

UNANI MEDICINE- A GUIDING TOOL FOR THE MANAGEMENT AND CONTROL OF HYPERTENSION.

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ABSTRACT

Hypertension is continuously a global public health issue since 50 years, accounts for approximately 17 million deaths a year, one third of which are due to the complications of hypertension including IHD-45% and stroke-51%.^[1] Hypertension itself not a serious problem but complications arising from it becomes life threatening and fatal. Treating the complications of hypertension entails costly interventions draining individuals as well as government budgets. Therefore, there is a need not only to manage but also to control and prevent it before it becomes a major public health problem. In Unani medicine hypertension is described as *Imtila ba hsbul auyiah*, which is basically

a life style problem. *Avicenna* –an eminent physician of Unani medicine advised for *husne tadabeer* i.e. life style modifications (primary prevention). The author tried to highlight all the possible preventive & therapeutic approaches of Unani medicine that could be valuable for the management & control of hypertension as well as for further researches.

KEYWORDS: *Imtila ba hsbul auyiah*, *Imtila ba hasbul quwa*, *husne tadabeer*.

INTRODUCTION

Not very old, theme of the year on World Health Day 2013' was "Hypertension-silent killer, global public health crisis".^[2] Some called it as a disease, some syndrome whereas some called it as a condition whatever be it is, WHO defined *Hypertension* as when the systolic blood pressure equals to or above 140 mmHg and diastolic blood pressure equals to or above 90 mmHg.^[3] Hypertension is both treatable as well as preventable condition. Keeping in consideration the urge to fight with this ever persisting condition, the therapies which are

more efficacious, convenient, and cheap, with least side effects should be adopted. One of such is the *Unani system of medicine*.

As the Unani concept revolves round the four humours (blood, bile, black bile and phlegm), it is mentioned in Unani literature that almost all diseases arise due to the imbalance between these four humours. The disturbance may be in their quality or quantity. Similarly, *Imtila* arises due to disturbed humoral quantity & quality. ***Imtila***- is a condition in which matter gets accumulated in the body, which arises as a result of imbalance between the four humours as well as due to the weakness of faculties' i.e. *quwwate ghazia and quwwate muharrika/quwwate faila*. When these faculties get weakened they become unable to impart proper function to the *akhlat* (humours), hence arises *Imtila*. It is further categorized as *Imtila ba hasbul quwa* and *Imtila ba hasbul auyiyah*.

a. *Imtila ba hasbul quwa*: a condition in which both quantity & quality of humours get disturbed from normal.

b. *Imtila ba hasbul auyiyah*: a condition in which the quantity of blood, pneuma/rooh and *akhlat*/humours increased inside the blood vessels leading to *tammadud* (distension) & *tanav* (tension).^[4]

Imtila ba hasbul auyiah (IBHA)

As this condition resembles to hypertension. Let's have a look over its causes, signs & symptoms, complications from the bottom of Unani text.

Causes of IBHA includes **over production** or **retention of humours** inside the body. One of the cause for over production of humours is the defect in any of the *hazm* (digestion) out of four *huzoome arba* (digestive stages) i.e. poor digestion or poor absorption of food.

Retention of humours may arise due to either weakening of the faculty-*quwwate dafia* (excrete the waste out of the body) or when the faculty-*quwwate masika* (retains the fluid/humours inside the body) becomes strong.

Clinical manifestations of IBHA includes- color of body may change & it becomes red and warm to touch, lethargy, yawning, headache & heaviness in head, cognitive impairment, epistaxis, tinnitus, dizziness, fainting, palpitations, a feeling of tension, increased sleep, pulse will be *mukhtalif* (different), prominent & distended veins, loose motion.

Risk factors mentioned by Unani physicians are-Middle aged individuals(*Sin e kuhulat*), dietary excess, obesity, heavy alcohol consumption, excess of red meat intake, lack of exercise, reduced sleep(*insomnia*), anxiety & cold season. Among all these factors certain can be modified and others cannot like age (non-modifiable risk factor).

Consequences of IBHA- Congestive heart failure (*Imila tajaweefil qalb*) pulmonary oedema, stroke(*Fali*j), renal damage(which was diagnosed clinically as *Sakhnul bole*- increased specific gravity and *Insibaghul bole*- tint in the urine), *Kalalul basar*(impaired vision). *Khunaq* (hypoxia/ischemia), *Sarau*(seizures), *Sakta* (coma), *Baladatul Fikr*(impaired cognitive function), *Ghishyan* (syncope) *Takaddurul Hawas* (impaired sensory function).^[5,6,7]

Looking to all the points since definition till consequences *Imtila ba hasbul auyiah* coincides with the modern day term *hypertension*. Taking into considerations all the above points one can clearly see whether it is definition or clinical manifestations and pathological changes or complications, how accurately Unani physicians described each & everything with minimum diagnostic tools & technique's resources around 2000 yrs. ago. If they were capable of diagnosing any disease it wasn't difficult for them to either manage or control it more accurately.

Unani integrated scheme for the management, prevention and control of hypertension/ *Husne Tadbeer Al Muhim*(life style modifications)

Hypertension is basically a life style problem and *Avicenna* advised for *husne tadbeer* i.e; life style modifications for the management, control and prevention of hypertension.^[8] Following the three basic principles of Unani system of medicine, one can treat as well as prevent the adjured consequences of the *silent killer*-Hypertension. These are

- a. *Ialj bil ghiza* (Dietotherapy)
- b. *Ilaj bil tadbeer* (Regimental therapies)
- c. *Ilaj bil dawa* (Pharmacological treatment)

***Ialj bil ghiza*/Dietotherapy**

For therapeutic purpose- *Taqleele ghiza* i.e. either reducing the quantity of diet or increasing the bulk of food but not the quality like vegetables & fruits.^[9]

Ghiza Mufarrigh food items having diuretic effect (e.g. Corriander, cumin, almonds, carrots, gram etc.) which helps to excrete the excess of humours causing *Imtila*. *Ghiza Mulattif* (dietary items which produces lateef khoon e.g. honey, injeer, pistachio etc). This type of diet helps in thinning of blood. As the thick & viscous madda (matter) gets adhere to the vessel walls & becomes a reason for raised blood pressure.^[10]

For preventive purpose

Following the six essentials of life (*Asbabe sitta zarooria*), if one takes the diet in proper quantity & quality i.e. according to energy consumption per day, proper timings, proper sequence (first *ghiza ghaleez* followed by *ghiza lateef*) & according to habit, can be protected from a number of diseases.^[11]

Ilaj bil tadbeer/ Regimental therapies

The regimental therapies mentioned in Unani system of medicine are basically applied for *Ilaj bil Istiferagh* (evacuation of madda/ matter causing disease and rectifying the humours). These includes *Fasd* / venesection, *Hijamat Bil Shurt*/wet cupping, *Dalak* (massage), *Hammam*/water bath, *Nutool*.

Fasd /venesection a procedure of bloodletting ,provides immediate relief in the symptoms & prevents the complications of hypertension.^[12,13]

Hijamat Bil Shurt /wet cupping another process of relieving *Imtila* in which bleeding is promoted by incising the superficial small vessels, located in muscles. *Hijamat on Al Kahil* (the intra scapular region excluding vertebral column) is recommended for this purpose.^[14]

Dalak/massage: A number of studies showed that massage reduces stress-related hormone levels. Massage with cold temperament oils like roghane banafsha, roghane gul not only dissolve the waste but also opens the skin pores to release the madda/matter out of the body.^[15]

Riyazat /exercise: It is advisable for hypertensive patients not to do vigorous exercise instead mild exercise can be performed.^[16] To prevent body from being attacked by different diseases not only Unani scholars but nowadays WHO also publicized the daily exercise schedule. *Riyazat*, *dalak* and *hammam* are the regimes if regularly adopted by healthy subjects, prevent from communicable as well as non-communicable diseases.^[17]

Hamman/water bath: It dilates the pores of the skin, *tahleel* or give *nuzuj* to the fuzlat(waste) of body and excrete them out of the body via sweating. For preventive purpose, hot water bath is advisable after exercise & before meal but as far as the therapeutic purpose is concerned, *Hippocrates* advised to use cold water bath as cold water draws the *innate heat* inside, which helps in the digestion & excretion of over produced *akhlat*(humours).^[18]

Nutool a technique of dropping oil/decoction of certain drugs on head from some height, is used for therapeutic purpose to relieve headache & heaviness.^[19]

Ilaj bil dawa/Pharmacological treatment

There are a number of anti-hypertensive drugs available like calcium channel blockers, ACE inhibitors, beta-adrenoreceptors etc. but their side effects like weakness, fatigue, leg cramps, depression, hacking cough, skin rashes, swollen ankles, palpitations, anaemia, constipation, fever, diarrhea, heartburn, excessive hair growth, headache, dizziness, numbness & pain in toes, dryness of mouth & eyes, sleeping difficulties etc. always make it troublesome for the users.^[20] Keeping in mind the effect & side effects of anti-hypertensive drugs for prolonged use, the inconvenience & the in affordability, health agencies are running towards their alternatives. Unani system of medicine has a long list of such types of drugs that possess high efficacy & least upshots. These drugs have the properties of *latafat* (thinning of blood), *tahallul* (resolving thick & viscid humour) & *istiferagh* (evacuate the undue amount of matter via micturition).^[21] e.g. *adrak*, *hulba*, *zafran*, *badiyan*, *darchini*, *asrol*, *asgandh*, *zarishk*, *badranjoboya*, *lehsun*, *rehan*, *ushna*, *asaroon*, *badruj*, *bisfaij*, *daroonje aqrabi*, *zaranbad*, *sumbulluttib*, *faranjmushk*, *sandal*, *qaranfal* etc.^[22,23] These drugs were extensively used by our Unani physicians, so undoubtedly they are efficacious in the treatment & control of hypertension. A no. of researches on anti-hypertensive properties of Unani medicines either single or compound formulations have already been carried out and lots more are still going on. As the search never ceases. So, some of the scientific reports in this context are as follows

1. **Zafran**(*Crocus sativus*): showed anti-hypertensive effect in rats.^[24]
2. **Zarishk**(*Berberis vulgaris*): extract of B.V. acts as vasodilator & significantly reduced the arterial blood pressure in Sprague-Dawley rats.^[25]
3. **Kishneez**(*Coriandrum sativum*) crude extract showed hypotensive effect through cholinergic, Ca(2+) antagonist in guinea-pigs. Moreover also exhibits diuretic effect.^[26]
4. **Heel khurd**(*Elettaria cardamomum*): powder of it reduces blood pressure, enhances fibrinolysis and improves antioxidant activity in human subjects.^[27]

5. **Mastagi**(*Pistacia lentiscus*): aqueous extract of it showed antihypertensive activity in Wister rats. Showed anti-oxidant activity due to the presence of flavonoids.^[28]
6. **Citrus** (key lime, bitter orange, Persian lime, lemon, rangpur etc.): auraptene is a bioactive monoterpene coumarin derived from genus citrus, considerably reduced Mean systolic blood pressure in hypertensive rats.^[29]
7. **Aas**(*Myrtus communis*): extracts from the leaves showed anti hypertensive as well as anti oxidant property in rats.^[30]
8. **Asgand**(*Withania somnifera*): demonstrated to possess adaptogenic, anti-inflammatory, antioxidant, anti-platelet, antihypertensive, hypoglycemic and hypolipidemic effects in human subjects.^[31]
9. **Lemun**(*Citrus aurantifolia*): aqueous extract of *Citrus aurantifolia* produces negative inotropic and chronotropic effects on heart muscles & significantly reduced adrenalin and KCl-evoked vasoconstriction in normotensive rabbits.^[32]
10. **Saad koofi**(*Cyperus rotundus*) exhibited relaxing effect on smooth muscles of blood vessels thus, reduced the mean arterial blood pressure in rats.^[33]
11. **Lehsun**(*Allium sativum*): Butanol extract of dried bulb of garlic demonstrated antihypertensive, antioxidant effects in human adults.^[34]
12. **Zaitoon**(*Olea europaea*): lowered systolic & diastolic pressure as well as increased NO i.e. showed anti-oxidant property in human subjects.^[35]

CONCLUSION

Hypertension becoming a major public health problem day by day. It burdens the community with premature mortality & disability. Moreover, its expensive treatment along with the side-effects of drugs compels the people to be irregular with their prescriptions. Hence, alternatives to cope up with this problem are required. Unani system of medicine have full regimen to control & prevent hypertension in time. The regimens are affordable, easy to carry and can be followed with maximum potency & least fall outs. Each and every regimen of Unani system of medicine has its own gravelling effects. Even nowadays WHO, itself accenting on diet control for better prevention of hypertension which is more or less same as described by Unani physicians under *Ilaj bil ghiza*. The medicines being their regional availability & culturally acceptability can be used in PHC to decrease the ratio of mortality & morbidity. However, extensive researches on Unani drugs need to be carried out to validate their effects & side-effects scientifically.

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