



Research Article

GRACEFUL AGEING THROUGH AYURVEDA - A RETROSPECTIVE PILOT STUDY AMONG PARTICIPANTS ABOVE 80 YEARS OF AGE

Arya Anil^{1*}, Sowmya C Nair²

*1PG Scholar, ²Professor, Department of Swasthavritta, VPSV Ayurveda College Kottakkal, Kerala, India.

Article info

Article History:

Received: 15-12-2024

Accepted: 19-01-2025

Published: 07-02-2025

KEYWORDS:

Ayu, Longevity, Pilot study, Graceful ageing, Healthy long life.

ABSTRACT

The pathophysiological process of aging is progressive and irreversible, resulting in a loss of tissue and cell activities as well as an increased risk of certain diseases. Diseases like neurodegenerative diseases, cardiovascular diseases, metabolic disorders, musculoskeletal ailments, and immune system disorders are increasingly prevalent among old age. The universal process of aging most likely started with the beginning of life. The accumulation of various harmful aging-related alterations in the cells and tissues gradually reduces function and may ultimately result in death. Aging is one of the many human illness that Ayurveda addresses holistically. It is categorized as a *Yapya* (palliative) and natural sickness. The body undergoes a number of changes as people age, including changes in mental and cognitive abilities, exterior appearance, *Dosha, Dhātu, Mala, Agni, Oja*, and other conditions. Ayurveda maintains *Dhātu samya* (homeostasis) through a comprehensive strategy, for which a number of principles have been outlined. It is believed that aging is an illness that might appear at any time. As a result, a thorough explanation of how to prevent, maintain, and treat aging has been provided; if followed, this will result in a long, healthy life. **Method:** Survey study, 31 participants from different parts of Kerala who are above 80 years of age was contacted and an online survey via google form was conducted. **Objective:** To highlight the importance of following Ayurvedic principles for longevity. **Result:** All the participants were following most of the principles explained in Ayurveda in their daily life. **Conclusion** – Ayurvedic principles are helping to maintain a healthy long life. So here an effort has been made to document some Ayurvedic principles followed by participants above 80 years of age who lead a healthy long life.

INTRODUCTION

The intrinsic, unavoidable, and permanent age-related loss of viability that increases a person's vulnerability to different illnesses and death is known as aging. Chronological aging, which measures real age in years, months, and days, is one of the two components of aging. This element is irrevocable and unalterable. The second is biological aging, which can be postponed or reversed and refers to an individual's development and changes depending on specific cellular or molecular characteristics. Among the

variables affecting biological aging are stem cell growth, cellular senescence, telomere modification, and genomic instability.¹ There are certain theories related to ageing: Genetic - molecular theory, Cellular theory, System level theory, Mutation theory, Telomerase theory and Stress theory are few among them. Ayurveda defines *Jara* or *Vardhakya* as something that has aged as a result of wear and tear. According to Ayurveda, *Jara* is a normal occurrence, just like hunger, thirst, or sleep. *Shareera, Indriya, Satva, Agni, Bala, Shareera vridhikara bhavas, Parinama*, and *Garbhavidhikara bhavas* are some of the variables that affect *Jara*, or aging, and when followed appropriately, will result in a long, healthy life. The disease process that leads to mental and bodily pain is triggered by the misuse of the five sense organs and by making poor decisions that affects body and mind. *Dhatusamya*, a condition of equilibrium of normal anatomical, biochemical, physiological, mental,

Access this article online	
Quick Response Code	
	https://doi.org/10.47070/ijapr.v13i1.3507
Published by Mahadev Publications (Regd.) publication licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)	

and spiritual well-being, is maintained by Ayurveda using a holistic approach. According to Ayurveda, homeostasis is thus provided by a balanced condition of *Dosha, Dhātu, Agni, and Mala*.² To maintain this, Ayurveda relies on comprehensive approach including dietary, lifestyle, behavioral and psychological interventions for providing a healthy aging. The study aims at identifying the influence of Ayurvedic principle in providing a healthy, successful ageing. The study was conducted among 31 participants who are above 80 years of age who are in the phase of successful ageing. According to National health system resource center survey, Kerala has an overall life expectancy of 75.2 years in 2024. Hence knowing the lifestyle of participants above 80 years of age would provide the need for identifying factors influenced in their life to attain healthy ageing. Documenting the information about the routine of such participants can provide data which can be recommended in the society for attaining healthy ageing.

OBJECTIVE

To document routines of participants above 80 years of age and their contribution to provide a healthy ageing.

MATERIALS AND METHODS

1. Research design Exploratory study
2. Sources of data

The data was collected from participants above 80 years of age in Kerala

Method of data collection

1. Sample size

The sample for the study was considered as 31

2. Sampling procedure

A total of 31 participants were selected using purposive sampling and evaluated for their routines they followed to maintain a healthy long life. Those who fulfilled the criteria only were selected for the survey.

RESULTS AND DISCUSSION

Study was conducted through a questionnaire including 19 closed ended questions assessing their daily routines, eating habits, practices to maintain mental health and data regarding the social norms they followed. Study utilized selected questions from *Brihatrayees*.

Method of study was a survey method. Among 31 participants, data was collected regarding the routines they followed in their life time via google form. Participants who had intact memory and orientation, without any major illnesses were selected for the survey. Contact number of all participants were collected. The request form, title, aim, objective of study, brief introduction was explained to the participants and care takers.

Selection of sample

1. Inclusion criteria

- Age group – above 80 years of age
- Not a known case of major illnesses
- Participants with intact memory and orientation
- Those who are willing to take part in the survey

2. Exclusion criteria

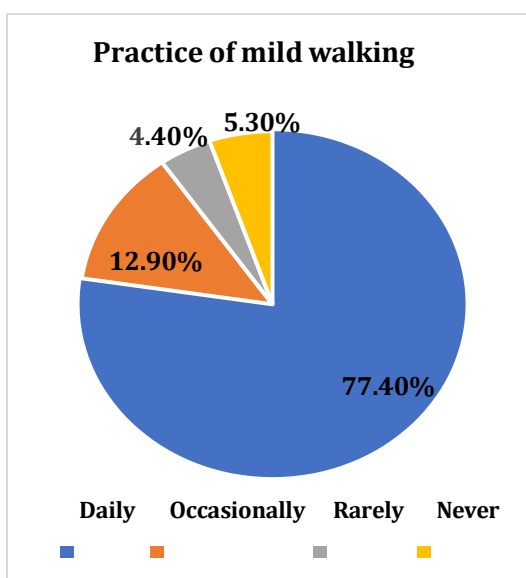
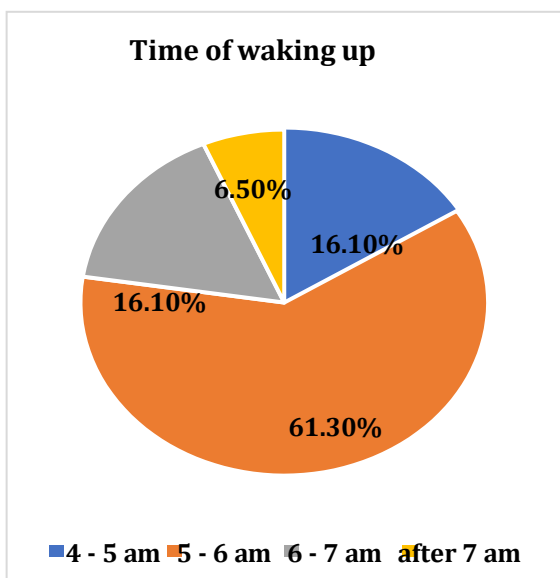
- Participants suffering from loss of memory
- Participants who are bed ridden
- Those who are not willing to take part in the survey

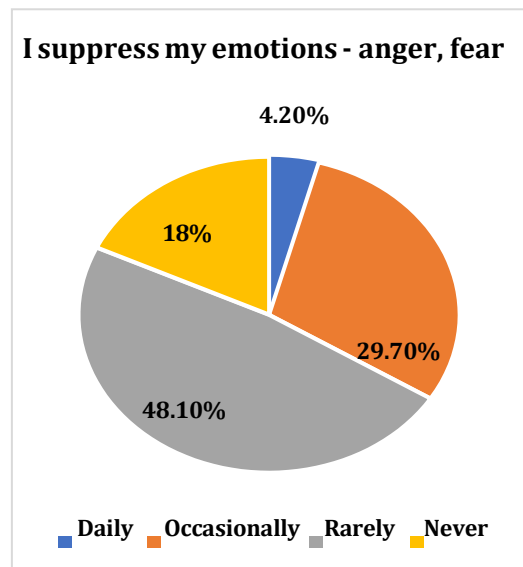
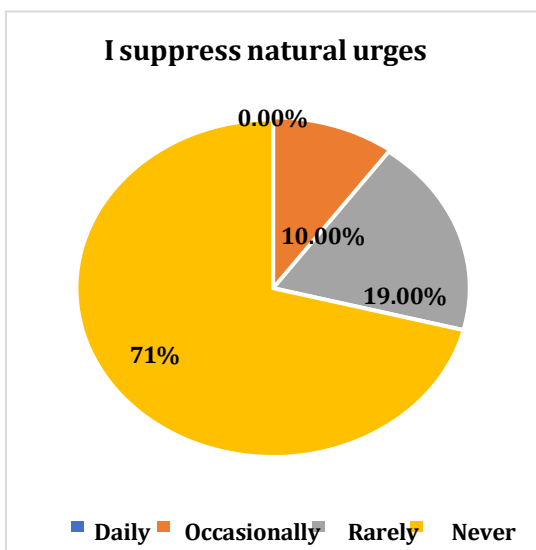
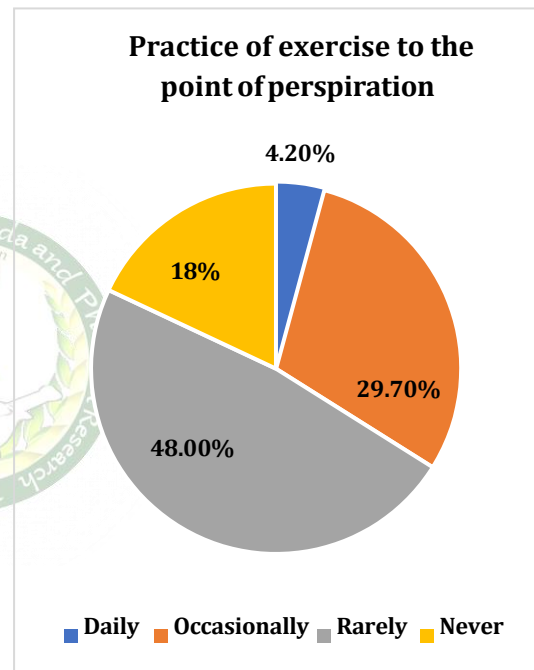
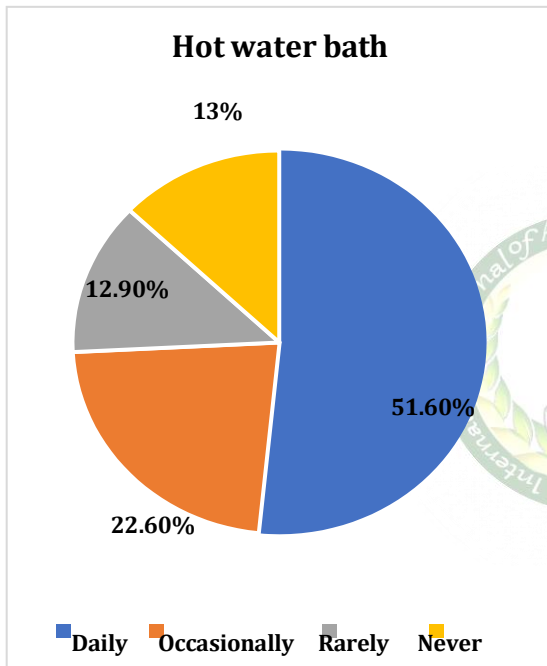
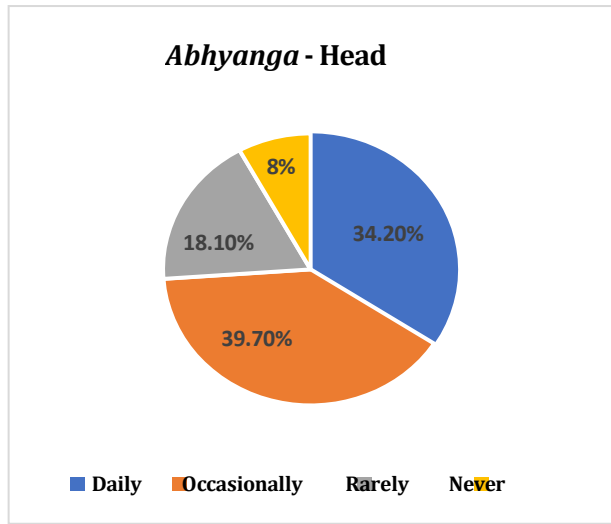
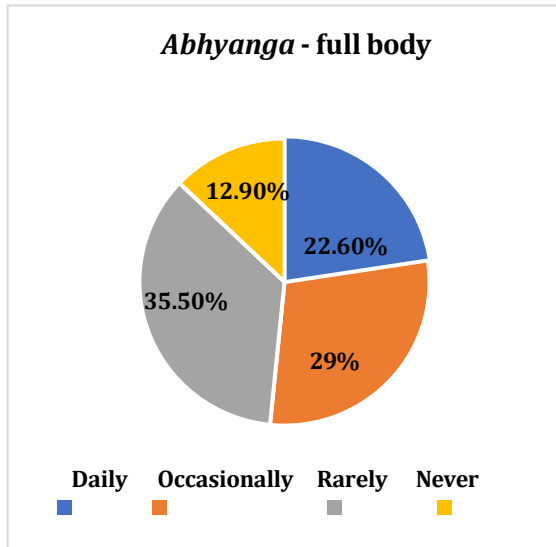
3. Assessment criteria

All participants were analyzed for their demographic profile like age, sex, marital status etc

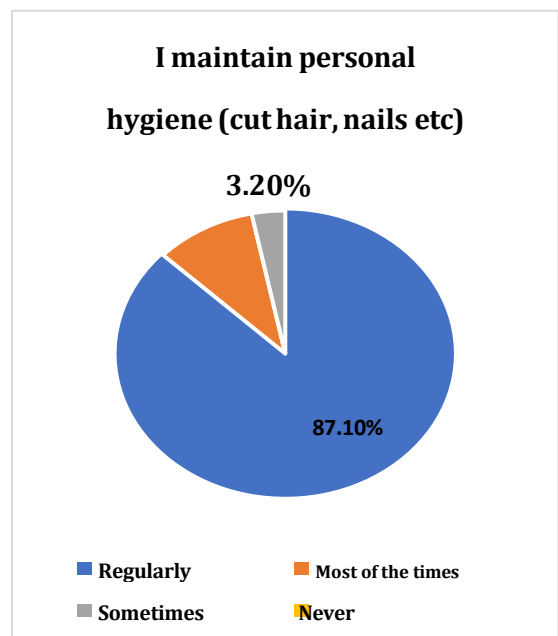
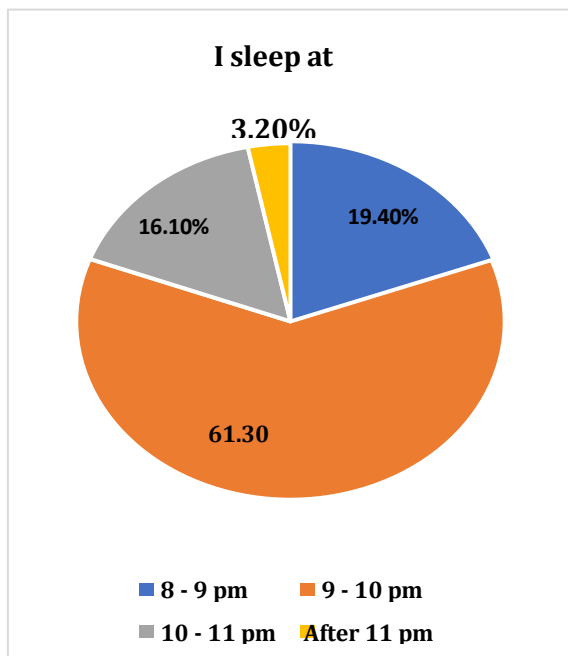
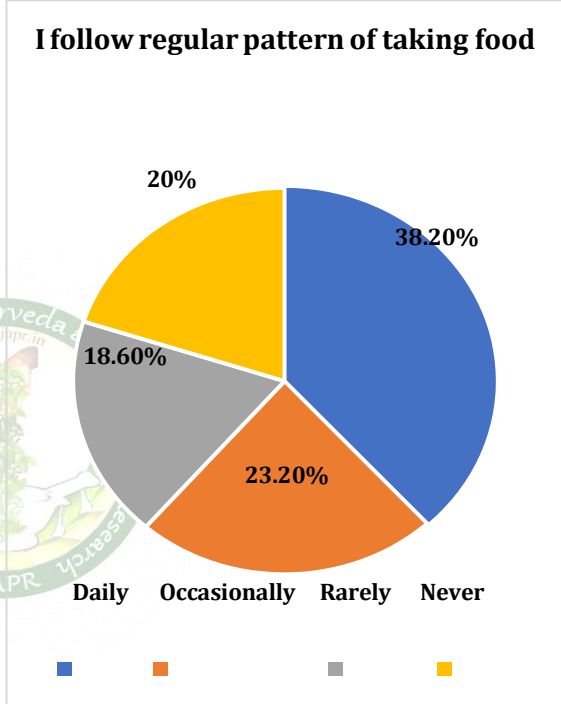
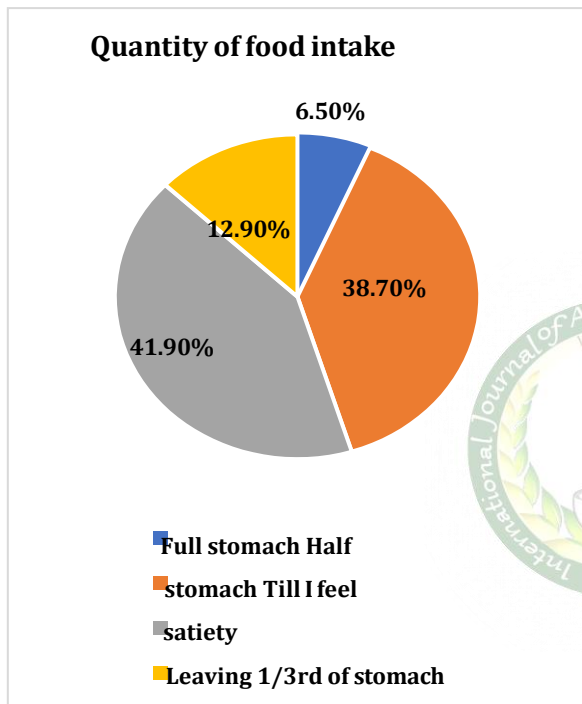
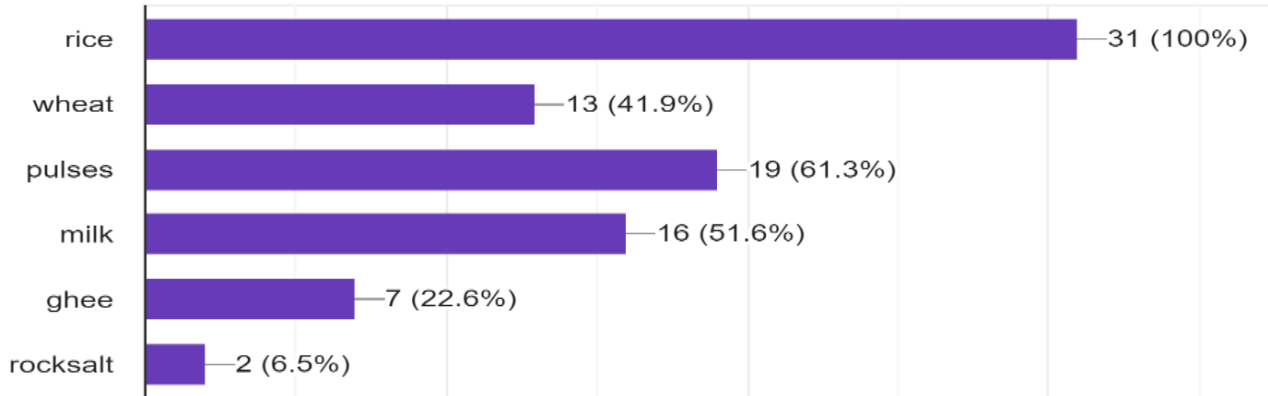
Questionnaire

The questionnaire aims to gather information from participants about their daily routines, food habits, sleep, job, mental health and social norms they followed.

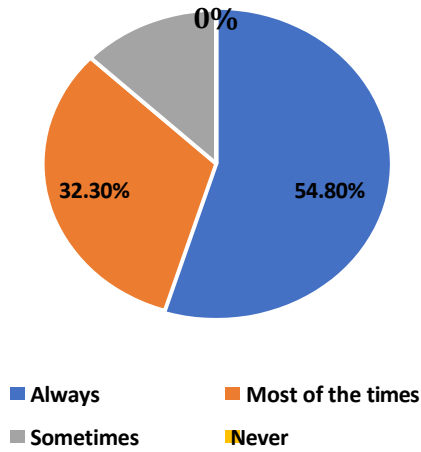




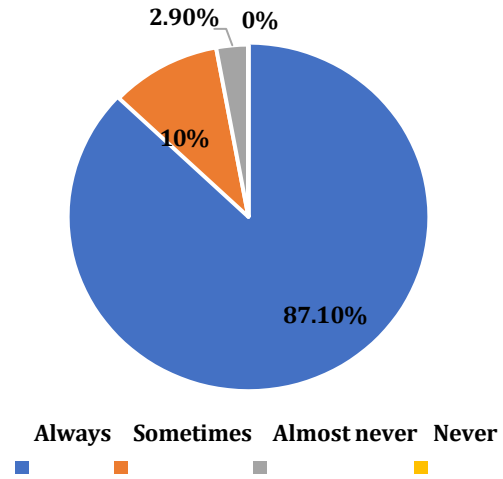
Nityasevaneeya ahara



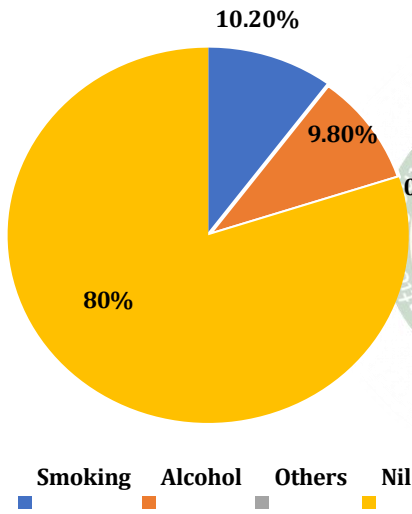
I enjoyed my work during my middle age



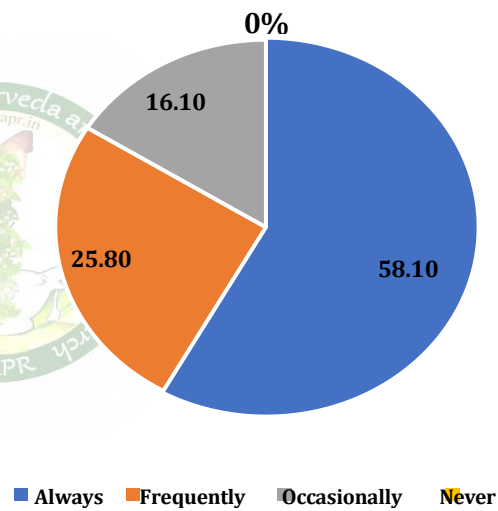
I had a good social circle in my middle age



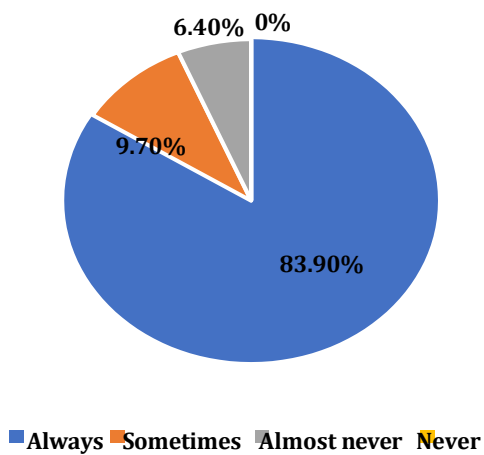
Unhealthy habits



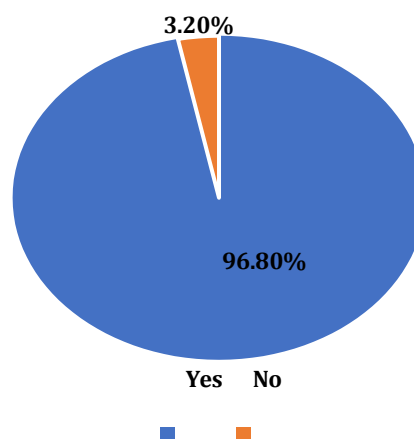
I give and receive affection



I get strength from my religious beliefs



How do you feel - I have been successful in life



DISCUSSION

Among 31 participants, most of them are seen to be regularly following routines explained in Ayurveda. Routines include selected principles of *dinacharya*, *nidra*, *ahara* and *sadvritta*.

Question regarding the timing of waking up showed that 61% of participants wakes up between 5 – 6 am and 16.1 % wakes up between 4 – 5 am. According to the teachings in our classics regarding *Brahma Muhurtha*, if the sunrise occurs at 6 am, the period from 4:24 am to 5:12 am, which is 1 hour and 36 minutes before sunrise, is considered as *Brahma Muhurtha*. This is particularly relevant as most participants wake up before 6 am. Early mornings are when fresh oxygen is released, which rapidly nourishes the tissues when absorbed. The release of the serotonin hormone keeps individuals alert and active. Additionally, the minimal pollution during this time enhances concentration. During this time, the pineal gland also increases the synthesis of melatonin, which plays a key role in regulating the reproductive system, thermoregulation, metabolic rate, antioxidant levels, and overall immunity.³

The next point is about the practice of mild walking, which 77.4% of participants engage in. This can be related to *Chankaramanam* as described in Ayurveda. Research shows that walking interventions lead to consistent improvements in cardiovascular fitness⁴ or an improvement in ability to undertake exercise post intervention.⁵ According to Ayurveda, *Chankaramanam* enhances longevity (*Ayu*), strength (*Bala*), intellect (*Medha*), digestive power (*Agni*), and sensory perception (*Indriyabodhana*).⁶ Since it is Ayurvedic it helps in preventing various diseases thereby providing a healthy long life.

29 % of participants occasionally and 22.6% participants daily follows full body *abhyanga*. 39.7% occasionally and 34.2% daily apply oil over head. Ayurveda recommends daily *Abhyanga* (oil massage), or at the very least, applying oil to the head, ears, and feet, as essential for maintaining a healthy life. The key areas that should be massaged include the head (*Shira*), ears (*Sravana*), and feet (*Paada*).⁷ The *Abhyanga* practiced today primarily aims to enhance the circulation of vital fluids in the massaged areas and stimulate the nervous system, offering a soothing and relaxing effect. It is important to perform *Abhyanga* in the *Anuloma* direction to avoid damaging the hair roots. The benefits of *Abhyanga* are closely linked to the stimulation of both the autonomic nervous system and the central nervous system. Therefore, practicing *Abhyanga* regularly is beneficial for promoting healthy aging.⁸

Next was regarding hot water bath where 51.6 % participants use hot water for their daily bath. It helps in increasing the strength of an individual and

pacifies the increased vat dosha and kapha dosha.⁹ A warm bath stimulates the skin, triggering a reflex that excites the heart and circulation. The primary effect is its hypothermic action, which warms the body and the blood in superficial vessels, thereby raising the deep body temperature through circulation. Bathing in warm water also exerts sufficient hyperthermic action to induce vasodilation, increasing blood flow. This enhances the supply of oxygen and nutrients to the peripheral areas, while promoting the elimination of carbon dioxide and metabolic waste. As a result, it helps prevent many diseases and contributes to maintaining a healthy body as one ages.¹⁰

Regarding exercise, 48% of participants engage in it only rarely, while 29.7% do so occasionally. According to Acharya Sushruta, a person who practices *vyayama* (exercise) regularly cannot be defeated by enemies. Old age does not affect them quickly, and their muscles become strong. Exercise also enhances the body's appearance, even for those who may be lacking in age, physique, or qualities. A person who exercises daily can easily digest unhealthy or improperly cooked food without any difficulty.¹¹ *Vyayama* contributes to optimal health or "physical fitness," which enables an individual to perform daily tasks with vigor and alertness, without excessive fatigue, while also having enough energy to enjoy leisure activities and handle unexpected emergencies. Regular mild physical exercise enhances muscle strength and tonicity, while also improving cardiac and respiratory functions.¹²

Seventy-one percent of participants never had the habit of suppressing their natural urges. Acharya Vagbhata, in the *Ashtanga Hridaya Samhita*, explained that all diseases arise due to the suppression of natural urges that should not be held back (*Adharaniya Vega*). Therefore, the proper management of *Adharaniya Vegas* plays a crucial role in maintaining the normal physiological functions of the human body.¹³ In Charaka Samhita also it is said that all the diseases are mostly caused by the *vegadharana*¹⁴ The consequences of suppressing natural urges include pain, digestive disorders, and increased stress levels. Suppressing *Adharaniya Vegas* not only interferes with physical functions but also has a wider impact on mental and emotional well-being.¹⁵

Regarding emotional suppression, 29.7% of participants occasionally suppress their emotions. According to Ayurveda, an individual seeking well-being in both life and after death should refrain from suppressing *Dharaneeya Vegas* related to harshness and cruelty whether mentally, verbally, or physically. Most

Dharaneeya Vegas are mental urges, and when suppressed, they negatively impact the overall well-being of the individual.¹⁶

Next question was regarding the practice of intake of *Nitasevaneeya ahara* explained in Ayurveda. Among the participants, all of them has the routine of taking rice daily, rice being the staple food of Kerala. 41.9% consume wheat daily. 61.3% of participants have the habit of including pulses to their daily diet which are light for digestion, rich in proteins, phosphorous, calcium and potassium. 51.6% participants consume milk on daily basis, it being easily digestible, nourishing the body, rich in fat, protein, vitamins and minerals. Ghee is taken by 22.6% participants daily which helps in increasing digestive fire, easy for digestion and rich in fat. 6.5% participants use rock salt in their daily diet which is the rich source of potassium than sodium. Inclusion these items told in *Nityasevaneeya ahara* has contributed to the intake of a balanced diet which might have contributed in providing them a healthy long life.¹⁷

Regarding food intake, 38.2% takes their food at regular timing, 41.9% of participants eat until they feel full, while 38.7% consume food until their stomach is half full. When a person consumes enough food, fat cells release leptin, which signals the brain that sufficient calories are stored, thus inhibiting hunger signals. Leptin, secreted by adipocytes, plays a crucial role in regulating body weight by balancing food intake and energy expenditure. This suggests that following the principles of *Trividha Kukshi* for food intake can help regulate leptin levels, thereby maintaining BMI and preventing issues like indigestion, obesity, hyperlipidemia, and heart disease.¹

Regarding sleep timing, 61.3% of participants sleep between 9-10 pm. Studies indicates that a delayed bedtime can disrupt the circadian rhythm, leading to endocrine disorders and increased fibrinogen levels, which promote thrombosis. Additionally, shorter sleep durations may heighten the myocardium's sensitivity to ischemic damage, contributing to the early deterioration of vascular structure and function.¹⁸

Among the participants, 87.1% followed regular personal hygiene practices. Improved hygiene has been linked to increased life expectancy, as it helps reduce the incidence of infectious diseases.¹⁹

Regarding their work, 66.7% of participants never postponed their tasks, 54.8% always enjoyed their work during middle age, and 58.1% regularly gave and received affection. A sense of purpose and happiness in life are strongly associated with longevity. Additionally, 87% of participants maintained a good social circle, which likely contributed to their healthy, long lives. Furthermore, 80% of participants did not engage in harmful habits such as smoking or

alcohol, as studies show that such habits can shorten life expectancy. 83% of participants stated that they draw strength from their religious beliefs. These practices align with the *Sadvritta* principles in Ayurveda, which are guidelines for living a healthy, balanced life and may have contributed to their longevity. Finally, 96.8% of participants felt they had been successful in life. Adhering to the healthy regimens prescribed in Ayurveda for the body, mind, and social well-being has played a significant role in their successful aging.

CONCLUSION

Ayurveda being the science of life has described an ideal lifestyle for health maintenance. All the principles explained above has the reference of providing ayu or longevity in its references which are supported by the survey showing that most of the individuals who have attained 80 years or above has followed healthy regimens in their life time. So following appropriate *Dinacharya*, *Rtucharya*, *Ahara vidhi*, intake of food considering *Agni* and *Sadvritta* helps in attaining graceful ageing in life.

REFERENCES

1. Rao RV. Ayurveda and the science of aging. Journal of Ayurveda and integrative medicine. 2018 Jul 1;9(3):225-32.
2. Datta HS, Mitra SK, Paramesh R, Patwardhan B. Theories and management of aging: modern and Ayurveda perspectives. Evidence-Based Complementary and Alternative Medicine. 2011; 2011 (1): 528527.
3. Avinash Chaudhary, Yagyik Mishra et.al Brahma Muhurta Jagarana -A Review. World Journal of Pharmaceutical Research October 2022 DOI: 10.20959/wjpr202215-25886
4. Morton RD, West DJ, Stephens JW, Bain SC, Bracken RM. Heart rate prescribed walking training improves cardiorespiratory fitness but not glycaemic control in people with type 2 diabetes. Journal of sports sciences. 2010 Jan 1;28(1):93-9.
5. Barak S, Stopka CB, Martinez CA, Carmeli E. Benefits of low-intensity pain-free treadmill exercise on functional capacity of individuals presenting with intermittent claudication due to peripheral arterial disease. Angiology. 2009 Aug; 60(4):477-86.
6. Hridya A. Analysis of Dyslipidemia as per Ayurveda and its Management. International Journal of Ayurveda and Pharma Research. 2022 Nov 13:62-9.
7. Srikanta Murthy KR, Vagbhata. Ashtanga Hridayam. Krishnadas Academy, Varanasi. Vol 1, 2nd ed, 1994.
8. Jarimalli P, Kulkarni P, Sunagar MB. Role of Abhyanga (oil massage) in daily practice. Journal of Ayurveda and Integrated Medical Sciences. 2021

- Sep 15;6(4):242-4.
9. Tripathi I, Tripathi SD. (Ed). Yogratanakara, Chaukhamba Krishnadas Academy, Varanasi: 2nd edition; 2007; Nityapra vrittuprakaramaha; shloka-73:52
 10. Rupali M Patil et.al. Study of Physiological Of Snana And Its Applied Aspect -A Review. International Ayurveda Medical Journal 2023 June
 11. Ambikadutta Shastri, editor, Sushruta Samhita, Chaukhamba Sanskrit Sansthan, Varanasi, 2007. p.108
 12. Bagde AB, Sawant RS, Sawai RV, Dhimdhime SR, Swami NB. Preventive Aspect of Vyayama (Physical Exercise). International Journal of Ayurveda and Alternate Medicine. 2015;3(1).
 13. Dr.Ganesh Krishna Garde, Sartha Vagbhata, sutrasthana, Chapter 4, verse 22, Chaukhamba surbharati prakashan, Varanasi, reprinted (2016) Page no.-16
 14. Harishchandra Singh Kushwaha, Charaka samhita, volume 1, Sutrasthana, chapter 7, verse 5 Chowkhamba Orientalia, Varanasi 1, Reprinted (2016), page no. 106
 15. Jamwal A, Samyal K, Sharma S. Literary Review on Adharneeya Vega wsr to Physiology. Journal of Ayurveda and Integrated Medical Sciences. 2022;7(11):91-9.
 16. Pranathi N. Raj et.al. The Significance of Dharaniya Vega in Manasika Swasthya - A Review. World journal of pharmaceutical and medical research. 2024, 10(5), 250-253
 17. Thakor K, Negalur VB, Mishra Y, Bhat N. Critical analysis of Nitya Sevaniya Ahara Dravya's-Balanced diet in Ayurveda. Journal of Ayurveda and Integrated Medical Sciences. 2016 Jun 30;1(01):64-7.
 18. Fan Y, Wu Y, Peng Y, Zhao B, Yang J, Bai L, Ma X, Yan B. Sleeping late increases the risk of myocardial infarction in the middle-aged and older populations. Frontiers in cardiovascular medicine. 2021 Sep 24; 8: 709468.
 19. Stanwell-Smith R. The infection potential in the home and the role of hygiene: historical and current perspectives. International Journal of Environmental Health Research. 2003 Jan 1; 13 (sup1): S9-17.

Cite this article as:

Arya Anil, Sowmya C Nair. Graceful Ageing through Ayurveda – A Retrospective Pilot Study Among Participants Above 80 Years of Age. International Journal of Ayurveda and Pharma Research. 2025;13(1):116-123.

<https://doi.org/10.47070/ijapr.v13i1.3507>

Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**

Dr. Arya Anil
PG Scholar
Department of Swasthavritta,
VPSV Ayurveda College, Kottakkal,
Kerala, India.
Email: draryaanil03@gmail.com

Disclaimer: IJAPR is solely owned by Mahadev Publications - dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJAPR cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJAPR editor or editorial board members.