MAJOON NAJAH: A POTENT UNANI FORMULATION FOR NEUROLOGICAL DISORDERS

Zeba Afrin1, Aisha Siddiqui2, M.A. Jafri3, Mohd. Asif2 and Hushan Jahan1

1PG Scholar, 2Assistant Professor, 3Professor, Department of Ilmul Advia, Faculty of Medicine (Unani), Jamia Hamdard, New Delhi, India.

*Author for Correspondence: Dr. Aisha Siddiqui,
Assistant Professor, Dept. of Ilmul Advia, Faculty of Medicine (Unani), Jamia Hamdard, New Delhi, India.

ABSTRACT
Neurological disorders (Epilepsy, depression, dementia, Parkinson’s disease etc) are an important cause of mortality and constitute 12% of total deaths globally. Unani system of medicine has a treasure of valuable single and compound formulations. There are several mufarad (single) drugs used to treat neurological disorders such as Afthimoon (Cascuta reflexa), Bisfaj (Polypodium vulgare), Turbud (Operculina turpethum), Ustukhudoos (Lavandula stoechas), Badranjboya (Nepeta hindostana/ Melissa parviflora), Ghariqoon (Agaricus alba), Kishneez (Coriandrum sativum) etc. Among the compound drugs Majoon Najah is one of the polyherbal unani preparations and it has been traditionally used in melancholia, epilepsy, hysteria, insanity, colitis and for saudavi amraaz. MN has been reported for its antidepressant potential in recent years.

KEYWORDS: Majoon Najah, Antidepressant, Neurological disorders, Unani medicine.

INTRODUCTION
According to a survey WHO appraises that 80% of the world population reckon on the medicines of plant origin for their primary healthcare.6 Unani system of medicine is one important traditional system of medicine which is one among the oldest systems that abound till date with its effective and profitable drugs derived from plant, animal and mineral sources. According to Unani system of medicine, the methods of treatment comprises of dietotherapy (Ilaj-Bil-Ghiza), regimental therapy (Ilaj-Bil-Tadbeer), surgery (Ilaj-Bil-Yad) and pharmacotherapy (Ilaj-Bil-Dawa). Considering pharmacotherapy, both single and compound drugs are being used successfully since hundreds of years in the management of neurological disorders like depression, epilepsy, Parkinson’s disease etc. There are several mufarad (single) drugs such as Afthimoon (Cascuta reflexa), Bisfaj (Polypodium vulgare), Turbud (Operculina turpethum), Ustukhudoos (lavandula stoechas), Badranjboya (Nepeta hindostana/ Melissa parviflora), Ghariqoon (Agaricus alba), Kishneez (Coriandrum sativum) etc and many murakkab (formulations) such as Mufarreh Barid, Joshanda Aftimoon, Majoon Lanai etc that have been described to possess protective activity against neurological disorders.7,8,9,10

According to a recent report published by the World Health Organization “Neurological disorders, public health challenges” it is stated that about one billion people worldwide suffer from neurological disorders which are found among all age groups and that 6.8 million people die annually from these disorders. The spectrum of neurological disorders includes epilepsy, stroke, headache, Alzheimer’s disease, dementia, parkinson’s disease etc.7 In 1996, neurological disorders accounted for 4.2% of the global burden of disease which has notably increased to 6.29% in 2005 assessed by the disability adjusted life years (DALYs) for common neurological disorders such as epilepsy, dementia, parkinson’s disease, tetanus, meningitis etc. Further ascent in burden is expected and by 2030 it is estimated to be 6.77%.2 Epilepsy is the second most common chronic neurological condition seen by neurologists. It is estimated that there are 55.00.000 persons with epilepsy in India. It is becoming the most serious brain disorder and affects about 50million people and about 100 million will be affected at sometime in their life. Overall, it accounts for 1% of the world’s burden of diseases, and the prevalence rate is reported at 0.5-1%.3 Currently available antiepileptic drugs are synthetic compounds and have dose related & chronic toxicity involving virtually every major organ system, adverse effects on cognition and behaviour and teratogenic effects.5,3
Majoon

Majoon is a semisolid medicinal preparation which is obtained by mixing more than one powdered single drugs of plant, animal or mineral origin in the base (Qiwam) made of purified honey, sugar, candy or jaggery. These involve preparations like Jawarish, Itrifal, Barshasha, Dawa-ul-Misk, Dabeed-ul-ward, Mufarrehat, Luboob, Khamira and Laoqq etc.

Method of preparation of Majoon

For making Majoon or any of its allied preparations, Qiwam (base) of different consistencies (tar) is generally made. It depends on the nature of ingredient drugs to be used. The Qiwam is generally made by adding Aab (water), Araq (distillate) or Aab e samar (fruit juices), etc. in any of the bases of purified honey, sugar, candy or jaggery etc and boiled over a low fire till it acquires a required consistency. The bases are generally purified by adding Aab e lemu (lemon juice), Satt e lemu (lemon extract), or Shibbe yamani (Alum) before making Qiwam. Afterwards the ingredients are mixed in qiwam to prepare Majoon. Qiwam for majoon is of two tar (consistency).

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Unani Name</th>
<th>Botanical Name</th>
<th>Parts Used</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Post-e-halela kabli</td>
<td>Terminalia chebula Retz</td>
<td>Fruit</td>
<td>50g</td>
</tr>
<tr>
<td>2.</td>
<td>Post-e-Balela</td>
<td>Terminalia bellerica Roxb</td>
<td>Fruit</td>
<td>50g</td>
</tr>
<tr>
<td>3.</td>
<td>Aamla</td>
<td>Emblica officinalis</td>
<td>Fruit</td>
<td>50g</td>
</tr>
<tr>
<td>4.</td>
<td>Halela Siyah</td>
<td>Terminalia chebula Retz</td>
<td>Fruit</td>
<td>50g</td>
</tr>
<tr>
<td>5.</td>
<td>Turbud</td>
<td>Opeculina turpethum Linn</td>
<td>Root</td>
<td>50g</td>
</tr>
<tr>
<td>6.</td>
<td>Bisfayej</td>
<td>Polypodium vulgar Linn</td>
<td>Root</td>
<td>25g</td>
</tr>
<tr>
<td>7.</td>
<td>Aftimoon</td>
<td>Cuscata reflexa Roxb.</td>
<td>Whole plant</td>
<td>25g</td>
</tr>
<tr>
<td>8.</td>
<td>Ustukhuddus</td>
<td>Lavandula stoechas</td>
<td>Flowers</td>
<td>25g</td>
</tr>
<tr>
<td>9.</td>
<td>Qand safaid (Sugar)</td>
<td></td>
<td></td>
<td>600g</td>
</tr>
</tbody>
</table>

Method of preparation of Majoon Najah

MN is prepared as per the procedures, mentioned in the pharmacopeia Part II, Vol. I of National Formulary of Unani Medicine (NFUM).

1. Powdering the ingredients

As per the classical method, tirphala ‘Three Myrobalan fruits’ (from S.No. 1 to 4) are first dried to evaporate their moisture content and pounded in an iron mortar. Initially gentle pounding is employed to break the drugs into small pieces then vigorous pounding is done till they are ground into coarse powder. The powder is then passed through appropriate mesh sieve. The remaining ingredients (from S.No.5 to 8) are dried, powdered and sieved separately.

2. Rubbing (Tad’heen or Charb) the Tirphala with almond oil or sesame oil or Ghee.

Tad’heen or Charb is the process of correction or detoxification in which dry drug is made oily or rubbed with some special oil. This terminology of pharmaceutics is often used for Tirphala. The powdered Tirphala (Separately or with other ingredients of Majoon) are rubbed with one of the following oils.

| 1. | Raughan e Badam (Almond oil) |
| 2. | Rhaghan e Badam (Cow Ghee) |
| 3. | Raughan e Bed Injeer (Castor oil) |

3. Mixing the rubbed powder in the Qiwan.

The Qiwan is generally made by adding Aab (water), Araq (Distillate) or Aab e samar (Fruit Juice) etc., in any of the bases of purified Honey with Sugar, Candy or Jaggery etc., and boiled over a low fire till it acquires a required consistency. The bases are generally purified by adding Aab e lemu (Lemon Juice), Satt e lemu (Lemon extract) or Shibbe yamani (Alum) etc. Afterwards, the ingredient drugs are mixed in it, to prepare Jawarish, Majoon, Itrifal, Halwa. For making Majoon or any of its preparations the consistency of Qiwan of Majoon is Three Tar (consistency).

Qiwan is made, as described above and all the powdered drugs are mixed in the Qiwan to form MN.
Dosage & administration
10g at night with 250ml of milk [16,12] 5 to 10gm [11]
7 to 11gm with water in morning [10]
17gm with lukewarm water [13]

Pharmacological actions
- Nervine tonic (Muqawwi Aasab) [11]
- Blood purifier (Musaffi-e-dam) [11]
- Purgative of black bile and viscid phlegm (Mushil-e-Sauda Wa Balgham Ghalij) [11,13] [26]
- Tranquillizer (Musakkin) [16]
- Cephalic tonic (Muqawwi Dimagh) [16]

Therapeutic Uses
- Melancholia (Malakkuliya)[11,12,13]
- Epilepsy (Sara)[13,14]
- Hysteria (Ikhtenaq-Ur-Raham) [11,12,13]
- Colic (Qolanj)[11]
- Schizophrenia (Junoon) [15]
- Leprosy (Jucam)[15]
- Arthritis (Waja-ul-Mafasil)[15]
- Mental disorders due to excess of sauda [15]
- Black bile disorders (Saudavi amraza)[10]
- Brain disorders (Amraz-e-Dimaghii)[13]
- Menopausal symptoms [21]

Pharmacological Studies
Antidepressant activity
Hydroalcohololic extract of MN was tested for antidepressant activity in two animal models viz.,
Tetrabenazine Antagonism test and Yohimbine Toxicity Enhancement Test (Vogel, 2002) in mice by Shariff F et al in 2015. The findings of Tetrabenazine antagonism test suggested that there was a significant reduction of catalepsy and ptosis and Yohimbine toxicity enhancement test suggested that there was a significant increase in the mean mortality rate of test drug, thus concluded that MN possesses significant antidepressant effect. [22]

Brief description of Ingredients of MN
Post-e-halela kabli

Terminalia chebula
- PART USED: Fruit [24]
- DOSE: 5-7gm [23]
- PHARMACOLOGICAL ACTIONS:
  - Purgative of all three humors [9]  Siccative [8]
  - Stomachic [9]
  - Cardiac tonic [24]
  - Brain tonic [9]
  - Laxative [26]
- THERAPEUTIC USES
  - Melancholia [9]
  - Piles [9]
  - Dementia [8]
  - Chronic diarrhoea [26]
  - Flatulence [25]

- PHARMACOLOGICAL STUDIES
  - Antioxidant [27]
  - Anxiolytic [29]
  - Immunomodulatory [31]
  - Neuroprotective [13]
  - Antidiabetic activity [15]

Post-e-Balela

Terminalia bellerica
- PART USED: Fruit [24]
- DOSE: 9-10g [24]
- PHARMACOLOGICAL ACTIONS
  - Stomachic [23]
  - Expectorant [2]
  - Purgative [4]
  - Tonic [4]
  - Aperient [4]
  - Brain tonic [23]

- THERAPEUTIC USES
  - Disease of GIT [23]
  - Diarrhoea [23,25]
  - Brain weakness [36]
  - Dyspepsia [25]
  - URT infections [25]
  - Piles [36]
  - Hoarseness [26]
  - Ophthalmia [37]

Aamla

Emblica officinalis
- PART USED: Fruit [24]
- DOSE: 3-5g [23]
- PHARMACOLOGICAL ACTIONS
  - Cardiotoxic [55]
  - Brain tonic [23]
  - Anti-anemic [25]
  - Antiemetic [55]
  - Anti-diarrhoeal [25]
  - Antidiabetic [25]
  - Antioxidant [25]
  - Anti-aspathic [25]
  - Refrigerant [37]
  - Memory enhancer [8]

- PHARMACOLOGICAL STUDIES
  - Antioxidant [27]
  - Antiarrhythmic [28]
  - Chemomodulatory [30]
  - Cardioprotective [52]
  - Hepatoprotective [34]

Antioxidant

Appetizer [8]

Aphrodisiac [8]

Siccative [8]

Expectorant [25]

Anti-inflammatory [20]

Brain tonic [23]

Antipyretic [32]

Anti-diabetic [51]

Laxative [17]

Memory enhancer [8]
Afrin et al. European Journal of Biomedical and Pharmaceutical Sciences

- Hair tonic[^9]
- Tonic for vital organs[^9]
- Liver tonic[^9]

**THERAPEUTIC USES**
- Brain weakness[^23]
- Headache[^23]
- Hyperacidity[^23]
- Ophthalmia[^24]
- Dyspepsia[^25]
- Mouth ulcers[^37]
- Jaundice[^25]
- Bronchitis[^25]
- Biliousness[^57]
- Anorexia[^26]
- Haemorrhage[^37]

**PHARMACOLOGICAL STUDIES**
- Antibacterial[^58]
- Antioxidant[^60]
- Hypolipidemic[^162]
- Anti-tumor[^64]
- Antimicrobial[^66]
- Insulin sensitizing activity[^68]

Halela Siyah
*Terminalia chebula*

**PART USED:** Fruit[^24]
**DOSE:** 5-10g[^23]

**PHARMACOLOGICAL ACTIONS:**
- Diuretic[^34]
- Brain tonic[^23]
- Analgesic[^23]
- Astringent[^9]
- Intestinal tonic[^9]
- Alterative[^26]
- Tonic[^26]
- Blood purifier[^26]

**THERAPEUTIC USES:**
- Amenorrhoea[^24]
- Eye weakness[^23]
- Weakness of GIT[^23]
- Constipation[^25]
- Vomiting[^25]
- Splenomegaly[^26]
- Bronchial asthma[^25]
- Urinary diseases[^26]
- Rheumatism[^26]
- Hiccups[^26]
- Dementia[^9]
- Facial paralysis[^9]

**PHARMACOLOGICAL STUDIES**
- Antioxidant[^27]
- Antibacterial[^69]
- Anti HSV-2[^71]

**THERAPEUTIC USES**
- Anticonvulsant[^73]
- Antidepressant[^28]
- Immunomodulatory[^31]
- Cardioprotective[^32]
- Neuroprotective[^33]
- Hepatoprotective[^74]
- Antiaging[^75]
- Antifungal[^76]
- Antipyretic[^77]
- Anti-inflammatory[^78]
- Anti arthritic[^79]
- Antioxidant[^80]

Turbud
*Opeculina turpethum*

**PART USED:** Root[^24]
**DOSE:** 3-5g[^23]

**PHARMACOLOGICAL ACTIONS**
- Purgative of phlegm and yellow bile[^8]
- Deobstruent[^8]
- Cathartic for brain, stomach & uterus[^8]
- Anthelmintic[^36]
- Purgative[^46]
- Antipyretic[^36]
- Expectorant[^36]
- Laxative[^36]

**THERAPEUTIC USES**
- Paralysis[^8]
- Chronic cough[^8]
- Sciatica[^8]
- Melancholia[^8]
- Epilepsy[^8]
- Scizophrenia[^8]
- Bronchitis[^8]
- Hepatitis[^8]
- Ascites[^8]
- Leucoderma[^8]
- Ulcers[^8]
- Erysipelas[^8]
- Haemorrhoids[^8]
- Ophthalmia[^8]
- Anemia[^82]
- Rheumatism[^82]
- Gout[^82]
- Corneal opacity[^83]
- Conjunctivitis[^83]

**PHARMACOLOGICAL STUDIES:**
- Antisecretory[^84]
- Ulcer protective[^84]
- Anti diarhoeal[^84]
- Hepatoprotective[^85]
- Antibacterial[^86]
- Anticancerous[^87]
- Antioxidant[^87]
- Cytotoxic activity[^86]

Bisfayej
*Polypodium vulgare*

**PART USED:** Root[^24]
**DOSE:** 5-10g[^7]

**PHARMACOLOGICAL ACTIONS**
- Purgative of black bile & phlegm[^23]
- Cardio tonic[^7]
- Anti-inflammatory[^8]
- Diuretic[^88]
- Laxative[^88]
- Antipyretic[^88]
- Digestive[^88]

**THERAPEUTIC USES**
- Leprosy[^7]
- Melancholia[^6, 7]
- Flatulence[^7]
- Colitis[^23]
- Epilepsy[^8, 7]
- Eruptions[^7]
- Joint pain, Asthma, Haemorrhoids, Rheumatic disorders

**PHARMACOLOGICAL STUDIES**
- Antioxidant, Anti-arritic, Antimicrobial

**PHARMACOLOGICAL STUDIES**
- Antimicrobial, Antibacterial
- Antifungal, Anti-inflammatory
- Antioxidant, Cytotoxic
- Anticonvulsant, Spasmylic
- Sedative, Antispasmodic
- Hypoglycaemic activity

**CONCLUSION**
With the above discussion the inference may be drawn that Majoon Najah is one of the best Unani formulations for neurological disorders. It has proven to be beneficial to treat various neurological disorders such as depression, epilepsy etc. However more scientific studies and clinical trials are needed on this compound formulation to ensure its scientific validation for clinical use in patients. According to Wild et al. the prevalence of diabetes is predicted to double globally from 171 million in 2000 to 366 million in 2030 with a maximum increase in India. Evidence from prospective epidemiological studies has identified type 2 diabetes as an independent risk factor for multiple hyperglycaemia-induced complications virtually in all organs, including neurodegenerative diseases such as diabetic neuropathy, stroke, dementia, and Alzheimer’s disease. Epilepsy or seizures which is the second common neurological disorder are often observed in patients with diabetes mellitus (DM), and an emerging association between the two diseases is more than coincidental based on recent research. Approximately 25% of patients with DM experience different types of seizures. Furthermore, diabetic patients who experienced episodes of DKA also have seizures more frequently.

Though; Majoon Najah can be effectively used as a potent Unani formulation for neurological disorders like epilepsy, depression etc if it is made sugar free. So in view of current emerging disease scenario of diabetes and neurological disorders it is the demand of present era to prepare its compatible sugar free dosage form.

**REFERENCES**
40. Poonkothai M. Antimicrobial activity and phytochemical analysis of fruit extracts of}


64. Arunachalam M, Shailja S, Sumeet KS. The antiinflammatory potential of phenolic compounds from Emblica officinalis L. in rat. Inflammopharmacology, 2011; 327-334.


90. Ambasta SP. The Useful plants of India. New Delhi; Publications & Information Directorate, CSIR, 1986; 152.
92. Pavan BU, Suggala VS, Chandrashekar DU. Preliminary screening of Cuscuta reflexa stems for Anti-inflammatory and cytotoxic activity. Asian

94. Wiart C. Ethnopharmacology of Medicinal Plants. Asia and the Pacific Humana Press, 2006; 143.


