Bad digestion) leads to produce Akhlat e Raddiya (Bad Humours) which leads to development of Soo e Mizaj e Madda either hot or cold. So this condition is treated by eliminating the Akhlat e Raddiya (Bad Humours) from the body with suitable purgative drugs according to Soo e Mizaj e Madda. If it is in har (Hot), Gul e Nilooofar, Gul e Surkh, Shahtira and Ummab can be used, if it is in Sard (cold), Shabbit can be used as a purgatives [15].

Vaj e Mufasil (Athritis), is a pain which occurs in different joints of the body especially of arms and legs based on the four Akhlat (humours). The pathological changes in the joint caused mainly derangement of Akhlat (humours) which lead to accumulation of Morbid Matter in the joint
spaces. Sometime pain may be there without swelling. It can be successfully treated by cleansing and eliminating the morbid matter by purgative drugs like Surinjan, Maweez, Turbud and Senna [10].

Cancer is described as Sartan in Unani. Unani scholars described Sartan as a warm and Sulb Sawdawi, different types of Sartan were discussed by Samaraqandi. Varm e Sulb Sawdawi occurs by accumulation of excessive Sawdwa in a particular organ site. According to Aviceenna, cancer is occurred by burning of Sawda [10].

Cancer was treated by Unani in following ways1. Ilaj bitaddbeer va Taghziya, (Regimens and diet therapy) 2. Ilaj biddawa (Pharmacotherapy) 3. Ilaj bilyad (Surgery). Here removal of Sawdwa from the body and in a particular organ site by using appropriate purgatives drugs are very important. According to severity, Mushil e khafeef or Mushil bil jali (Bor e Armani) or Mushil bil Asir (Haleela) or other types of drug (Aftimoon, Ayari, Senna, Bisfaj, Tukhm e Kazooz, Habunneel, Ghariqoon) can be used in the treatment [10].

Bars is caused by Madaa e Raddiya (Excesses of Balgham) which deranged nutrition process of the affected site. According to Unani, Bars is treated in following way;1. diet therapy, 2. psychotherapy and pharmacotherapy, 3. M M (Mullayjin and Mushil) therapy. Here drugs like, Senna, Anjeer Zard, Maweez Munaqqa, Turbud and Ayarijat are used as M M therapy in treatment of Bars [17].

Chronic and established diseases were treated successfully by using above mentioned different types of necessitate purgative drugs for elimination of causative factors in Unani treatment. Purgative drugs are important in Unani treatment such specialized method of regimental therapy, through which deranged humour is eliminated from the body after administration of these drugs after preparing the condition by Nuzj.

According to Modern view, drug like Thammarhindi (Tamarindus indica) acts as laxative due to the presence of high amounts of malic and tartaric acids and potassium acid. And Maweez munaqqa due to presence of natural sugar called sorbitol [19]. Generally, honey has a laxative effect on the digestive system of individuals because of incomplete fructose absorption [20]. Castor oil helps to prevent fluid absorption from the intestines due to presence of ricinoleic acid. Because of this, the bowel can hold back more moisture, allowing for the easy passage of stools out of the anal canal. Hence, castor oil acts as a lubricant for fecal matter to easily pass through the intestines and the bowels [21].

Sennoside and Anthraquinone are found in Senna (Cassia aungustifolia) plant. They act by increasing fluid secretion and breaking the morbid matter into small pieces within the large intestine and also act directly as irritants on the colonic wall to induce fluid secretion and colonic motility [22]. Crotonoleic acid, glycerol crotonate, crotonic acid, crotonic resin, and various carcinogenic phorbol derivatives are found in Jamalgota (Croton tigillum) which absorb watery matter from blood and pass through the intestine [23].

Conclusion

Concept of purgatives plays an important role to prevent and treat diseases. Concept of purgatives minimizes the side effects during the treatment and improves the natural activity of the body function; specially it prevents complications and improves health condition in chronic diseases. In this study some various type purgative drugs were taken to explain the concept according to the Unani Purgative drugs concept and it was found significant rather than other medical system. So it can be concluded that, in treating diseases through these Purgative drugs is quite effective and safe for human being.

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