



Version 1: Received: 12 January 2021 / Approved: 20 January 2021 / Online: 21 January 2021

Elderly Care with Unani Medicine

Mohammad Hashir

School of Unani Medical Education and Research, Jamia Hamdard, New Delhi-110062

Email: *****

ABSTRACT

Ageing is a normal, inevitable and universal phenomenon which is result of progressive deterioration in the body. A person is said elderly or old when he reaches to an age of 60 years. United Nations also defined a person elderly whose age is 60 years and above. Better health status of elderly people can help to protect them from communicable and non-communicable diseases, physical dependencies and psychological problems like depression, loneliness etc. It will also make them socially active and economically productive. *Tadābīr-i-mashāikh* are a set of advisory guidelines based on the *asbab-i-sittah zarūriyah* (six essential factors) which are described in Unani medicine for the maintenance of good health in old age. In general, it is advisable that the *tadābīr* for old people should be *Muraṭṭib* (moist, to compensate for the loss of *ratūbat-i-gharīziyah*), and *Musakhkhin* (calorific, to compensate for the loss of *ḥarārat-i-gharīziyah*). *Emblica officinalis*, *Zingiber officinale*, *Myristica fragrans*, and *Cinnamomum zeylanicum* are some of the drugs described in unani medicine for health maintenance in old age.

Keywords: Ageing, Unani medicine, *Tadābīr-i-mashāikh*, *Sinn-e-shekhūkhat*

1. Introduction

Ageing is a normal, inevitable and universal phenomenon which is result of progressive deterioration in the body. A person is said elderly or old when he reaches to an age of 60 years. United Nations also defined a person elderly whose age is 60 years and above. We are living in an era of ‘demographic transition’, i.e. increased population of elderly, for two reasons:

- Increase in the number of old people: The number of people aged 60 years or older will rise from 900 million to 2 billion between 2015 and 2050 (moving from 12% to 22% of the total global population).

Copyright © 2021. The Author(s). This is an open access preprint (not peer-reviewed) article under [Creative Commons Attribution-NonCommercial 4.0 International](https://creativecommons.org/licenses/by-nc/4.0/) license, which permits any non-commercial use, distribution, adaptation, and reproduction in any medium, as long as the original work is properly cited. **However, caution and responsibility are required when reusing as the articles on preprint server are not peer-reviewed.** Readers are advised to click on URL/doi link for the possible availability of an updated or peer-reviewed version.

How to Cite:

Mohammad Hashir, “Elderly Care with Unani Medicine”. *AIJR Preprints*, 278, Version 1, 2021.

- Faster rate of ageing than before: We also know that population ageing is happening much more quickly than in the past. For example, while France had almost 150 years to adapt to a change from 10% to 20% in the proportion of the population that was older than 60 years, places such as Brazil, China and India will have slightly more than 20 years to make the same adaptation. In 2011 elderly population of India constituted 8.2 percent of the total population which is second largest in the world (1).

In addition, population ageing is happening much more quickly than in the past. Also, overall, people are living longer. Overall life expectancy for a baby born today is 71 years. But a person who is currently 60 years of age can expect to live 20 years more, on average. A longer life brings with it unique opportunities, not only for older people and their families, but also for societies as a whole. Additional years provide the chance to pursue new activities such as further education, a new career or pursuing a long-neglected passion. Older people also contribute in many ways to their families and communities (2,3).

2. Factors associated with ageing

Only a small proportion of health is due to genetic inheritance. Most is due to ongoing interactions between broader characteristics of individuals and the environments they inhabit. Our personal characteristics include factors such as our sex and ethnicity, as well as our occupation, educational attainment, and wealth. These contribute to our social position and to our ability to access resources. Our environments include our home, neighbourhood and community. Factors that influence ageing include where we live, our transportation options, and the health-care systems and long-term care systems that we can access. The relationship we have with our environments varies according to many personal characteristics, including the family we were born into, our sex and our ethnicity. Importantly, these factors start to interact with each other and to influence ageing from childhood, onwards (4,5).

3. Physiological changes in ageing

- Osteoporosis, vertebral compression
- Increased fat to lean body mass ratio
- Decreased muscle mass
- Decreased total body water
- Increased peripheral vascular resistance
- Decreased Forced Expiratory Volume, less effective ciliary action

- Thinning of alveolar wall
- Decreased production of erythropoietin (6–8)

These physiological changes give rise to a number of physical and social problems such as:

- Physical health problems
- Physical health problems
- Socio-economical setbacks (9,10)
- Increased longevity is associated with multiple chronic conditions like
 - Declination in health
 - Reduced mobility
 - Depression
 - Isolation and loneliness (11,12)
- Socio-economic and cultural changes, particularly increased physical and economic dependence (13).
- Incidence of NCDs (non-communicable diseases) increases with increase in age- It is predicted that by 2020 more than two third of the deaths in developing countries will be due to ageing related NCDs (14).

4. The concept of ageing and quality of life in Unani medicine

More than two thousand years ago the discussion about quality of life was started by Aristotle (384-322 BC). He stated, “*Good life is not only something to live for but also something to live by*”. Many recent studies have conclusively proven that a feeling of being healthy and fit is related to a better quality of life. Physical and psychological health has a direct impact on functional ability, emotional well-being, and social well-being, and vice-versa. The uniqueness of Unani medicine is its holistic approach towards maintenance of physiological processes to delay ageing, hence, it has great potential in preventive geriatrics (15–17).

4.1.Asnān-e-Arba’

In Unani medicine, the lifespan is divided into four stages:

- *Sinn-e-Namū*: the stage of *growth*, which lasts upto the age of 30 years
- *Sinn-e-Waqūf*: the stage of *stability*, lasts upto the age of 35-40 years

- *Sinn-e-Kahūlat*: the stage when *quwa* start to decline, but some strength persists. This lasts upto the age of 60 years.
- *Sinn-e-shekhūkhat*: the stage in which *inḥiṭāṭ* (decline) occurs, and ultimately leads to death (18,19)

4.2.Changes in the body with age

A finite amount of *ḥarārat-i-gharīziya* (innate heat or vital spirit) present at the time of birth which is gradually consumed over time and little remains in advance age - Aristotle (384-322 BC). This innate heat can be fortified but cannot be restored to its original level. Hence, the *mizāj* begins to incline towards *barūdat* and *yabūsat* with time. The gradual loss of *ḥarārat-i-gharīziyah* leads to decline of *raṭubāt-i-gharīziyah* (protoplasm). Hence, there is a decline in *quwa* (powers and faculties) which lead to the ageing process (20,21).

With the gradual decline of *ḥarārat-i-gharīziyah* and *raṭubāt-i-gharīziyah*, the *mizāj* in old age gradually becomes *bārid* and *yābis* (*saudawi* or melancholic). The *saudāwi mizāj* is responsible for many conditions and diseases which are caused by *saudāwi* humor:

- Psychological disturbances like irritability, depression, difficulty in falling asleep, reduced sleep, forgetfulness and fearfulness occur.
- Excess of *sauda* also makes a person more prone to diseases like constipation, insomnia, amnesia, discoloration of skin, dry skin conditions and more severe diseases like cancers (19,20,22).

Therefore, ageing changes may be said to be a result of declining *ḥarārat-i-gharīziyah* and *ratubāt-i-gharīziyah* (23). Therefore, the key to preventing ageing (not old age) lies in maintaining these two.

4.3.Strategies for healthy ageing in Unani Medicine

Better health status of elderly people can help to protect them from communicable and non-communicable diseases, physical dependencies and psychological problems like depression, loneliness etc. It will also make them socially active and economically productive. It is necessary to know about the quality of life and factors associated with it. Education in self-care is advantageous for elderly themselves as well as to reduce some of the burden on the health services.

5. *Tadābīr-i-Mashāikh* (Elderly care)

These are a set of advisory guidelines based on the *asbab-i-sittah zarūriyah* (six essential factors) which are described in Unani medicine for the maintenance of good health in old age (24). The guidelines are based on *Ta'dīl-i-mizāj* (modulation of temperament) by *Tarṭīb* (humectation) & *Taskhīn* (calorification) with the aims to:

- protect *ratūbat-i-gharīziyah* and *ḥarārat-i-gharīziyah* for as long as possible
- remove *fāsīd mawād* (morbid material) from the body from time to time through natural methods (20,25,26)

In general, it is advisable that the *tadābīr* for old people should be *Muraṭṭīb* (moist, to compensate for the loss of *ratūbat-i-gharīziyah*), & *Musakhkhin* (calorific, to compensate for the loss of *ḥarārat-i-gharīziyah*) (27).

5.1. Dietary advises in old age

- Meals should be short and frequent keeping in mind their *quwā*
- Meals should constitute *mulayyināt* (laxatives) and should be *jayyid-ul kaymūs*
- *Ghalīdh* (difficult to digest) *ghidha* should be avoided, especially which is *mowallid-i-sauda* or *mowallid-i-balgham*.
- Goat milk is preferred among others. *Ma-ul Asl* may be used in winters (28).
- *Roghan-i-zaitūn* (Olive oil), carrots, *chuqandar* (beetroot), *karafs* (celery) etc are preferred as diet. Garlic should be taken in moderation as it may cause *yabusat*. *Injīr* (Fig fruit), *Aalu bukhara* (Plum) and similar fruits may be used in summers.

5.2. *Tadabīr* (Regimes)

- Old people should get more sleep than younger people
- Excess *Balgham* (phlegm) should be expelled through intestinal or urinary route
- Moderate and gentle massage with oils is beneficial in old age (29)
- Walking is preferred as a form of exercise (30)

5.3. Riyāzat (exercise/ physical activity)

- Type and extent of physical activity should be individualized depending on general health
- Walking is preferred as a form of exercise
- Specific *riyāzat* (exercise) may be advised for different organs if walking is not possible, for instance, breathing exercises (19,31,32).

5.4. Other guidelines

- Regular massage should be done to strengthen the body. Massage should be done for short duration with moderate pressure. It may be repeated when necessary (29).
- *Mufatteh-sudad* (deobstruent) measures should be taken regularly. *Hammam* (33), oil massage and diet such as barley, honey, *zufa* (*Hyssopus officinalis*) and *parsiyaoshan* (*Adiantum capillus-veneris*) are advisable for this purpose.
- Strong *Huqna* (enema) should not be given (18,34).
- Old people should be involved in recreational activities of their choice (15,23,35).

5.5. Some Unani drugs used for prevention of geriatric diseases (36–38)

Drug	Botanical/ scientific name	Actions	Therapeutic / prophylactic uses
<i>Amla</i>	<i>Emblica officinalis</i>	<i>Mufarreh</i> (exhilarant), <i>muqawwi</i> (tonic), <i>musakkin</i> (sedative/ palliative)	<i>Khafqan</i> (palpitation). <i>Zo'f-e-basr</i> (weakness of eye sight), <i>zo'f-e-dimagh</i> (cerebral weakness, memory problems)
<i>Zanjabeel</i>	<i>Zingiber officinale</i>	<i>Muharrrik</i> (stimulant), <i>mushtahi</i> (appetizer), <i>Hazim</i> (digestive), <i>Kasir-e-Riyah</i> (anti-flatulence)	<i>Zo'f-e-A'sab</i> (falij, laqwa etc), <i>su-e-hazm</i> (dyspesia), <i>nafkh-e-shikam</i> (flatulence)
<i>Bisbasa</i>	<i>Myristica fragrans</i>	<i>Mufarreh</i> (exhilarant), <i>muqawwi</i> (general tonic), <i>mujaffif wa munaffis-e-ratubat</i> (expectorant and desiccator of vicious humors)	<i>Zo'f-e-qalb</i> (cardiac weakness), <i>Zo'f-e-me'da</i> (gastric weakness), <i>nafkh-e-shikam</i> (flatulence), <i>su'al-e-balghami</i> (cough caused by phlegmatic humor), <i>sulas-al-bawl</i> (incontinence of urine)
<i>Darchini</i>	<i>Cinnamomum zeylanicum</i>	<i>Muqawwi-wa muharrrik-e-qalb</i> (cardiotonic and stimulant), <i>kasir-e-riyah</i> (carminative), <i>dafa-e-ta'fun</i> (antiseptic)	Especially beneficial in cardiac diseases, also used in <i>zo'f-e-hazm</i> (indigestion), diarrhoeal disorders, chronic cough

<i>Halela</i>	<i>Terminalia chebula</i>	<i>Muqawwi-e-dimagh</i> (brain tonic), <i>muqawwi-e-me'da wa am'a</i> (tonic for stomach and intestines)	<i>Nisyan</i> (amnesia), <i>weakness of eyesight</i> , to prevent graying of hair.
<i>Injeer</i>	<i>Ficus carica</i>	<i>Mulayyin</i> (laxative), <i>mulattif</i> (demulscent), <i>mughazzi</i> (nutritive), <i>musammin-e-badan</i> (enhances body weight)	<i>Qabz</i> (constipation), <i>Dama</i> (asthma), <i>Cough</i> , <i>huzaal</i> (asthenia), <i>discoloration of skin</i> . Fresh fruits should be used for constipation.
<i>Kalonji</i>	<i>Nigella sativa</i>	<i>Muhallil</i> (resolvent), <i>kasir-e-riyah</i> (carminative), <i>muqawwi-e-a'sab</i> (nervine tonic)	<i>Nisyan</i> (amnesia), <i>faliy</i> (paralyssi), <i>ra'sha</i> (tremors), <i>zo'f-e-a'sab</i> (neurological weakness)
<i>Badranjboya</i>	<i>Mellisa officinalis</i>	<i>Mufarreh</i> (enhilarant), <i>muqawwi-e-qalb</i> (cardiotonic)	Used for strengthening of heart.
<i>Marjan</i>	<i>Corallium rubrum</i>	<i>Mufarreh</i> (enhilaratnt), <i>muqawwi</i> (tonic), <i>habis</i> (styptic)	<i>Wahshat</i> (trepidation), <i>khafqan</i> (palpitation), <i>waswasa</i> (obsession), <i>general weakness</i>
<i>Sadaf</i> (used as kushta)	<i>Pinctada margaritifera</i>	<i>Muqawwi-e-a'sab</i> (nervine tonic), <i>munaffis-e-balgham</i> (expectorant of phlegm), <i>dafa-e-sammiyat</i> (antidote)	<i>Zo'f-e-a'sab</i> (neurological weakness), <i>ra'sha</i> (tremors), <i>tap-e-diq</i> (tubercular fever), <i>hudaar</i> (rheumatism), <i>nigras</i> (gout)
<i>Brahmi</i>	<i>Hydrocotyle asiatica/ Bacopa monnieri</i>	<i>Muqawwi-e-a'sab</i> (nervine tonic), <i>Muqawwi-e-dimagh</i> (brain tonic), <i>musakkin</i> (calming)	<i>Zo'f-e-hafiza</i> (amnesia), <i>suda'</i> (headache), <i>zo'f-e-basr</i> (weakness of sight), <i>junoon</i> (insanity)
<i>Jadwar</i>	<i>Delphinium denudatum</i>	<i>Musakkin</i> (analgesic), <i>muhallil-e-warm</i> (anti-inflammatory), <i>muqawwi-wa-musakkin e a'sab</i> (nervine tonic and palliative)	<i>Inflammatory fevers</i> , <i>tonsillitis</i> , <i>chronic respiratory infections</i> , <i>istarkha</i> (atonicity), <i>khidr</i> (numbness), <i>prophylactic during epidemics</i>
<i>Ajwain Khurasani</i>	<i>Hyoscyamus niger</i>	<i>Mushtahi</i> (appetizing), <i>kasir-e-riyah</i> (carminative), <i>dafa-e-ta'fun</i> (anti-septic), <i>dafa-e-tashannuj</i> (antispasmodic)	<i>Nafkhe shikam</i> (Flatulence), <i>zo'f-e-hazm</i> (indigestion), <i>qulanj</i> (colic), <i>diarrhoeal diseases</i>

6. Conclusion

Healthy ageing is an investment, not an expenditure. In reality, older people make many positive contributions to society; and health and social care costs for older people are an investment rather than expenditure. These investments bring benefits to older people and returns for society as a whole. Hence, old age should not equate with ill-health. Infact, most of the health problems associated with ageing are preventable. Therefore, we need to study the factors which bring about ill-health with advancing age. A literature review of unani textbooks provides important solutions towards a healthy ageing.

7. Competing Interests

The author declared that no conflict of interest exists in this work.

References

1. United Nations Department of Economic and Social Affairs. World Population Ageing 2019 (ST/ESA/SER.A/444) [Internet]. Population Division (2020). World Population Ageing 2019 (ST/ESA/SER.A/444. 2020. 1–111 p. Available from: https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/files/documents/2020/Jan/un_2019_worldpopulationageing_report.pdf
2. Kirkwood TBL. Why and how are we living longer? *Exp Physiol*. 2017 Sep;102(9):1067–74.
3. Nikhat S, Fazil M. Kayi (Cauterization) : A Tribute to Unani Scholars. *Med J Islam World Acad Sci*. 2013;21(2):81–8.
4. Castel AD, Friedman MC, McGillivray S, Flores CC, Murayama K, Kerr T, et al. I owe you: age-related similarities and differences in associative memory for gains and losses. *Aging, Neuropsychol Cogn*. 2016 Sep;23(5):549–65.
5. Skilbeck JK, Arthur A, Seymour J. Making sense of frailty: An ethnographic study of the experience of older people living with complex health problems. *Int J Older People Nurs*. 2018;13(1):e12172.
6. McPhee JS, French DP, Jackson D, Nazroo J, Pendleton N, Degens H. Physical activity in older age: perspectives for healthy ageing and frailty. *Biogerontology*. 2016;17(3):567–80.
7. Tavares JT, Biasotto-Gonzalez DA, Boa Sorte Silva NC, Suzuki FS, Lucareli PRG, Politti F. Age-Related Changes in Postural Control in Physically Inactive Older Women. *J Geriatr Phys Ther*. 2019;42(3):E81–6.
8. Fazil M, Nikhat S, Akram M. Diabetes From Ancient to Modern Era. *Hamdard Med*. 2012;55(1):27–31.
9. Wu R, De Vito G, Delahunt E, Ditroilo M. Age-related Changes in Motor Function (I) Mechanical and Neuromuscular Factors. *Int J Sports Med*. 2020;41(11):709–19.
10. Nikhat S, Fazil M. Determination of the Shelf Life and Expiry Date of Herbal Compound Drugs: a Review. *Int J Sci Res Manag*. 2013;1(8):415–20.
11. Aravinda J. Risk factors in patients with type 2 diabetes in Bengaluru: A retrospective study. *World J Diabetes*. 2019;10(4):241–8.
12. Fazil M, Nikhat S. Exploring new horizons in health care: A mechanistic review on the potential of Unani medicines in combating epidemics of infectious diseases. *Phyther Res*. 2020 Nov;
13. Pacolet J, Bouten R, Lanoye H, Versieck K. Social protection for dependency in old age: A study of the fifteen EU member states and Norway. *Social Protection for Dependency in Old Age: A Study of the Fifteen EU Member States and Norway*. Routledge; 2018. 1–337 p.
14. Gyasi RM, Phillips DR, Meeks S. Aging and the Rising Burden of Noncommunicable Diseases in Sub-Saharan Africa and other Low- And Middle-Income Countries: A Call for Holistic Action. *Gerontologist*. 2020;60(5):806–11.
15. Mendoza-Núñez V, Sarmiento-Salmerón E, Marín-Cortés R, Martínez-Maldonado M, Ruiz-Ramos M. Influence of the Self-Perception of Old Age on the Effect of a Healthy Aging Program. *J Clin Med*.

-
- 2018;7(5):106.
16. Nargis N, Al-Mahmood AK, Afrin SF, Sayeed MH, Hassan MZ. Unani preparation 'sharbat misali' is useful as an alternate medicine to safely treat anemia: A pilot study. *Bangladesh J Med Sci* [Internet]. 2018 Jan 11;17(1):144–8. Available from: <https://www.banglajol.info/index.php/BJMS/article/view/35295>
 17. Nikhat S, Fazil M. Principles and practice of faṣḍ (venesection) in unani/greco-arabian medicine. *Imam J Appl Sci*. 2018;3(2):33.
 18. Rushd I. *Kitab al-Kulliyat*. 2nd ed. New Delhi: Central Council for Research in Unani Medicine; 1987. 158-9,220-2 p.
 19. Sina I. *Al Qanoon Fil Tibb Vol. 1*. Lahore: Book Printers; 1992. 126, 142, 147, 158–9, 237, 278 p.
 20. Jurjani AH. *Zakhira Khwarazm Shahi Vol. 1*. Lucknow: Munshi Nawal Kishore; 1878. 171–4, 246 p.
 21. Fazil M, Nikhat S, Ali I. An Insight into Unani Hypoglycemic Drugs and Their Mechanism of Action. *Comb Chem High Throughput Screen*. 2020 Jul;
 22. Razi Z. *Kitab al-Mansoori*. New Delhi: Central Council for Research in Unani Medicine; 1991. 175–177 p.
 23. Majusi A. *Kamil us Sina'ah al Tibbiyah Vol.1*. Lucknow: Munshi Nawal Kishore; 1889. 547–550 p.
 24. Naseer M, Zahidie A, Shaikh BT. Determinants of patient 's satisfaction with health care system in Pakistan : a critical review. *Pakistan J Public Heal*. 2012;2(2):56–61.
 25. Nikhat S, Fazil M. Overview of Covid-19; its prevention and management in the light of Unani medicine. *Sci Total Environ* [Internet]. 2020;728:138859. Available from: <http://www.sciencedirect.com/science/article/pii/S0048969720323767>
 26. Nikhat S, Shamsi Y, Fazil M. Overcoming Pain: An Exploration of Analgesia in Ibn Sina's Al-Qanoon Fil Tibb. *J Drug Deliv Ther* [Internet]. 2019 May 15;9(3):571–4. Available from: <http://jddtonline.info/index.php/jddt/article/view/2755>
 27. Kapur M, Kapur M. Gleanings from Unani Medicine. In: *Psychological Perspectives on Childcare in Indian Indigenous Health Systems*. Springer; 2016. p. 209–14.
 28. Wang J, Rong X, Um ISI, Yamahara J, Li Y. 55-week treatment of mice with the Unani and Ayurvedic medicine pomegranate flower ameliorates ageing-associated insulin resistance and skin abnormalities. Kimura Y, editor. *Evidence-based Complement Altern Med* [Internet]. 2012;2012:350125. Available from: <https://doi.org/10.1155/2012/350125>
 29. Nikhat S, Fazil M. A Review on Dalk (Massage) with Special Reference to the Prescribed Medications. *Tradit Integr Med*. 2017;2(1):39–52.
 30. Saleem A, Khan TM. Medication misuse among elderly population in Pakistan. *Ther Adv Drug Saf*. 2016;7(3):122–3.
 31. Nikhat S, Fazil M. An Analytical Review on Nutool (Irrigation) Therapy. *J Drug Deliv Ther*. 2015;5(5):1–4.
 32. Nikhat S, Fazil M. Hirudotherapy In The Modern World-An Updated Review. *Asian J Complement Altern Med*. 2014;02(05):1–6.
 33. Breathnach T. For health and pleasure: The Turkish bath in Victorian Ireland. *Vic Lit Cult*. 2004;32(1):159–75.
-

34. Razi Z. *Kitab al-Hawi*. New Delhi: Central Council for Research in Unani Medicine; 2008. 142–150 p.
35. Fazil M, Nikhat S. Topical medicines for wound healing: A systematic review of Unani literature with recent advances. *J Ethnopharmacol* [Internet]. 2020;257:112878. Available from: <http://www.sciencedirect.com/science/article/pii/S0378874119349827>
36. Ali SS. *Unani Advia Mufrada*. 4th ed. New Delhi: Central Council for Promotion of Urdu Language; 2010. 275-276,57-58, p.
37. Baitar I. *Al-Jame' al-Mufradat Al-Advia wa-al Aghzia Vol. 1*. New Delhi: Central Council for Research in Unani Medicine; 2000. 10–11 p.
38. Fazil M, Nikhat S. Nutraceutical and Pharmacological Appraisal of Āmla (*Emblica officinalis* Gaertn.): A Review. *European J Med Plants*. 2019;1–13.