



Healing Gardens for Human Wellbeing

Ar. Urwa Tariq¹, Dr. Fariha Tariq², Ar. Naveed ur Rehman Anwar³, Ar. Alishpa Naveed⁴,
Ar. Dr. Omer Shujat Bhatti⁵

¹ M. Arch UMT student & Professional Architect, Lahore. (Primary Author)

² Dean, School of Architecture and Planning, University of Management and Technology, Lahore. (Co-Author)

³ Assistant Professor, Department of Architecture, Balochistan University of Information Technology, Engineering and Management Sciences, Quetta. (Co Author)

⁴ Practicing Architect & Interior Designer, Quetta. (Co-Author)

⁵ Associate Professor & COD, Dept. of Architecture, School of Architecture & Planning, UMT, Lahore. (Corresponding & Co-Author) omer.shujat@umt.edu.pk

DOI: <https://doi.org/10.71145/rjsp.v4i2.619>

Abstract:

This research explains the idea of healing garden and its true potential, especially in healthcare centers. In the world where hospitals and healthcare centers only focus on treating patients medically, the healing garden is the idea which also provides a patient with nature. The study emphasizes nature, which itself has the power to heal the person, especially for the patients facing stress, anxiety and depression. The scented flowers, trees, water bodies, wildlife habitats that are connected to everything make sure to improve your mental well-being. It doesn't mean to cure the physical illnesses that plague a human being, rather its main purpose is to provide an environment that is conducive to your inner healing journey. The research also highlights the main factors that are user accessible, interactive spaces, and the importance of medicinal plants that play a crucial role in healing gardens.

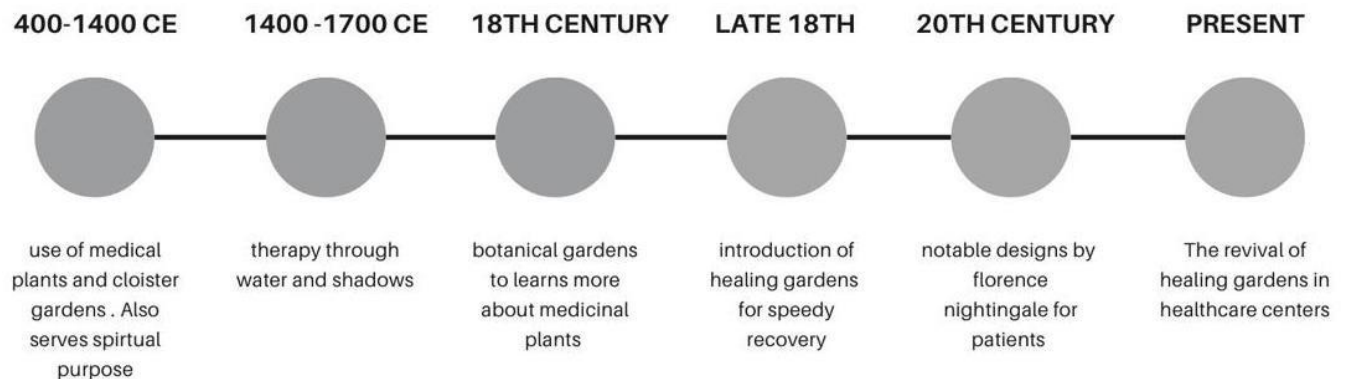
Keywords: Healing gardens, Stress, Nature, Hospitals, Pakistan

Introduction:

Healing garden is the concepts that were used in past years (17th – 18th century) for the betterment and wellbeing of humans but in present days, this concept can be rarely seen especially in the hospitals or health care departments where the need of these gardens is so high (Javed et al., 2025). Health-care centers are the places where people already feel depression, stress and anxiety where it's all black and white for the patients so it should be designed in a way that provides more exposure to the mother-nature (Bhatti et al., 2024). The features in landscape such as water bodies, plantations, trees can calm and relieve stress, and the various studies and experiments have been done and proved right that the patient with exposure to healing gardens gets better in short time (Mujtaba et al., 2025). It doesn't mean that it can cure your health conditions (Shafaqat et al. 2025), but healing is another word which can give the sense of calmness and relief so that the patients can stay there peacefully.

History of Healing Garden:

Healing gardens is not a new concept, it has been generated from historical times till now, by the names of 'restorative gardens' originated from Persia and Egypt but due to negligence, the concept turned down but later in late 12th century, when the idea of landscape was introduced, it found its way back in hospitals or other health care departments (Marcus & Barnes, 1999).



What Makes a Garden a Healing Garden?

Nature has always been a great source of healing. Nature includes sunlight, water, trees and plants which benefits and makes the person alive, especially in healthcare institutes where the atmosphere is already very dull and un-pleasant.

There are some key objectives that should be considered to ensure that they truly support healing:

- A designed setting where visitors and patients can interact under the blue sky rather than meeting in that same boring space
- A garden where nurses can let the patient perform different activities such as yoga, horticulture therapy etc.
- A space that is utilized by doctors and other medical staff for relaxation
- A setup which helps patients connect with nature so they can overcome their stress and sadness

Healing garden should be a place where user can feel sensory bonding, meaning, the garden should connect visitors with sight, smell, hearing and touching sensors (Stigsdotter & Grahn, 2003).

Secondly, the sitting areas should be designed carefully as most of the patients have anxiety, stress and discomfort. Let's say, Seating's near a water feature, it can calm and relieve the stress of visitor, the coolness of water and its sound can really make an overall impact. Similarly, the seating spaces designed near scented plants or trees can enhance the mood and improve mental health.

Thirdly, designed spaces for meditation or a gymnasium can help with rehabilitation of patient's under-going physiotherapy. Healing garden is an overall environment which can improve these symptoms and has a vast list of benefits in terms of physical and mental health.

Key Aspects of Healing Gardens:

Healing gardens is the space carefully designed for the mental and physical health of a person. It can either be built inside the health care centers or any other any area where it demands. Some key aspects should be noted carefully such as,

- Connection to nature
- Easy to assess
- Therapeutic activities
- Wild-life habitats
- Well- designed outdoor sitting

Connection to Nature:

Healing gardens are different from other gardens, to achieve the level of healing gardens, so patients can rely on them, connection to nature is one major aspect.

Planting specific medicinal plants and vegetation can improvise health and can release stress. It should be designed in a way so that the person can feel connected and attached to the garden (Shahrad, 2012).

There are some specific flowers that make your brain produce happy hormones like serotonin and can lighten up your mood. These flowers have calming properties and their fragrance can helps to enhance your mood, such as; (Laughlin, 2020)

- Jasmine
- Lavender
- Roses
- Peonies
- Lilies

Easily Accessible and User Friendly:

The need of the user should be kept in mind when designing the garden and secondly it should be easily accessible for all types of age-range.

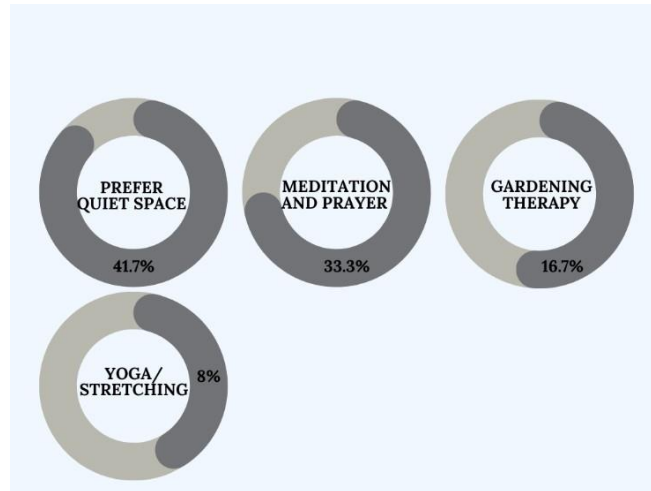
- Using navigation boards and clear paths can make a whole lot of difference.
- Pathways that are accessible for patients with wheelchairs
- Materials should be chosen wisely with respect to user demand

Therapeutic Activities:

Offering the activities to patients can release stress even in the form of work-out and meditation. Exercise not only reduces stress but also great for physical health. It also includes the sightseeing and relaxing in the calm environment.

There are several activities that can be done for the betterment of patient illness: (Marcus, 2007)

- Gardening and horticulture therapy
- Manual work can help in building muscles
- Meditation/ prayer/yoga
- Different sport activities
- Walking on a textured surface
- Sitting under the shade of trees, beside the aromatic flowers
- Listen to the birds chirping / flowing water



Surveys were conducted to get the original data by people of different gender and different professions, students, healthcare workers and others to find out that most of people prefer such options , shown in above image, that are fundamental elements of healing garden.

Wildlife Habitat:

As we already know, the connection between nature and human beings is unbreakable, and so wildlife is also a part of nature. The feeling of human beings towards animals or birds is undefinable. Interaction with animals always provides benefits to human well-being, psychologically and mentally. Reduction of stress and anxiety, improvement in mood by distracting the patient, phycological and physiological changes (Sumner, 2020).

Other Design Aspects:

Some of the design aspects that should be kept in mind while making the healing garden (Hartig & Marcus, 2006)



Looped pathways for patients ease



Tinted walking surface
which doesn't affect the aged person



Use of flowers that can help to
recall their good memories



Non-toxic plants
so patients can't get harm if they eat

Medicinal Plants In Pakistan:

Medicinal plants plays a vital role in making of healing gardens so the patient can feel lively. Unfortunately Pakistan don't have vast variety of such plants In Pakistan, the concept of healing gardens is not widely spread in comparison of other countries. Similarly, the import of medicinal plants in Pakistan is too low compared to china and India.

Some of them that can be used in healing gardens are:

No.	Name of plants	Size	Picture for reference	Medical benefits
01	Cassia fistula L. Also known as golden shower or amaltas	30-40 feet tall		Serves antifungal and anti-inflammatory properties which can help in skin diseases, coughing, and jaundice.
02	Solanum Nigrum Also known as nightshade and in urdu 'makoh'	1.25 meters tall		Its active components can release anti-oxidants which acts as therapeutic plants, which can reduce stress in patients (zeeshan, 2023)
03	Verbascum Thapsus L. Also known as mullein. In urdu 'Tionsh'	2-7 ft tall		Mullein has sedatives that gives the feeling of calmness among patients and its anti-inflammatory properties works best for asthma patients.
04	Lavendula angustifolia Common name 'lavander'	12 inches tall		This plant with its pleasant smell can help patients to recall their happy memories Its high properties can reduce stress , anxiety in some patients plus it can lighten up the mood (Bowman, 2023)
05	Matricaria chamomilla Called as 'chamomile' and in urdu 'gul-e-babona'	3-24 inches tall		Its sedative properties, makes this plant effective for the patients of insomnia and makes the patient relax (WebMd, 2024)
06	Morus Alba Known as 'mulberry' and in urdu, its 'shahtoot'	24 meter tall		Its wide spread gives the coolness effect and provide a great shadow to user. It's a fruit tree which is also a plus point.

07	Azadirachta Indica Widely known as 'neem tree'	20-30 meter tall		Its refreshing properties helps to purify the air quality and it also a non-toxic plant, which can also be consumed directly.
08	Lobularia Maritima Also known as 'sweet alyssum'	6-12 inches tall		It not only enhance the mood of person but also its sweet honey scent makes the garden's air fresh and unique (Rankel, 2024)
09	Gardenia Jasmionoides Known as 'gardenia' and in urdu 'garhal'	3-8 feet tall		It is good for releasing stress especially for digital stress patients. It is also good for insomnia patients.
10	Eucalyptus spp. Widely known as 'eucalyptus' and in urdu 'safaida'	30-200 feet tall		It is great source of anti-oxidants, it also helps to improve sinus and can heal other cold symptoms (Davidson, 2024)

Study of healing gardens in local and global context:

Case-study: Agha Khan University Hospital

THE AMIR KANJI GARDEN- is situated in Karachi, Pakistan within agha khan university hospital designed by Vladimir Djurovic. It is one of those gardens which are designed according to patients need but it has not reached the level of healing gardens yet, as the concept is very new in this country.

Characteristics that make this garden special are:

1. The space can accommodate 20,000 visitors including patients, staff and other members at the same time
2. The garden also act as welcoming entrance for the building on the south side.
3. The garden owns a total of 100 different plant species in which old-silk-floss tree is included (it is beneficial for patients with stress or anxiety as well as it attracts birds and butterflies , which creates a garden, a peaceful and calming place)
4. The addition of water bodies in the center of garden makes it more serene. The water pond is lined with pebbles which has a therapeutic effect on patients. Walking on pebbles can make you at ease by putting pressure on certain points on feet. This process is also known as reflexology (Lindberg, 2019).
5. The pathways are done with granite and lighting is also added at certain points so it will be easy to walk-on.



Case study: Siskin Hospital

It is situated in Chattanooga, Tennessee designed by Terry L. Hoyt. The garden was designed for patients who have been through traumatic injuries; this garden not only allows them to see the outside world, but nature also helps the patient to heal within.

Characteristics of this garden that makes it healing garden:

1. A variety of sculptures, artwork to enhance visuals and interactive spaces for relaxation and for the connection with nature are built not only for the patients but also for the staff and visitors.
2. Staircase with different dimensions, textured surface and raised platforms that help patients
3. Shaded areas and aromatic flowers to stimulate sense, and some flowers which have ability to reduce anxiety, stress and depression have also been used in this project
4. Seating areas with properly designed armrest, walkways with carefully used materials and textures let the patients learn to walk again.
5. The steel structure (a patterned metal structure with movable panels) in healing garden which only allows the filtered sunlight and also create a dynamic impact on overall surroundings (Chattanooga, 2024).





Discussion:

Guidelines for Designing Healing Garden:

There are certain guidelines that should be followed

Identification of The User:

To begin with, the user should be kept in mind while designing the healing garden. Surveys or questionnaires should be filled by users so every feature in the garden should be designed on their requirements, desires and needs.

Questions should be asked like.

- Which age group will be the major user of healing garden?
- What type of surroundings should be provided where patients feel safe and calm?
- What type of activities should be performed for the user?
- Does the healing garden fulfilling its purpose?

Spatial and Contextual Analysis:

Analysis of space is quite important when designing the healing garden. Space should have specific characteristics such as.

- Climate condition, whether it's too hot or too cold
- Type of soil
- Sunlight direction
- Wind direction

Execution of Design:

The team should be strong enough to design the healing garden meaning, a doctor/health care worker, landscape designer, and architect. They all should be a part of the team to understand the value of healing garden. A proper understanding of healing garden's fundamental characteristics can lead to proper form and design.

To execute the functionality of HG, spaces should be well defined, variety of textures and materials, vast variety of exotic flowers and trees, designed space to read books, all these elements should be kept in mind while designing the garden. Design should be based on the features that help in healing (Pimentel, 2024).

- It should be all pre-planned where the garden entrance should be.
- What would be the material of garden fences, pathways?
- How the garden will be connected to nature, what type of plant species will help to improve patients wellness.
- Designing sitting areas accordingly.
- Use of colors that do not make visitors uncomfortable.

- Right placement of trees.
- Use of water bodies (ponds, fountains)
- Wild-life habitats
- To improve the patients' health, physical activities should be improved

Supervision of Healing Garden:

After designing the garden, monitoring is one crucial step, without the supervision, it'll create problems for users. Making HG comes with huge responsibility because major consumers of the garden are patients that have already gone through a lot, so maintenance and continuous checking of garden is quite an important part. There are a few questions while monitoring the garden

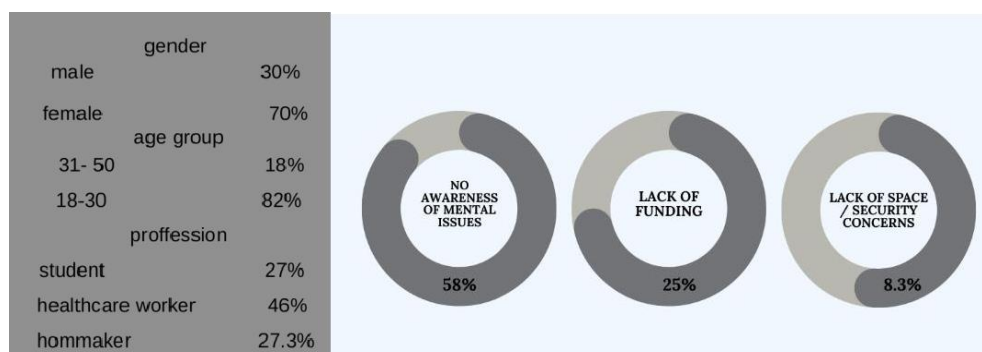
- Does the user meet their desired requirement?
- Is any structure, sitting area or furniture that needs to be reconsidered?
- Does the user perceive the actual purpose of healing garden?
- Does the garden succeed in making an environment positive?

Why is there not much scope for Healing Garden in Pakistan?

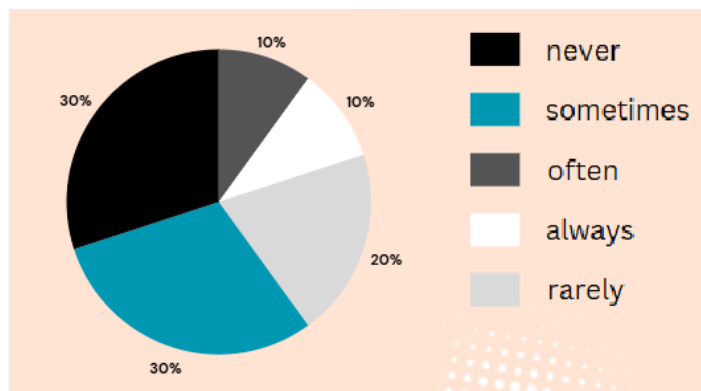
In other countries, healing gardens are making place to get into health care centers whereas, in Pakistan, the scope of healing gardens is comparatively low. When we see Pakistan as a society, it is still a taboo, seeing a psychiatrist while in depression. Depression itself is under-discovered and many people don't even realize if they are going through one. As a society we are live for fun and entertainment. What's mental peace, restoring connection with nature or one's inner self, or even with creator are not thought about, and introducing the healing garden idea might be welcomed by elite class since they understand the importance of personal wellbeing, but our major population is middle class and lower class. People don't even visit a general doctor while they are sick, they'll start home remedies. Pakistan has yet to unveil the importance and positive impact of healing garden but before that, there are so many other major aspects we as a society need to discover, adapt and adopt.

Challenges that we might face:

To move forward with this search, the number of surveys and questionnaires were handed to variety of people for a vast range of perspective, different backgrounds, age groups were targeted for a better approach. Among the participants, there were healthcare workers as they are suitable candidates for this survey, homemakers, the one who make our homes, they usually get stressed by doing all the work and loads of responsibilities, and students, they will be our future, so their feedback is also important.



With respect to research, it is a fact that lack of awareness and insufficient funding's are the main issues in Pakistan that makes it hard for designers to design something that is beneficial not only for patients but also the visitors and staff of healthcare centers. Furthermore, a healing garden should not be seen as an option instead it should be a part of our lives, a place or environment that connects directly to the soul of user. More over according to research survey we found out that:



40% of people never heard of healing garden before And 30% of people have never visited this type of garden before

References:

- Aamer Javed Ar. Kabeer Ud Din Naseer, Ar. Dr. Omer Shujat Bhatti. 2025. "HEALING ENVIRONMENTS FOR CHILDREN: AN ENVIRONMENTAL ASSESSMENT OF THE PEDIATRIC WARD AT ALLIED HOSPITAL, FAISALABAD CITY." The Research of Medical Science Review 3(5):553–75. https://www.researchgate.net/profile/Omer-Bhatti-4/publication/391880835_HEALING_ENVIRONMENTS_FOR_CHILDREN_AN_ENVIRONMENTAL_ASSESSMENT_OF_THE_PEDIATRIC_WARD_AT_ALLIED_HOSPITAL_FAISALABAD_CITY/links/682c19f7d1054b0207effcb8/HEALING-ENVIRONMENTS-FOR-CH.
- Ankle and Foot Institute of Texas. (n.d.). Are there health benefits of walking barefoot on stones? Retrieved February 4, 2025, from <https://www.aafoot.com/post/are-there-health-benefits-of-walking-barefoot-on-stones-fort-worth-podiatrist>
- Ar. Muhammad Waleed Mujtaba Ar. Reena Majid Memon, Ar. Dr. Omer Shujat Bhatti, Ar. Shayan Zulfqar. 2025. "From Asylum To Healing Environments:A Comparative Study Of Mental Health Architecture With National And International Case Studies." Annual Methodological Archive Research Review 3(12):539–58.
- Bhatti, Omer Shujat, Saad Mujahid, and Shujat Ali Hamid. 2024. "Therapeutic Transformation through Healing Environment . Evaluation of Post Surgical Facilities Optimization in Selected Tertiary Healthcare Facilities in Post Covid-19 KPK , Pakistan." Journal of Health and Rehabilitation Research 4(3):706–12.
- Bowman, J. (2023, October 30). The many benefits of lavender for mood, sleep, hair and skin. Healthline. <https://www.healthline.com>
- Davidson, K. (2024, September 17). 7 impressive benefits of eucalyptus trees. Healthline. <https://www.healthline.com>
- Hartig, T., & Marcus, C. C. (2006). Healing gardens—Places for nature in health care. The Lancet, 387(6), 1–2. [https://doi.org/10.1016/S0140-6736\(06\)69920-0](https://doi.org/10.1016/S0140-6736(06)69920-0)
- Laughlin, T. (2020). Career and passion for plants and animals. Quora. <https://www.quora.com>

- Marcus, C. C. (2007). Healing gardens in hospitals. *Interdisciplinary Design and Research e-Journal*, 1(1), 1–27.
<http://www.brikbases.org/sites/default/files/Healing%20Gardens%20in%20Hospitals.pdf>
- Marcus, C. C., & Barnes, M. (1999). *Healing gardens: Therapeutic benefits and design recommendations*. John Wiley & Sons.
- Pimentel, H. C. B. (2024). Recommendations for implementing therapeutic gardens to enhance human well-being. *Sustainability*, 16(21), Article 9502.
<https://doi.org/10.3390/su16219502>
- Rankel, K. (2024, June 8). 10 benefits of having sweet alyssum. Greg. <https://www.greg.app>
- Shafaqat, Ar Humaira, Ar Omer Shujat Bhatti, Ar Fahad Khan, and Ar Nazia Iftakhar. 2025. “The Healing Nexus: A Patient-Centered Model for Rehabilitation Architecture.” *Policy Journal of Social Science Review* 3(11):211–28.
- Shahrad, A. (2012). What are design principles of healing gardens: For people who are suffering from stress-related diseases. *Alnarp*.
- Stigsdotter, U. A., & Grahn, P. (2003). Experiencing a garden: A healing garden for people suffering from burnout diseases. *Journal of Therapeutic Horticulture*, 14, 38–48.
- Sumner, R. C. (2020). A walk on the wild side: How interactions with non-companion animals might help reduce human stress. *People and Nature*. <https://doi.org/10.1002/pan3.10074>
- Tinker, M. A. (2024). Clarence E. Harris Pavilion at Siskin Hospital. Chattanooga, TN.
- WebMD Editorial Contributors. (2024, December 29). Health benefits of chamomile. WebMD.
<https://www.webmd.com>
- Zeeshan, A., et al. (2023). *Solanum nigrum* Linn: An analysis of the therapeutic properties of plant. *Journal of Pure and Applied Agriculture*, 8(4), 1–10.