

Principles and Practices of Geriatric in the Unani System of Medicine

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ABSTRACT

As the population ages, the increasing prevalence of chronic diseases and complex medical conditions will have profound implications for the future healthcare system. Soon the world will have more population of older people than children and more people at extremely old age than ever. Therefore, the importance of maintenance of health and well-being in older age is increased many folds to reduce dependency and disability. In today's world research on health issues related to aging is being done and the need for Geriatric i.e., care of the aged is being addressed at national and global levels. In this scenario, the Unani system of medicine (USM) can do wonders if its regimes and lifestyle modifications that are explained under *Tadābīr-i-mashāyikh* (geriatric) are adopted. Geriatric is explained based on the concept of aging in USM. Aging is described based on the amount of *rutūbat gharīziyya* (innate moisture) and its ability to protect *harārat gharīziyya* (innate heat). Literature related to this topic is collected from classical books of Unani medicines and their translations as well as modern medicine, journals, reports, etc. The aim of this paper is to highlight the approach of Unani physicians to geriatric.

Keywords: *Tadābīr-i-mashāyikh*; Geriatric; Aging; Unani Medicine

INTRODUCTION

No one in this world is immortal. It is a fact that death is the only truth of this life.

According to the World Health Organization, aging is a course of the biological reality that starts at conception and ends with death.^[1] Aging is the lifelong process of growing older at the cellular, organ, or whole-body level throughout life.^[2] The study of the physical and psychological changes that are incident to old age is called gerontology. The care of the aged is called clinical gerontology or geriatric.^[3] In many developed countries, the age of 60 is considered equivalent to retirement age and it is said to be the beginning of old age.^[1] For the year 2010 the estimates are 8% of the total population was above the age of 60 years and is likely to rise to 19% by 2050.^[3] In some countries, the sheer number of people entering older ages will challenge the national infrastructures, particularly the health system. This dramatic numeric surge in older people will be seen in China and India the world's two most populous countries where a population of older people over age 65 years will likely swell to 330 million and 227 million by 2050 respectively.^[4] This expected surge in the older population requires a set of measures to be adopted for the maintenance of their well-being. In USM the care of the aged (above 60 years) is known as a *tadābīr-i-mashāyikh*.^[5]

Asnān arba'a (four phases of life): In the Unani system of medicine, human life is categorized into four stages which are

known as *asnān arba'a*. It is based on the quantity of *rutūbat gharīziyya* and its ability to protect *ḥarārat gharīziyya* (innate heat).^[6]

These four stages of human life are as follows:

Table 1: Quantity of *rutūbat gharīziyya* in the body with respect to different stages of life

S. No.	Stage	Duration	Quantity of <i>rutūbat gharīziyya</i>
1.	<i>Sinn-i-namū</i> (Growing age)	From birth to 30 years of age	It is more than that is required for the protection of <i>ḥarārat gharīziyya</i>
2.	<i>Sinn-i-shabāb</i> (adulthood)	From 30 to 40 years of age	It is sufficient for the protection of <i>ḥarārat gharīziyya</i> .
3.	<i>Sinn-i-kuhulat</i> (Age of decline)	From 40 years to 60 years of age	It is insufficient for the protection of <i>ḥarārat gharīziyya</i>
4.	<i>Sinn-i-shaykhūkhat</i> (Age of superannuation)	Above 60 years of age	It is insufficient for the protection of <i>ḥarārat gharīziyya</i> , the dominance of <i>rutūbat ghrība</i> .

In USM aging is explained based on the quantity of *rutūbat gharīziyya* that can protect *ḥarārat gharīziyya*. It is a fact that a set amount of *rutūbat gharīziyya* is present in the human body by birth.^[7] Ibn Sina was of the view that every individual receives *rutūbat gharīziyya* from parents at the time of conception.^[8] There is a gradual reduction in the quantity of *rutūbat gharīziyya* with increasing age due to its *tahallul* (dissolution).^[7] Decrease in *rutūbat gharīziyya* is responsible for the weakening of *ḥarārat gharīziyya* because *rutūbat gharīziyya* provides matter for it.^[6,9] Relationship of *rutūbat gharīziyya* to *ḥarārat gharīziyya* is best understood by the example of the fuel of a lamp and its flame respectively.^[5,6,10] If *rutūbat gharīziyya* vanishes, *ḥarārat gharīziyya* gets extinguished and death occurs.^[8] It is a fact that even at birth, the quantity of *rutūbat gharīziyya* is smaller that is not sufficient to sustain life for a long period. Food is taken as a replenishing substance, and it assists *rutūbat gharīziyya* in the sustenance of life for a definite period. Intake of food minimizes the dissolution of *rutūbat gharīziyya* up to a certain age.^[10] With advancing age, the quantity of *ḥarārat gharīziyya* decreases resulting in the formation of *rutūbat ghrība* (morbid moisture). This *rutūbat ghrība* further decreases *ḥarārat gharīziyya* leading to the weakening of *quwā* (faculties) of the body.^[5] In *sinn-i-shaykhūkhat*, weak *ḥarārat gharīziyya* and the presence of *rutūbat ghrība* bring gradual loss in functions due to the weakening of all three *quwā* i.e. *quwat tabi'iyā* (natural faculty), *quwwat*

haywaniyya (vital faculty) and *quwwa nafsāniyya* (psychic faculty).^[7,11]

Maintenance of health:

Health is one of the two states of the human body and there are causes for the state of health of the body known as *asbāb siḥḥat* (causes of health). Moderation in *asbāb sitta ḍarūriyya* (six essentials of life) and *asbāb ghayr ḍarūriyya* (non-essential cause) *ghayr muzaddah* (beneficial to health e.g., medicines) according to individual's *mizāj* and age, along with avoidance of *asbāb ghayr ḍarūriyya* (non-essential cause) *muzaddah* (harmful to health e.g., poisons) are considered as *asbāb siḥḥat*. So far as the maintenance of health is concerned, these *asbāb siḥḥat* should be maintained.^[6] Maintenance of health at every stage of life is important. It is a fact that *mizāj* of the human body keeps changing in every stage of life. With advancing age, there is an increase in *yubūsat* (dryness) as well as *burūdat* (coldness) in *mizāj* of the human body due to a decrease in *ḥarārat gharīziyya*.^[6,10] Most of the health problems of old age are due to *burūdat* and *yubūsat* of *mizāj*. A decrease in *ḥarārat gharīziyya* leads to weakness in faculties and results in an increased tendency to produce morbid matter due to weak digestive faculty.^[10,12] The art of maintaining health is taking all the measures to minimize/limit the rapid dissolution of *rutūbat gharīziyya* and to protect *ḥarārat gharīziyya* for a longer duration.^[10]

Tadābīr-i-Mashāyikh:

The comprehensive approach of the Unani medicine system for maintaining health and preventing old-age problems is known as *tadābīr-i-mashāyikh*. It is a systematic plan that embraces various recommendations related to moderation and modification of *asbāb darūriyya* and *ghayr darūriyya* (essential and non-essential factors) to raise the quality of life in old age. These are *Hawā'* (air), *Ma'kūl-o-Mashrūb* (food and beverages), *Harkat-o-Sukūn Badanī* (bodily movement and repose), *Harkat-o-Sukūn Nafsānī* (psychic movements and repose), *Nawm-o-Yaqza* (sleep and wakefulness), *Istifragh wa Ihtibās* (evacuation and retention), *dalk*, hammam, and *nutool*, etc. All the therapies for the prevention and management of old age should be based on *musakhkhinat* (calorific) and *murattibat* (humectant).^[5,7,10]

Based on *asbāb sitta darūriyya* and *ghayr darūriyya* following are the recommendations of Unani physicians for the maintenance of health and prevention of old-age problems:

1. **Hawā'**: The temperament of the surrounding air is hot and moist.^[6] But seasonal variation, various geographical conditions, and some other factors affect the quality and essence of air. Dry air is not suitable for old age people. Similarly, the cold air of the winter season is also not suitable for old age people as it may cause joint pains, hemiplegia, and other phlegmatic diseases.^[8] *Mu'tadil* air like *mausam-i-rabi'* (spring season) is considered best for them because of its temperament.^[5] Places with harsh climatic conditions either due to geographical conditions or some other factors are not suitable for old age people. Similarly, Unani physicians were of the view that any change in the *jawher* (essence) of air also has an adverse effect on health.^[8] There is growing evidence suggesting adverse effects on lung function related to long-term exposure to ambient air pollution. Few studies have assessed

long-term mortality in the elderly. It is still unclear what are the pollutants most damaging to the health of the elderly. It seems that elderly subjects are more vulnerable to particulate matter (PM) than to other pollutants, with a particular effect on daily cardio-respiratory mortality and acute hospital admissions.^[13]

2. **Ma'kūl-o-Mashrūb**: Unani physicians recommended specific dietary regimens for individuals according to their temperament. There is a dominance of *burūdat* (coldness) and *yubūsat* (dryness) in old age hence *musakhkhin* (calorific) and *murattib* (humectant) diets are advised to improve the lifestyle of old age people.^[14]

Renowned scholar Zakariya Razi has advised that a person should not take a quantity of meal that is beyond his *quwwat hādima* (digestive capability).^[15] Elderly people have weak digestion so they should take light and easily digestible diets.^[8] So far as quantity and the number of meals are concerned Unani physicians advised small and frequent meals to the elderly considering their weak digestive faculty.^[16]

Chicken, partridge, and meat of yearling goat or sheep are recommended because of their hot and moist temperament.^{10,16} Studies show that poultry meat provides good nutrition and it contains 15 to 35 % of protein with a low content of collagen (a structural protein) that make it easily digestible. Also, the composition of poultry fat is another favourable characteristic as it includes significant amounts of monounsaturated fatty acids (only a third of total fat is made up of saturated fatty acids).^[17] It is known that meat from older sheep is tougher due to the increased level of cross-linking of collagen that reduces the solubility of collagen during cooking, making meat more difficult to chew.^[18] According to Unani Physicians with age, dryness increases in the body of humans

as well as animals. For this reason, they recommended the yearling sheep and goats, etc. Beef should be avoided by them as it increases dryness in their body.^[11] Consumption of heavy foods like salted fish, brinjal, lentils, beans, cheese, etc. should be avoided by the elderly because of their weak digestive faculties.^[16] The use of onion, ginger, and garlic is also beneficial for them as they aid in improving their digestion.^[10,16] Milk should also be included in their diet for nutrition if they are able to digest it. Milk of goat is considered best for them.^[10] It is clear that goat milk fat is a concentrated energy source, evidenced by observing that one unit of this fat has 2.5 times more energy than common carbohydrates. The fatty composition of goat's milk is primarily responsible for its properties against high cholesterol as it prevents excess saturated fatty acids from being absorbed from the body, consequently reducing the concentration of LDL cholesterol and triglycerides and increasing HDL cholesterol concentration. It is a fact that goat milk has more fat than cow milk i.e., 4.1 vs. 3.5% sometimes reaching 5.5%. But the size of the fat globules of goat's milk is small as compared to that of the fat globules in cow's milk (2 µm in goat's milk versus an average of 3-5 µm in cow's milk), which has been associated with better digestibility. Also, goat milk contains omega-3 fatty acids that support neuronal repair, growth, and memory. Hence, goat milk could be regarded as complementary medicine in the management of dementia.^[19]

Ma'al-sha'ir (Barley water) is one of the best diets for the elderly, as it helps to evacuate abnormal humors from the body. Barley water is also beneficial for old age people suffering from *barid amrād* (cold diseases) like paralysis and bell's palsy.^[20] Fresh figs and plums in summer and dried figs cooked in honey water are advised to take in winter

because of their laxative properties and high nutritional value. It is a fact that due to dryness in old age, people tend to develop constipation.^[10] Consumption of Spinach, lettuce, and beetroot should not be discouraged.^[16]

Consumption of cold water should be avoided by the elderly as it lowers the *ḥarārat gharīzīyya*.^[21] Especially in winter, they should avoid drinking cold water and other cold beverages as it may increase the production of phlegmatic matter in the body by decreasing their digestive capability. So far as the consumption of wine is considered, red wine is considered best for them because of its temperament and nutritional value.^[6,16]

3. ***Harkat-o-Sukūn Badanī***: For a healthy life, moderation in *Harkat-o-Sukūn Badanī* is very important. In old age, their bodily movements decrease and they become easily tired due to weakness of their faculties. But bodily movements or physical activity in moderation are necessary for the removal of unwanted substances or waste especially the waste that generates in the fourth stage of digestion i.e., *ḥaḍm 'udwi* (tissue digestion). Removal of these wastes is necessary otherwise they will get accumulated and produce diseases.^[8] Being physically active throughout life is considered a protective factor against many chronic diseases and age-related loss of function. Moreover, physical activity can have physiologic effects, such as changes in endorphin and monoamine levels or a decrease in the level of the stress hormone cortisol, which can improve mood.^[22] Unani physicians recommended doing some exercises or a daily walk at least.^[8] Moderate exercise not only helps in digestion and excretion but also stimulates *ḥarārat gharīzīyya*.^[23] Exercise should be in accordance with their bodily condition. They should also take care of weak parts of their body during exercise to avoid

any major harm. e.g., In the case of vertigo, lower body exercise is advised.^[13,20] Several studies have proven that physical exercise of moderate intensity, combined with aerobic and resistance training, could be appropriate for decreasing depressive symptoms in older adults.^[22]

4. **Harkat-o-Sukūn Nafsānī:** Moderation in *harkat-o-sukūn nafsānī* is key to a healthy life. Any immoderation in this factor always costs the health of people of any age, especially the elderly. Grief, anger, fear, etc. cause sudden or gradual movement of *rūḥ* (pneuma). So, any excess in these emotions causes frequent movements of pneuma that lead to the dissolution of *rūḥ* resulting in disruption of the normal functioning of the body. Similarly, excessive worry, or any other type of mental stress, etc. also has an adverse effect on health. The elderly are more likely to suffer from depression due to their spare time and loneliness. To keep them healthy, every step should be taken to bring moderation in their *harkat-o-sukūn nafsānī*. e.g., They should not be left alone but instead kept busy.^[6,10] Research suggests that the elderly population benefits from supportive social connections and close personal relationships but suffers as a result of disrupted personal ties and loneliness.^[24]
5. **Nawm-o-Yaqza:** Moderation in sleep and wakefulness is necessary for the maintenance of health. Sleep gives rise to moistness in the body.^[6] Elderly people require more rest and sleep^[25] in comparison to people of other age groups because of their temperament. Also, in old age, people are more likely to suffer from decreased and disturbed sleep because of the dominance of dryness in their brains.^[26] This leads to the excess dissolution of *rūḥ* and weakness of *ḥarārat gharīziyya* resulting in decreased digestion and metabolism as well as general weakness. Unani physicians advised them to increase the duration of sleeping hours. And to combat decreased and disturbed sleep, massage, and irrigation therapies are advised.^[6,8,10] There are studies showing that massage therapies improve sleep quality in patients with CHF and breast cancer.^[27] Research to establish the link between massage therapy and good-quality sleep in the elderly might be done in the future.
6. **Istifragh-o- Ihtibās:** Immoderation in depletion and retention has an adverse effect on health. In elderly people, because of the decreased *ḥarārat gharīziyya* and weakness of *quwa* (faculties), depletion and retention get disturbed easily. They get easily constipated because of *yubūsat* in their *mizāj*. So, laxatives should be given to them. But they should not be given strong purgatives. Similarly, *faṣd* (bloodletting), *ḥuqna* (strong enemas) should also be avoided.^[8,10]
7. **Dalk (massage):** *Dalk* of moderate intensity is advised for old-age people with or without oil. Weak and painful areas should be avoided during massage. Hot oil like olive oil and almond oil are good for them because they provide *taskhīn* (warmth) and help in retaining *ruḥbat* of the body.^[10,28] Massage prevents the episode of fever by decreasing the susceptibility of organs towards *ufūnat*.^[10]
8. **Hammām (a type of medicated bath):** It should be done regularly with fresh and lukewarm water at least once a week or according to the body strength of old age people. *Hammām* reduces the dryness of the skin and provides gentle warmth and a moderate amount of moisture. It relaxes the body and induces sleep.^[17]
9. **Natūl (irrigation):** It is one of the important regimes for the correction of insomnia in old age people. The oil should be *muraṭṭib* (moist) and *munawwim* (hypnotic) in nature for *natūl* to treat insomnia.^[29]

CONCLUSION

After going through the relevant Unani literature on aging and geriatric, it can be inferred that with age, *rutūbat gharīzīyya* decreases causing diminution of *ḥarārat gharīzīyya* that leads to *burūdat* and *yubūsat* of *mizāj*. This very *mizāj* is responsible for various old age-related complaints. Also, the diminution of *ḥarārat gharīzīyya* helps in the production of *rutūbat ghrība* which further aids in the development of old age-related complaints. To avoid as well as minimize these age-related health issues Unani physicians described various diets and regimes under *tadābīr-i-mashāyikh*. Research has proved that by practicing their recommended regimes many of the old age-related health issues can be minimized. It's high time to propagate this knowledge so that old age people benefit by practicing it in their day-to-day lives.

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REFERENCES

1. Amarya S, Singh K, Sabharwal M. Ageing Process and Physiological Changes. 2021 march. Available from: <http://dx.doi.org/10.5772/intechopen.76249>
2. Naja S, Makhlouf MMED, Chehab MAH. An ageing world of the 21st century: a literature review. International Journal of Community Medicine and Public Health. 2017 Dec; 4(12):4363-69.
3. K. Park. Textbook of preventive and social medicine. 23rd ed. Jabalpur: Banarsidas bhanot publications; 2015.
4. World Health Organisation. Global Health and ageing. 2021 Jul. Available from: https://www.who.int/ageing/publications/global_health.pdf
5. Majoosi AA. Kamil-us-Sana. New Delhi: Idara Kitabus-Shifa; 2010.
6. Nafis BU. Kulliyat-e-Nafisi. New Delhi: Idara Kitabus-Shifa; 1954.
7. Ahmad SI. Kulliyat-e-Asri. New Delhi: New Public Press; 1983.
8. Ibn Sina. Al Qanoon fit Tibb. New Delhi: Idara Kitabus-Shifa; YNM.
9. Itrat M, Zarnigar, Haque N. Concept of ageing in Unani medicine. Int. J. Res. Ayurveda pharm. 2013; 4(3):459-62.
10. Ibn Sina. Kulliyat-e-Qanoon. New Delhi: Aijaz publication house; YNM.
11. Masihi AS. Kitab ul-Miya. New Delhi: CCRUM; 2008.
12. Nisa S, Allaqband SM, Iqbal M, Kawoosa SH, Farooq R et al. Concept of Shakhukhat (old age) in Unani medicine. Int J Adv Pharm Med Bioallied Sci. 2017 Jul;1-5.
13. Simoni M, Baldacci S, Maio S, Cerrai S, Sarno G, Viegi G. Adverse effects of outdoor pollution in the elderly. J Thorac Dis. 2015 Jan; 7(1): 34-45.
14. Fahamiya N, Shiffa M, Muzn F. Enlightenment on Unani concept of ghiza (diet) in modern perspective. WJPLS. 2016; 2(6):472-79.
15. Razi Z. Kitab-ul-Mansuri. New Delhi: CCRUM; YNM.
16. Baghdadi I. Kitab-ul-Mukhtar-at-Fil-Tibb. New Delhi: CCRUM; 2005.
17. Marangoni F, Corsello G, Cricelli C, Ferrara N, Ghiselli A, Lucchin L, et al. Role of poultry meat in a balanced diet aimed at maintaining health and wellbeing: an Italian consensus document: Food Nutr Res. 2015; 59:10.
18. Mashelea GA, Parkerb ME, Schreursa NM. Effect of slaughter age between 5 to 14 months of age on the quality of sheep meat. Proceedings of the New Zealand Society of Animal Production. 2017; Vol 77:177-80.
19. Kaura S, Parle M, Insa R, Yadav BS, Sethi N. Neuroprotective effect of goat milk. Small Ruminant Research. 2022 Sep; Vol 214.
20. Shah MH. The General Principles of Avicenna's Canon of Medicine. New Delhi: Idara Kitabus-Shifa; 2007.
21. Anjum R, Siddiqui A. Preservation of old age with Unani system of medicine. International Journal of Herbal Medicine. 2017; 5(5):94-96.
22. Sahoo T. Role of exercise in older adults. Journal of Geriatric Care and Research. 2023; 10(1) :08-10.
23. Harwi MY. Ain-ul Hayat. Aligarh: Ibn Sina Academy; 2007.
24. Singh A, Misra N. Loneliness, depression and sociability in old age. Ind Psychiatry J. 2009 Jan-Jun; 18(1):51-55.

25. Tabari R. Firdaus-ul Hikmat. New Delhi: Idara Kitabus-Shifa; 2010.
26. Arzani MA. Tibb-e-Akbar. Deoband: Faisal Publication; 1870.
27. Kashani F, Kashani P. The effect of massage therapy on the quality of sleep in breast cancer patients. Iran J Nurse Midwifery Res. 2014 Mar; 19(2):113-8.
28. Jurjani I. Zakheera khwirizam Shahi. Vol. 3rd. New Delhi: Idara Kitabus-Shifa; 2010.
29. Rizwana AA, Sherwani AMK, Hafeel MHM. Tadabeere mashaikh (regimens for elderly) in Unani system of medicine. EJPMR. 2015; 2(5):249-5

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