# **Review Article**

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# Methods of health promotion and disease prevention in Unani medicine

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#### **Abstract**

**BACKGROUND:** Better preventive care is a prerequisite to foster community health and in reducing the unnecessary burden on the health-care system. The Unani System of Medicine has given due emphasis on preventive care. This article aims to discuss the health promotion and disease prevention approaches in Unani Medicine.

**MATERIALS AND METHODS:** A manual literature survey of classical Unani texts such as *Firdaus-al-hikmat, Al Qanoon-fit-tib, Kitab-al-mansoori, Kitab-al-kulliyat,* and *Kitab-al-taisir* was conducted to collect the information available on the strategic approaches of health promotion and disease prevention in Unani Medicine. To obtain the appropriate English equivalent words for Unani terms and the scientific name of the drugs, "Standard Unani Medical Terminology" and "Classification of Unani Drugs" were consulted, respectively.

**RESULTS:** The findings of the literature survey revealed that Unani physicians have advocated the personalized and predictive approaches for maintaining health and preventing diseases. Personalized approach mainly centers on the temperament of an individual. By determining an individual's temperament, Unani physician can tell what is adequate or not adequate for the individual. While in the predictive approach, correct knowledge of prodromal symptoms is a prerequisite to predict the future developments in the human body and recommending the appropriate preventive measures accordingly.

**CONCLUSION:** These approaches present interesting perspectives in the field of promotive and preventive care and are of much relevance in the present scenario. Unfortunately, the lack of efficacy studies is a limiting factor in their application. Hence, effective protocol must be developed to provide evidence-based data and to give grounds for their widespread usage.

### **Keywords:**

Health promotion, prodromal symptoms, public health, temperament, Unani medicine

# Introduction

Unani medicine is practiced across the world with the name of Unani Tibb. "Tibb" is an Arabic word meaning "medicine," while "Unani" is thought to be derived from "Ionan" (meaning Greek), acknowledging its origin. Unani Tibb is not simply a continuation of Greek ideas but a venue for innovation and change. The core philosophy of this system was conceptualized by Hippocrates. After him, Arab and Persian scholars enriched this system considerably. They translated

Medicine ('*Ilm-i-Tibb*) is defined by Ibne Sina as "the science which states the condition of human body either healthy or ill; in order to preserve good health when it exists and restore it when it is ill." In his view, knowledge of '*Ilm-i-Tibb* broadly has two

the voluminous writings of Galen and Hippocrates, and also made many of their

own significant advances and contributions

to medicine, notably in the fields of anatomy,

embryology, ophthalmology, pathology,

pediatrics, physiology, psychiatry,

surgery, and pharmacy. This synthesis

resulted in a richer and universal medical

system, based on scientific parameters and

experimentation.[1]

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aspects: theoretical (science of the basics of medicine) and practical (science of practicing medicine). Theoretical aspect deals with the principles of tibb and includes knowledge of *Umur Tabi'iyya* (factors of the existence), states of the human body, causes of health and diseases, and knowledge of signs and symptoms in different states of the human body. However, in the practical section, the acquired knowledge of tibb is applied to patients in preventing or treating disease. Knowledge of management of healthy body and methods of preserving health termed as 'Ilm-i-hifz-i-sihhat (knowledge of health preservation), while knowledge of management of illness and methods of restoring it to health is termed as 'Ilm al-'Ilaj (knowledge of treatment).[2,3] Knowledge of treatment is beyond the scope of this article, and therefore confined to the discussion of *ilm-i-hifz-i-sihhat*.

Maintaining human health is one of the biggest challenges facing the health-care systems across the world; various national and international health agencies are coming out with several policies and program to improve human health. Inventions of new treatment modalities or advanced and sophisticated diagnostic equipment are not sufficient to achieve this goal, rather a comprehensive approach is required to improve the human health in a better way. As conventional medicine mainly focusing on curative aspect, there is an opportunity for the Unani System of Medicine to play an important role in disease prevention. Thus, the present article aims to explore various approaches to health promotion and disease prevention described in classical Unani texts.

#### **Materials and Methods**

A manual literature survey of classical Unani texts such as *Firdaus-al-hikmat*, *Al Qanoon-fit-tib*, *Kitab-al-mansoori*, *Kitab-al-kulliyat*, and *Kitab-al-taisir* was conducted to collect the information available on the strategic approaches of health promotion and disease prevention in Unani medicine. Other sources such as "Standard Unani Medical Terminology" and "Classification of Unani Drugs" were also considered to obtain the appropriate English equivalent words for Unani terms and the scientific name of the drugs mentioned in the article. A brief description of Unani medicine manuscripts referenced in this review is presented in Table 1.

#### Results

Unani scholars have given a very elaborative description of health promotive and preventive measures. They have described the causes of health and disease, means by which health is likely to be lost, guidelines to protect the health, features for identifying vulnerable population, and the protective measures for them. Comprehensive health promotion guidelines have also been given for

vulnerable groups. Findings of the literature review are presented in Tables 2-4. Table 2 represents the level of preventions, their aim, action, and target population from the Unani medicine perspective. Information on prodromal symptoms, their presences as an alarming signal for the development of certain disease, and the preventive care to be taken at this stage to halt the further progress of the disease is presented in Table 3. Table 4 provides information on prophylactic drugs mentioned in classical Unani texts.

# Levels of prevention: Unani perspective

Approaches to prevention of disease in Unani medicine depend on the states of the human body [Table 2]. If the body is in optimum healthy state, it should be maintained by adopting a lifestyle that suits an individual's temperament. If the body becomes prone to develop the disease or having the debility without disease, both these types require additional care in terms of special diet, regimens and even drugs.<sup>[2-5]</sup>

## Hifz-i-Sihhat Mutlaq (Preservation of Health)

It implies regulating or preserving the health of those people who are in an optimum healthy state. [4] Traditionally, health is viewed as an absence of disease and due to this; it is described in relation to disease. Many definitions of health have been offered from time to time, but these have been subject to controversy due to lack of operational value. Definition given by Unani physicians is very holistic and practical and according to this definition, healthy state is "a condition in which the temperament is in a balanced state and the structures of the human body are such that its functions are carried out in a correct and whole manner." [3]

Before understanding the methods of preserving health, we have to understand the means by which health is likely to be lost. Four kinds of causes of health and disease have been described by Unani scholars.<sup>[2-4]</sup> These are *Asbab maddiyya* (material cause), *Asbab fa'ila* (efficient cause), *Asbab suriyya* (formal cause), and *Asbab tamamiyya* (final cause).

Material cause is that constituent of the body which is directly affected from disease-causing agents and these are a'da' (organs), arwah (pneuma), akhlat (humours), and arkan (primary components). Among these, a'da' and arwah are immediate causes and akhlat and arkan are remote causes.

Efficient causes are those which change or maintain the ideal state of the human body. They can be further classified into extrinsic and intrinsic causes. Extrinsic causes are ambient air, seasonal changes, foods and drinks, habitat, etc., while intrinsic are physical and mental activity and repose, sleep and wakefulness,

Table 1: Brief description of Unani medicine manuscripts employed in this review full

Documents	Author	Description		
Firdaus-ul-Hikmat	Rabban Tabri (780-850 AD)	This book comprises 7 main titles ( <i>nau</i> ) and 30 subtitles ( <i>muqalaat</i> ). Description of <i>hifzane sihhat</i> is found in nau 2 <sup>nd</sup> , 5 <sup>th</sup> and 6 <sup>th</sup> . Author has described various guidelines to maintain health in an individualized manner. In this regard, different guidelines have been given for various seasons, age-groups and different temperaments. Guidelines regarding consumption of food, sleep and evacuation of waste matter from the body has also been described.		
Kitab-Al-Mansoori	Zakariya Razi (850-923 AD)	This book comprises 10 chapters; 3 chapters of this book are related to preventive medicine. Chapter 2 is on diet and drugs and their effect on the human body, Chapter 4 is on principles of maintaining the health and measures for the prevention of disease. Chapter 6 is on the health of travelers, in which the author has discussed food and drinking recommendations during travel, prevention of dehydration in warm conditions, management of sea passengers, fatigue due to travel		
Kitab-Al-Murshid	Zakariya Razi (850-923 AD)	In this book, the author has highlighted the importance of Asbab Sitta Daruriyya (six essential factors) in maintaining health. These factors are ambient air, foods and drinks, physical activity and repose, mental activity and repose, sleep and wakefulness, evacuation and retention		
Alqanoon Fit Tib	Ibne Sina (980-1037 AD)	This book consists of five volumes. Description of hifzane sihhat is found in its first volume. Causes of health and disease, dynamics of maintaining the health, approaches of prevention according to the state of the human body, and health promotive measures for vulnerable group has been described in this book		
Kitab-Al-Taisir	lbne Zohr (1091-1162 AD)	Overall content of this book are described into two parts called as <i>safar awwal</i> (pa and <i>safar saani</i> (part-II). Part I starts with <i>hifze sihhat</i> . Principles of Hifze sihhat has been described in this book. Along with the principles of health preservation. The author has also mentioned several drugs of prophylactic potential		
Zakheera Khwarzam Shahi	Ismail Jurjani (1040-1136A.D)	Volume 3 <sup>rd</sup> of this book is related to hifzane sihhat. Author has described various methods of evacuating morbid humor from the body and the conditions to be fulfilled before evacuation. Besides, regimens for children, elderly and travelers have been described. Impaired temperament ( <i>Su'-i-miza</i> ) and regimens to restore the temperament has also been described		
Kitab-Al-Kulliyat	Ibne Rushd (1126-1198 AD)	Sixth chapter of this book is on <i>hifzane sihhat</i> . In this chapter, the author has described the principles of maintaining health and focused on four factors namely: Consumption of good chyme foods, evacuation of morbid humors from the body, purification of air and avoidance of factors affecting the mental harmony		
		He also described various methods of evacuating morbid humors with special focus on massage, exercise and steam bath. Besides, various regimens for maintaining the health of children, adults, elderly and for individuals with impaired temperament have also been described		
Kitab-Al-Mukhtarat Fit Tib	lbne Hubl Baghdadi (1121-1213 AD)	This book has two volumes. Description of hifzane sihhat is found in the first volume. Comprehensive description of <i>Asbab Sitta Daruriyya</i> (six essential factors) and their applied aspect in maintaining the health, health promotive measures for different age groups, and specific care of organs has given in this book. Author has also emphasized starting preventive care at initials stage of disease to halt the progress of disease at an early stage		

evacuation and retention, physiological changes in different periods of life, habits and customs, etc.

Formal causes are temperament, faculties proceeding from the temperament, and the body structure. Health prevails when these three are in perfect harmony; whenever the harmony of any one or more among these is disturbed, it will lead to disease.

The final causes are functions of organs. Knowledge of these presupposes a knowledge of the faculties, which helps in determining the states of the body, i.e., in disease or healthy state.

Based on the above points, it can be said that to maintain a healthy state, equilibrium of temperament and appropriateness of body structure is essential. Impaired temperament (Su'-i-mizaj) and/or inappropriateness of body structure affect the faculties and ultimately impair the bodily functions.

# *Methods of preserving the health*

Rabban Tabri mentioned that health can be maintained by consumption of suitable foods and drinks and evacuation of waste matter from the body. [6] Zakariya Razi recommended two approaches to maintain health; first is balance in daily activities and second is starting the preventive care at the initial stage of disease by recognizing it through prodromal symptoms. [7] Ibne Rushd mentioned that there are four ways to maintain health. These are consumption of suitable foods and drinks, evacuation of waste matter, moderation in mental activity, and purity of inspired air. [8]

Table 2: Level of preventions, aim, action and target population

Level	Aim	Action	<b>Target Population</b>	Conclusion
Hifz-i-Sihhat Mutlaq <sup>[2-4]</sup>	Removal of the factors by which health is likely to be lost and maintain the conditions that promote health	Adoption of the lifestyle that suits the temperament	Healthy population	If the individual follows the diet, regimen and lifestyle according to one's body type, he or she can keep diseases at bay
Hifz-ma-Taqaddam <sup>[2-4]</sup>	Protection of susceptibles to reduce the incidence of disease and recognizing the prodromal symptoms and starting preventive care at that stage to prevent a full-blown disease	Evacuation of morbid humors by adopting appropriate measures depending on the dominance of humor Use of prophylactic drugs	Susceptible population or individual Apparently healthy individuals with presence of some alarming signals of the diseases	Identifying the early stage of disease through its precursors and starting the preventive care at this stage of disease will halt its further progression.
Tadabir-i-Abdaane Zaeefa <sup>[2-4]</sup>	Strengthening the body to cope with diverse physiological changes and to protect it from untoward stimuli	Group-specific packages of comprehensive health promotive measures that include diet, lifestyle, regimens and drugs	Population with debility without disease	This approach is concerned with safeguarding of innate moisture from too rapid dissipation

Table 3: Prodromal symptoms, their presence as an alarming signal for the development of certain diseases and preventive measures

Prodromal symptoms	Alarming signal for	Preventive measures
Severe migraine-like headache	Mydriasis, Cataract	Venesection of temporal veins[7]
Twitching of facial muscles	Facial palsy	Purgation and emesis, mix mint in vinegar and apply it on face, reduce dietary intake, avoid alcohol <sup>[7]</sup>
Numbness	Paralysis	Follow the regimens having demulcent effect on morbid matter[7]
Redness of eyes and face, prominent veins, watering of eyes, intolerance to light	Diaphragmitis	Venesection and purgation, Apply vinegar and rose oil (roghan gul) on head, Adopt cold ( <i>barid</i> ) regimes for whole body <sup>[7]</sup>
Nightmare and giddiness	Epilepsy	Venesection of cephalic vein, avoid alcohol, for purgation (if required) <i>Hab Qoqaya</i> is advised[7]
Depression, irritation, anxiety	Melancholia	Venesection of basilic vein, Decoction of aftimoon ( <i>Cuscuta reflexa</i> and in diet mutton soup is advised <sup>[7]</sup>
Blurred vision	Cataract	Evacuation of morbid matter through purgation, <i>Hab Qoqaya</i> is advised. Avoid foods which increase <i>rutubat</i> (moistness) in the body <sup>[7]</sup>
Chronic coryza and catarrh	Bronchial asthma	Treat accordingly[7]
Excessive sweating	Imtila (congestion)	Venesection and reduce food intake <sup>[7]</sup>
Excessive smell in sweat	Fever	Purgation to evacuate yellow bile (Safra)[7]
Palpitation	May lead to death	Venesection, cardiotonic drugs are advised[7]
Imtila (congestion)	Haemorrhage, apoplexy and sudden death	Venesection <sup>[7]</sup>
Confused thinking or reduced ability to concentrate along with imtila (congestion)	Apoplexy	Venesection <sup>[7]</sup>
Nausea, flatulence with loss of appetite	Colitis	Diet restriction, advice rest, use drugs accordingly[7]
Heaviness and distension in back and right hypochondrium and altered frequency of micturition	Renal dysfunction	Treat accordingly <sup>[7]</sup>

Ibne Sina mentioned that the art of preserving health consist in maintaining equilibrium between these concomitant factors; consumption of suitable foods and drinks as per mizaj, proper elimination of waste products, moderation in physical and mental activity, moderation in sleep and wakefulness, maintaining the purity of inspired air and adequate care and protection of organs.<sup>[2-4]</sup>

# Hifz ma Taqaddam (Measures for disease prevention)

This approach applies to population at-risk within the context that an individual is predisposed to illness conditions depending on his/her temperament. As per the Unani concept, predisposition to disease increases either due to the *imtila'i kaifiyat* (congestion state) in the body or due to the presence of *khaam madda* (incomplete maturation of humours). [4] Causes for *imtila'* may be intrinsic or extrinsic. Extrinsic causes are overeating and sedentary lifestyle, while intrinsic causes are hypoactiveness of nutritive and expulsive faculties, hyperactiveness of retentive faculty, and constriction of vessels. [2]

Table 4: Prophylactic drugs mentioned in classical Unani texts

Drugs		Application	Reference
Use of arqe saunf (Foeniculum vulgare) as eye drops		Good for healthy vision	[7]
Use of arqe anar ( <i>Punica granatum</i> ) as eye drops		Good for healthy vision	[7]
Mix rasaut ( <i>Berberis aristata</i> ) in water and use as eye drops		Good for healthy vision	[7]
Mix tutiyae mur (calamine) in aab marzanjoosh (Origanun	vulgare) and use as	Good for healthy vision	[7]
eye drops			
Haleela ( <i>Terminalia chebula</i> )		Good for healthy vision	[9]
Carrot		Good for healthy vision	[17]
Turnip		Good for healthy vision	[17]
Drinking of the water in which Bengal gram has been soal	red	Good for healthy vision	[17]
Use of roghane badam talkh (Bitter almond oil) as ear dro	р	Good to boost hearing	[7]
Mix suppository of mamira (Coptis teeta) in vinegar and us	se as ear drops	Good to boost hearing	[7]
Roghane gul (Rose oil)		Good to boost hearing	[9]
Teeth cleaning twigs of khulanjan (Alpinia galangal), peelu katira (Astragalus brachycalyx) and akhrot (Juglans regia)		Good to maintain healthy gums and strengthening the teeth	[9,17]
Decoction of mastagi (Pistacia lentiscus)		Protects from diseases of liver and stomach	[17]
Decoction of tukhme kharpaza (seeds of musk melon)		Prevents formation of calculi in body	[17]
Apply fresh rosebud paste on eyes		Prevents conjunctivitis	[17]
Apply clove paste on forehead in winters		Protects from cold and coryza	[17]
Apply bisbasa (Myristica fragrans) paste on forehead in w	inters	Protects from cold and coryza	[17]
Drink the decoction of karsana root mixed with sikanjabbe	n, on empty stomach	Prevents pleurodynia and abdominal swellings	[17]
Sikanjabeen (syrup made of honey and vinegar)		Prevents seasonal fevers	[8]
Murabba Zanjabeel (Preserved Ginger)		Protects from phlegmatic diseases	[6]
Use of pills made up of sibr (Aloe barbadensis), murr (con zafran (Crocus sativus)	nmiphora myrrh) and	Prevents infection during epidemics	[7]
Maul Shaeer (Barley water)		Prevents infection during epidemics	[7]
Use of Gile Armani (Armenian bole) with vinegar or water		Prevents infection during epidemics	[7]
Qurs kafur (a compound Unani formulation)		Prevents infection during epidemics	[7]
Tiryaqe farooq (a compound Unani formulation)		Antidote	[17]
		Strengthens spirit and augments innate heat	
Zamrud (Emerald stone)		Good for toning the stomach	[17]
		Hanging it in neck prevents epilepsy	
Rabbit's head		Prevents tremors	[17]
Drinking of water in the bowl made up of Jhau's (Tamarix	<i>dioica</i> ) wood	Prevents splenomegaly	[17]
Massage on back with roghan badam (Almond oil) or rogh	ane zaitoon (Olive oil)	Prevents kyphosis	[17]
Bird's flesh		Good for sexual health	[17]
Sirka (Vinegar)		Prevents septic fevers	[17]
Kali Mirch ( <i>Piper nigrum</i> )		Prevents septic fevers	[17]
Lehsun ( <i>Allium sativum</i> )		Antidote	[17]
Use of chilgoza ( <i>Pinus gerardiana</i> ) and akhrot ( <i>Juglans re carica</i> )	gia) with anjeer (Ficus	Antidote	[17]
Fumigation of lobān (Bowsellia serrata) and s'ad kūfī (Cyp	perus rotundus)	Purification of air	[18]
Fumigation of kundur ( <i>Bowsellia serrata</i> ), mia saila ( <i>Liquic</i> ( <i>Aquilaria agallocha</i> ), sandal ( <i>Santalum alba</i> ), kafur ( <i>Cinn</i> qust ( <i>Saussurea lappa</i> ) and murr ( <i>Commiphora myrrh</i> )	, .	Purification of air	[7]
Fumigation of sandal (Santalum album) and kafur (Cinnar	nomum camphora)	Purification of air	[7]
Fumigation of wood of turfa ( <i>Tamarix dioica</i> )	r,	Purification of air	[19]

# Identification of an individual's predisposition to disease

Predisposition to disease can be identified through the presence of signs of *imtila'*.<sup>[4]</sup> *Imtila'* can be qualitative or quantitative. In quantitative *imtila'*, the quality of humour and vital forces is normal, but the quantity of humours is increased so much that the blood vessels become overfull and distended. In qualitative *imtila'* along with quantity of humour, their quality also becomes abnormal.<sup>[3]</sup> Such humour overwhelms the vitality of the body with their morbid nature and are improperly

digested and matured. Persons suffering from this *imtila*′ are predisposed to putrefactive disorders.

Signs of both varieties of *imtila*′ are as: quantitative type is characterized by the feeling of heaviness in various parts of the body, redness of complexion, sluggish movements, distension of vessels, impaired appetite, defective vision, fullness of pulse, and high color of urine. Qualitative type is characterized by similar signs such as sense of heaviness, lassitude, and loss of

appetite as in quantitative plethora, but of moderate nature. [2,6,8]

# Protection of susceptibles

Susceptibles can be protected by evacuating the morbid humours through an appropriate method depending on the dominance of *khilt* (humour), decreasing the production of humor by moderation in food; and restoring the *mizaj* towards normalcy by adopting proper regimens.<sup>[2-4]</sup>

### Recognizing prodromal symptoms

Prevention of full-blown disease by recognizing it through early disease precursors and starting care at this stage is also one of the approaches for disease prevention described in classical Unani texts.<sup>[7,9]</sup> These prodromal symptoms in Unani medicine are called as 'Alamat. 'Alamat (sign) are objective evidence to define the state of human body. [10] Unani physicians classified 'alamat into three types as daal, muzakkira, and taqddamatul marfah, which points to present, past, and future states of human body. [4] From the preventive aspect, tagaddamatul marfah is of special significance because the correct knowledge of these helps in predicting the future developments in the human body. Various prodromal symptoms, their significance as an indicator for development of certain diseases, and the preventive measures to be taken at this stage have been mentioned by Zakariya Rāzī in *Kitab-al-Mansoori* [Table 4].<sup>[7]</sup>

# Use of prophylactic drugs

Although non-drug prophylaxis is one of the main approaches of Unani medicine for health promotion, it does not undermine the utility of prophylactic drugs to accomplish the objective of health promotion and disease prevention. <sup>[5]</sup> In this regard, a large number of drugs have been mentioned by Unani scholars [Table 4].

# Tadabir-i-Abdaane Zaeefa (Regimens for people having debility without disease)

Unani scholars categorize the vulnerable population such as old-aged people, neonates, children, and pregnant women under *Abdaane zaeefa*. Accordingly, they have mentioned comprehensive health promotive measures to strengthen the body to cope with diverse physiological changes and to protect it from untoward stimuli. Cache in the ultimate aim of these measures is to secure the utmost longevity possible to human beings. It includes *Tadabir-i-Navmawlud wa Atfal* (Neonate and child care), *Tadabir-i-Hamila* (Ante-natal care), and *Tadabir-i-Mashayikh* (Care of the elderly).

Tadabir-i-Navmawlud wa Atfal (Neonate and Child care) Mother's milk is the best food for a newborn. The first regimen for a newborn given by Jalinoos is sprinkling of salt on the body as it makes the body tolerable against foreign substances.<sup>[12]</sup> In this regard, Ibne Rushd has

recommended that salt which does not cause any irritation should be used. [8] Ibne Zohr has mentioned that rogan baloot (*Quercus baloot*) is suitable for this purpose as it does not cause any irritation. [12] The nursery of neonates should be warm and airy. [12]

When the incisor teeth begin to erupt, gradual supplementation of milk feeds with the food items, which are easy to masticate, is advisable. *Rabban Tabri* has mentioned that, when the children grow up little, they should be allowed for moderate exercise. [6] Ibne Hubl Baghdādī has mentioned that the child crossing the age of lactation needs light nutritive food and mild exercise. He also recommended the massage to strengthen the organs. [9]

Ibne Sina has given much emphasis on games at this age of the child. He described the role of exercise in the child's life and explains that exercise differs according to age and a child's ability. He mentioned that when the child passes the age of 4 years, they should be left free for playing and increases the quantity of diet accordingly. Due care must be given on removing the cause of irritation and fulfilling the child natural desires. He mentioned that properly balanced behavior is conducive to physical and mental health. [2-4,12]

#### *Tadabir-i-Hamila* (*Ante-natal care*)

Light, nutritious, and easily digestible is recommended for them.<sup>[7,13]</sup> Fruits such as apple, vitis, quince, orange, pear, and pomegranate are beneficial for them. [14] Foods which are difficult to digest, and produce gases and bad humors, should be avoided. Food items having emmenagogue and diuretic properties must be avoided as they may cause abortion.[14] They can continue her usual activities throughout pregnancy, but hard work is not advisable for them especially in the first trimester and last 6 weeks of pregnancy. [11,15] Duration of rest and sleep should be increased. [11,15] Ibne Sina has mentioned that steam bath (hammam) is contraindicated to pregnant women in first and third trimester; [2] while Zakariya Razi has recommended the hammam (steam bath) for them in last weeks of pregnancy. Near-term, massage on back, and abdomen has been recommended.[7]

# *Tadabir-i-Mashayikh* (care of the elderly)

They should be served with small and frequent meals thus fed two to three times a day. [4,7] Light and easily digestible foods are advisable for them. Heavy food items, which produce an excess of black bile and phlegm, and astringent foods should be avoided. Milk is beneficial for them only if they can digest it and do not feel distension of stomach, or pain in the epigastrium. [9] Use of garlic is extremely useful for them. Preserved ginger and other hot type of jams are also beneficial at this age. [2]

Moderate-intensity exercise is recommended for them because this kind of exercise produces *musakhkhin* (calorific) effect and helps in expelling the harmful substances from the body without producing excessive strain on the body. Due care must be taken during diseased state; if they are suffering from disease, exercise which strains the affected organs is not advisable.<sup>[2,9]</sup>

Massage for the aged should be of moderate type: For massage, *harr* (hot by temperament) oils such as rogan zaitoon (Olive oil) and rogan badam (Almond oil) are recommended, which provide *taskheen* (calorifacient) to the body. <sup>[4]</sup> Unani scholars have also recommended some single drugs such as amla (*Emblica officinalis*), anjeer (*Ficus carica*), and compound formulations such as sikanjabeen unsuli, jawarish kamooni, and maul laham, for this age group as tonics, appetizers, memory enhancers, laxatives, as well as the health enhancers. <sup>[16]</sup>

# Discussion

The findings of the literature survey highlighted two approaches in Unani medicine for maintaining health and preventing diseases. These are personalized and predictive approaches, which gives distinctiveness to this system in holistically dealing with human body.

Personalized approach mainly centers on the body type of an individual, which is termed as *mizaj* (temperament) in Unani medicine. Identification of temperament helps in giving an outline about the innate tendencies that have been built into the individual system. By determining an individual's temperament, Unani physician can tell what is adequate or not adequate for the individual. Therefore, for maintaining the health, first, the temperament of a person is identified and then specific schedules relating to lifestyle (including dietary guidelines) are recommended that are most suitable for an individual's temperament. The individuals are required to incorporate these recommendations in daily life and day-to-day activities to promote good health and well-being.

From the perspective of Unani medicine, nobody is prone to develop every disease; predisposition to disease depends on the temperament of an individual. People of specific temperament become prone to a particular group of diseases similar to the temperament of that individual. For example, a person of choleric temperament is prone to develop diseases which are considered to be choleric like acute fevers, heat-stroke, hypertension, and insomnia, and a person of phlegmatic temperament is more prone to develop obesity, infertility, and asthma. Therefore, adoption of one-size-fits-all approach for the prevention of diseases does not make any sense and seems to be irrational.

Prediction of disease through early disease precursors is another approach in preventive care. For example, twitching of facial muscles is an early warning signal for the occurrence of facial palsy. The correct knowledge and monitoring of such alarming signals in the population and starting the proactive preventive care at this stage will help in preventing the further progression of disease. This approach is very similar to the secondary level of prevention in conventional medicine, where attempts are done to diagnose the disease at an early stage and prompt treatment is given to halt further progress of the disease.

Recommendations of health promotion measures for different age groups are given by taking into consideration the temperament of that age group. For example, in old age, warming and moistening measures are recommended because the coldness and dryness predominates in this age-group. [6,8,9,22,23] This approach is concerned with safeguarding of innate moisture from too rapid dissipation and maintaining it at such a degree of strength that the original type of temperament peculiar to the person should not change even up to the last moment of life. It is a fact that all bodies have not the same degree of innate moisture and heat. There is great variation in regard to them. Every person has his own term of life. Under this view, the art of maintaining health consists in guiding the body to its natural span of life by paying attention to whatever things are conducive thereto.<sup>[2,3]</sup> Drugs, which have been mentioned by Unani scholars for care of old-aged persons as a health improver or as augmenter of innate heat, may have antioxidant activity. Under this view, some studies<sup>[24,25]</sup> have been conducted in recent years by Unani scholars.

Personalized and predictive approaches as highlighted in this article for maintaining the health and preventing the diseases present interesting perspectives but to bring these into implementation will require the validation of identification tools and efficacy studies. Unfortunately, lack of systematic safety and efficacy studies or proof-of-concept trials have relegated these Unani concepts of health promotion and disease prevention to a conceptual model. Therefore, it is imperative that these concepts must be reexamined to generate best research evidence that support these underlying principles. Promotive and preventive care modules based on the above recommendations should be designed for the training of health professionals (community physicians, public health nurses, health workers, etc.,) so that these approaches can be effectively implemented.

#### Conclusion

Disease prevention approaches mentioned by Unani scholars are of much relevance in the present scenario.

Different lifestyles schedules, dietary modifications, regimens, and even drugs have been recommended to accomplish the objective of health promotion and disease prevention. Unfortunately, lack of research in this area has limited its application. Hence, effective protocol must be developed to provide evidence-based data. If these scientific approaches are proved with the supportive documentation, it will help the Unani system of medicine to get its place as a potential system for preventive care.

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# **Conflicts of interest**

There are no conflicts of interest.

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