

PALLIATIVE CARE APPROACHES IN UNANI SYSTEM OF MEDICINE: A REVIEW ARTICLE

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ABSTRACT

Palliative care is defined as an approach to reduce physical and psychological distress while enhancing the quality of life for patients and their families during the initial phases of diagnosed illnesses. It applies to terminal illnesses, acute or chronic conditions and actual or potentially life-threatening diseases, which are identified as triggers for palliative care. Key features of palliative care include holistic care, interdisciplinary collaboration and compassionate, patient- and family-focused support. Benefits include improved patient's quality of life, greater human dignity, enhanced self-care and stronger coping skills. Palliative care in Unani medicine offers a holistic approach to managing patients with life-limiting illnesses, emphasizing symptom relief, improves quality of life and psychological well-being that rooted on the principles of akhlat (humoral theory), Mizaj (temperament) and individualized treatment. Unani palliative care integrates natural remedies, dietary interventions and balanced lifestyle through modification in Asbabe-e-sitta zaruriya (six essential elements) to address physical, emotional, and spiritual needs. Unani medicine, focusing on its therapeutic modalities, such as Ilaj bil-Tadbeer (regimental therapy), Ilaj bilGhiza (dietotherapy) and Ilaj bil-Dawa (pharmacotherapy) which employ minimal invasive regimenal techniques, herbal formulations and dietary supplements that are specified to the patient's temperament and disease condition, ensuring nutritional supports and overall wellbeing. Due to maximum efficacy, minimal invasive techniques and least side effects these treatment modalities are now become center of attraction for palliative care management.

KEYWORDS: Unani medicine, Akhlat, Mizaj, Asbabe-e-sitta zaruriya, Ilaj bil-Tadbeer, Ilaj bil- Ghiza, Ilaj bil-Dawa.

INTRODUCTION

Palliative care is a multidisciplinary approach which improves the quality of life of the patient and their families who are confronting serious, life-limiting illnesses. It aims to prevent and alleviate suffering by promptly recognizing and expertly managing pain along with a wide range of physical, emotional, social and spiritual challenges.^[1] This approach supports patients and families through comprehensive assessment and tailored treatment plans that address their unique needs. The palliative care is provided by team of specialized doctors, well trained nurses, physiotherapist, psychologist, registered dieticians, social workers.^[2,3]

These teams provide support for patients with illnesses such as cancer, congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), kidney disease, Alzheimer's disease, Parkinson's disease, Amyotrophic Lateral Sclerosis (ALS) and various other long-term chronic ailments.^[3] The Ministry of Health & Family Welfare introduced palliative care in India through the National Programme for Palliative care (NPPC) in 2012 with the following objectives- a. To provide relief and comfort from distressing physical symptom related to incurable life-threatening illnesses. b. To provide support to patients and family member facing psychosocial and spiritual issues. c. To prevent and minimize suffering by

early detection and prompt treatment. d. Avoid unnecessary intervention to ensure a peaceful, dignified death. e. To promote education in the field of palliative care management for both healthcare and non-healthcare professional.^[4] Palliative care interventions have grown globally, with studies predicting that 56.8 million population needs palliative care annually and only 14% of those who actually receive essential services related to palliative care.^[5] Projections suggest that in India the older population size (60 years and above) is nearly increase to 20.8% by 2050.^[6] Moreover, the Lancet Commission reveals the aging population experience the most significant rise in serious health related sufferings (SHF) that's why palliative care will be critically important for the world's aging population and should be integrated with geriatric care.^[7] This care can drive advancements in health care technologies and alter illness trajectories.^[8] To meet the diverse needs of patients, including those not yet terminally ill but still requiring support, a focused effort to reduce suffering and enhance quality of life is essential.^[9]

Challenges Tackled by Palliative Care

Palliative care addresses a wide spectrum of concerns, tailoring support to meet each person's unique circumstances (adults and children) and their families. The impact of the disease and its treatments varies greatly among individuals, affecting multiple dimensions of their well-being. 1. Physical symptoms and discomfort 2. Emotional resilience and coping strategies. 3. Practical concern. 4. Spiritual support.

Physical symptoms and discomfort: Physical symptoms like pain, exhaustion, appetite loss, flatulence, constipation, loose motion, nausea, vomiting, breathing difficulties, and sleep disturbances etc. are the common symptoms and can be managed effectively. Treatment options include medications, nutritional support, physical rehabilitation, and relaxation techniques such as controlled breathing.^[10]

Psychological and Emotional resilience: While dealing with prolonged and chronic illness feelings of depression, anxiety, and fear are very common and can be addressed through palliative care services. Professionals may offer counseling, facilitate support groups, organize family discussions or connect patients with mental health specialists for further assistance.^[11]

Practical concern: Patients and their families frequently encounter financial and legal issues, such as managing medical bills, understanding insurance coverage, worrying about job security during treatment and completing advance directives like living wills or power of attorney forms. The specialized language and intricate legal details often confuse both patients and their families. For this purpose, experts are available to resolve the problem.^[12]

Spiritual support: Palliative care professionals assist individuals in exploring their beliefs and values. For instance, helping a patient find comfort through meditation, prayer or conversations about life's meaning, enabling them to achieve peace or acceptance that suits their personal journey.^[13]

Unani approaches for palliative care management

Holistic Approach: In Unani medicine, the holistic approach views the human body as an interconnected whole, where health is maintained through the balance of internal and external factors rather than isolating and treating symptom alone. It considers the entire person (Patient's centered) including physical, mental, emotional and spiritual well-being. The concept of *tabiyat* (Body's self-regulating capacity) is the root of this system. The disease is considering as natural process and the physician's role is to support the body's self-healing capabilities. The treatments aimed at supporting this innate healing power to reduce suffering and promote comfort.^[14]

Individualized Treatment: The Unani medicine is based on the theory of the four humors (Akhlal). These are *dam*(blood), *balgham*(phlegm), *saфра*(yellow bile), *sauda*(black bile).

These humors are responsible for determining an individual's temperament (*mizaj*) which can be sanguine(*damvi*), phlegmatic (*balghami*), choleric(*safravi*) and melancholic(*saudavi*). On this basis health is seen as a state of equilibrium among these humors, while illness arises due to their imbalance.^[15] This humoral theory encourages a personalized treatment plan tailored to the patient's unique constitution. This approach aligns with palliative care focus on patient-centered care, addressing specific symptoms and needs.

Preventive care: Unani medicine emphasizes prevention and health preservation by maintaining six essential factors (*Asbab-e-sitta zaruriya*) which can be applied in palliative care to manage symptoms early and prevent complications. *Asbab-e-Sitta Zarooriya* are the six basic principles of Unani medicine, which are essential for maintaining health and without it the life cannot be imagine.^[16] It includes atmospheric air (*hawa*), food and drink (*Makul wa Mashrub*), sleep and wakefulness (*naum wa yaqza*), evacuation and retention (*ihtibas wa istifragh*), physical activity and rest (*harkat wa sukoon badani*), mental activity and rest (*harkat wa sukoon nafani*). These principles are based on the belief that an imbalance in any of them can lead to physical and mental illness, hence emphasizing the need to maintain their balance in order to achieve optimal health.^[17]

Therapeutic modalities in Unani medicine for palliative care

Unani medicine employs various modalities to alleviate symptoms and improve quality of life, which are particularly relevant in palliative care settings.

Ilaj-bil-Ghiza (Dietotherapy)

In Unani system of medicine diet (*ghiza*) is defined as substances which after digestion and passing through metabolic process becomes the part of the body and provide *badal ma tahallul* (replacement of cellular organelles).^[18] Dietary supplements are specified to the patient's temperament and disease condition, ensuring nutritional supports and overall well-being without aggravating symptoms. Hippocrates stated that "let your food be your medicine, and medicine be your food", and "leave your drugs in the chemist's pot, if you can heal the patient with food". Several modified diets have been mentioned in Unani pharmacopoeias and recommended separately or as an adjuvant with pharmacotherapy for the management of various diseases. Specific diets are prescribed to balance humors, temperament and supports the patient's *tabiyat*. These are Ma-us-Sha'eer (Barley water), Ma-ul-Asl (Honey water), Maul-Laham (Meat distillate), Ma-ul-Jubn (Whey), Ma-ul-Fawakah (Fruit juices), Ma-ul-Baqool (Vegetable juices), Nabeej, Sikanjabeen (Oxymel), Hareera, Gulqand, Hareesa, Sikbaj, Maibah etc. The health benefits of some of the diets are describe below.^[19]

1. Ma-us-Sha'eer (Barley water): Ma-us-Sha'eer is well soaked barely boiled in almost twenty times of water, till the color of water turns to red color. Due to its high nutritional value, it is useful in fever, acute infections, tuberculosis, diabetes mellitus and other debilitating diseases. Barley grains contain high proteins (10-20%), carbohydrates (7883%), including Beta-glucan, lipids (2-3%), vitamins especially vitamin E (8.5 -31.5 per gm dry weight) possess anti-oxidant property and minerals. Barely possess a soluble fiber, Beta-glucans that may reduce the total cholesterol level and also decreases the level of low-density lipids in blood stream. It also contains antioxidant property and may help to regulate blood sugar levels. Due to its anti-tumor quality by regulating the immune system and checking cancer cell-proliferation and dissemination it is use in case of carcinoma. Moreover, barley grains have antioxidant and anti-inflammatory property, which may also contribute to its anti-cancer potential.^[20]

2. Ma-ul-Asl (Honey water): It is prepared by combining one part of honey and two parts of water and boiled it for few minutes. It is recommended for cerebrovascular disorders, paralysis, facial palsy, fever, gastric diseases and in dry cough. Nutritional component of honey per 100 ml are carbohydrates 82.4 gm, protein 0.3gm, fibers 0.3 gm, Iron 0.42mg, Zinc 0.22mg, Copper 0.036mg, Sodium 4mg, Magnesium 2mg, Potassium 52mg, Phosphorus 4mg, Selenium 0.8mg, Manganese 0.08mg.^[21] Honey is also a rich source of polyphenols

and flavonoids which are potent antioxidants, antiinflammatory, immunomodulatory effect and promotes cardiovascular health. Additionally, it possesses various enzymes such as glucose oxidase which provide antimicrobial property.^[22,23]

3. Ma-ul-Laham (Meat distillate): Meat and meat products are nutrient rich and good sources of energy containing high quality proteins, various micronutrients such as iron, zinc and selenium etc. and vitamins. Additionally, it also contains several bioactive compounds like taurine, glutathione, carnosine etc.^[24] Ma-ul-Laham is basically meat/ chicken soup which is prepared by distillation method and to increase its efficacy some herbs are added such as Cinnamomum zylenicum, Coriandrum sativum, Foeniculum vulgare, Cinnamomum tamala, Curcuma longa, Piper nigrum, Zingiber officinale, Myristica fragrans, Elettaria cardamomum, Carum carvi etc. It shows its medicinal benefits in case of protein energy malnutrition (PEM), Tuberculosis, Anaemia, Cachexia, cerebral and cardiovascular diseases.^[25]

4. Talbina: Talbina is barley syrup cooked with milk sweetened by honey. The therapeutic potential is attributed to the presence of bioactive components such as Carbohydrates, aminoacids, vitamin, minerals (Zn, Mg, Fe etc.) fiber and other phytochemicals. The major phytochemical in the barley that has been shown health benefits include phenolic acid, flavonoids, lignans, vitamin E (tocols), sterols and folates.^[26] Prolonged illness leads to stress, depression and several mental disorder. The zinc content in Talbina of 5 mg per serving contributes in reducing depression.^[27] Magnesium may play a role in the rapid treatment of depression if it is given as a supplementary dose of 125-300 mg per day. The magnesium content in Talbina is 14.4 mg per serving, which is beneficial for coping such mental disorder.^[28]

Ilaj-bil-Tadbeer (Regimenal therapy)

Ilaj-bil- Tadbeer is non-pharmacological and minimal invasive techniques and these modalities supports quality of life by addressing common palliative needs such as pain reduction, wound care, mobility issues, cachexia, fatigue and psychological stress. These therapies emphasize to restore humoral balance, strengthen body's innate healing power (Quwwat-e-Badan), evacuate morbid material, regulates the six essential factors (Asbab-e- Sitta Zaruriya) and provide symptom focused comfort without heavy drug reliance, ideal for frail patients in advanced or terminal stages of illness. It includes therapies such as Dalak (Massage), Hammam (bath or sauna), Hijama (Cupping), Fasad (Venesection), Irsal-e-Alaq (Leeching), Riyadat (Exercise), Takmeed (Fomentation), Inkabab (Steam inhalation) and Pashoya (foot bath) etc.^[29] These regimens are recommended and tailored based on patient's assessment.

1.Hijama (Cupping Therapy): Dry or wet cupping creates suction to draw out morbid humors, improve local circulation, reduce inflammation and relieve pain.

Palliative benefits: Effective for musculoskeletal pain, headaches, respiratory congestion, and stress/anxiety. Wet cupping aids detoxification in chronic conditions; often used as adjuvant for cancer-related pain or fatigue.^[31]

2.Taleeq (Leech Therapy): Application of medicinal leeches to withdraw impure blood and introduce anti-inflammatory, anticoagulant, and analgesic substances (e.g., hirudin).

Palliative benefits: Excellent for localized pain, swelling, poor circulation, and wound healing (e.g., in diabetic ulcers, varicose veins, or cancer-related edema). It has been documented to prevent amputations in complicated cases and provide symptomatic relief in chronic wounds.

3.Dalk (Massage): Therapeutic massage with or without oils to improve blood circulation, relax muscles, reduce stiffness and promote comfort.

Palliative benefits: It reduces pain (especially musculoskeletal or neuropathic), mobility in bed-bound patients, anxiety reduction and for better sleep. It supports physical rehabilitation and counters cachexia-related weakness.

4. Riyazat (Exercise/Physical Activity): Gentle exercises tailored to the patient's need and strength.

Palliative benefits: It prevents deconditioning, improves lung function, enhances mood and maintains joint mobility in advanced illness.

5. Other Supportive Regimens

Tariq (Diaphoresis/Sweating): Steam baths or warm wraps for detoxification and relaxation.

Hammam (Therapeutic Bath): Warm or medicated baths for pain relief and skin comfort.

Idrar-e-Bawl (Diuresis induction) or gentle evacuation methods: To manage fluid retention or constipation common in palliative settings.

Naṭul (Douche/Irrigation): For localized pain/inflammation.

Ilaj- bil Dawa (Pharmacotherapy): Unani system of medicine work as holistic approach based on herbal, mineral and animal origin drug to restore the humeral (Akhlāt) and temperament (Mizaj) imbalance. In the context of palliative care (especially in advanced or terminal illness) ilaj bil Dawa focuses on symptom management, quality-of-life improvement and holistic comfort rather than curative intent. Due to maximum efficacy, minimal invasive techniques and least side effects these drugs are now become center of attraction for palliative care management. It addresses pain,

nausea, fatigue, wound issues, nutritional decline, psychological stress, oral mucositis, gastrointestinal disturbances and more by using corrective (Moaddelat), analgesic (Musakkinat), resolvent (Mohallilat), sedative (Munawwimat) and other targeted agents. This approach is personalized according to the patient's Mizaj and the underlying humoral imbalance (e.g., excess morbid black bile/Sauda in cancer). It is often integrated with diet and regimenal therapies but can stand alone for pharmacotherapy-focused palliation.^[30,31]

Key Principles in Palliative care in Unani medicine

Unani pharmacotherapy in palliative settings aims to.

- Evacuation of morbid material (Tanqiya-e-Mawad) using concoctives (Munzij) followed by purgatives (Mushil) according to patient's need.
- Reduce inflammation, oxidative stress, and nociception.
- Promote tissue healing, appetite and emotional well-being.
- Complement conventional care without interference, preserving patient dignity and holistic wellness.

Examples of Unani Drugs and Formulations Used in Palliative Care

These Unani formulations as well as single drugs are prescribed after assessing Mizaj and stage of illness.

For Pain Management (Musakkinat/Analgesics)

- Single drugs: Suranjan (*Colchicum autumnale*), Asgand (*Withania somnifera*), Kalonji (*Nigella sativa*), Zanjabeel (*Zingiber officinale*), Zard Chob (*Rheum emodi*) etc.
- Compound formulations: Habb-e-Suranjan, Ma'jun Jograj Gugul, Habb-e-Asgand, Ma'jun Chobchini, Majoon Sher Alvi khan etc.
- Topical oils (Roghan) such as Roghan-e-Babuna, Roghan-e-Surkh, Araq-e-Ajeeb etc. are frequently used for local pain and inflammation relief.

For Wound Healing and Ulcers (common in advanced cancer or pressure sores).

- Single drugs: Sibr (*Aloe vera*), Mur Makki (*Commiphora myrrha*), Gulnar (*Punica granatum*), Amba Haldi (*Curcuma aromatica*) etc.
- Topical: Marham Momiya'i, Zaroor-e-Qawi, Roghan-e-Suranjan, Dimad Muhallil etc. **For Gastrointestinal Symptoms** (nausea, constipation, motility issues):
- Single drugs: Aspaghol (*Plantago ovata*), Anjeer (*Ficus carica*), Banafsha (*Viola odorata*) etc.
- Compound formulations: Jawarish Anarain, Jawarish Kamooni Sharbat-e-Deenar, Habb-e-Muqil etc.

For Nutritional Support and Cachexia

- Honey-based preparations (Ma'ul Asl), barley water (Ma'ul Sha'ir), Talbina, Harisha etc.

For Psychological Stress, Anxiety, Insomnia

- Single drugs: Asgand (*Withania somnifera*), Brahmi (*Bacopa monnieri*), Ustukhuddus (*Lavandula stoechas*) etc.
- Compound formulation: Khamira Abresham, Majoon Najah, Mufarreh Azam, Dawaul-Misk etc.

For Tanqiya (Evacuation)

- Munzij phase (e.g., Ushba, Bisfaij, Ustukhuddus) followed by Mushil (e.g., Aftimoon decoction, Halela Siyah).

CONCLUSION

Unani System of Medicine work as integrative modality along the side with conventional palliative care managements (e.g., WHO-aligned protocols for opioids, radiotherapy support). It addresses gaps in holistic care, nutritional support, low-toxicity natural agents, personalized Mizaj-based tailoring and emotional-spiritual aspects, while minimizing adverse effects. It promotes patient dignity, family involvement and a sense of empowerment in terminal illness. In India (under AYUSH/CCRUM frameworks), Unani System of medicine contributes to accessible, culturally congruent palliative services, especially in resource-limited settings and thereby enhancing the equity and the quality of life.

Unani palliative care is not merely symptomatic relief but a profound, humanistic paradigm that affirms life, regards dying as natural process and integrates physical, psychological, social and spiritual dimensions. When integrated thoughtfully with modern medicine, it offers significant potential to alleviate suffering, improve comfort and support dignified end-of-life experiences in conditions like advanced cancer.

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