

Longevity and Antiaging Medicine: Inspiration from the Past, Aspiration for the Future

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The science of longevity and antiaging medicine is thought to be a recent addition to the multiple specialties and subspecialties that dot the ever-expanding universe of health¹. In reality, however, longevity and antiaging medicine is as old as humanity itself.

The first mention of efforts to attain immortality is the Samudra Manthan². The Puranas, ancient Indian texts, describes the churning of the ocean as an effort by the *devas* (Gods) and *asuras* (demons) to create *amrit* (the nectar of immortality). Indian epics list seven (in some versions, eight) Chiranjeevis (immortals), whose death is not documented³. These include the Puranic characters - Mahabali and Parshuram, heroes from the Ramayana - Hanuman, Vibhishana, and men from the Mahabharata - Kripa, Ashwatthama, and Rishi Ved Vyasa. Some versions include Markandeya, Jambavan the bear king, Kaka Bhusundi the crow, Agastya the sage, and Narada Muni, in the list of immortals.

The Mahabharata recounts the curse of old age, placed upon Yayati, by his angry father-in-law Shukracharya, father of Devyani. Yayati exchanged his old age with his son Puru, and enjoyed a youthful life, before giving it up⁴. This episode reminds us that antiaging is feasible, even if old age is inevitable.

The Upanishads also speak of longevity, and view long life as a blessing. A similar refrain is noted in the Ayurvedic texts, *Charaka Samhita* and *Sushruta Samhita*. Both devote entire sections and multiple chapters to the study of rejuvenative, or antiaging medicine. They also treat youth-enhancing, or aphrodisiac therapy as a distinct medical subspecialty. Indian history, infact, documents the first endocrine-stimulating nutraceutical as *Chyavanprash*. It was created by the Ashwin brothers,

physicians to the kings, for Rishi Chavan, who had married at an old age and required extra energy to enjoy a happy conjugal life⁵.

Focus on longevity and antiaging is found in other ancient texts as well. The Sumerian Epic of Gilgamesh, considered to be the oldest book in the world, recounts the travel and travails of king Gilgamesh, as he searches for the elusive plant of immortality⁶.

Modern longevity and antiaging medicine build upon this age-old inspirational aspiration. Armed with advances in biochemistry and physiology, and equipped with enhanced screening and means of monitoring health and ill health, we can proactively use newer pharmacological, nutraceutical, cosmetic, and invasive interventions to promote health and prevent disease, in a person-centered manner. This allows us to enhance the experience of aging, and to eliminate the avoidable obstacles to longevity.

Longevity and antiaging medicine is a multidisciplinary field, which works through collaboration and coordination with geriatric medicine, endocrinology and metabolism, cosmetics and dermatology as well as psychology and physical rehabilitation/physiotherapy. All specialties may be required, as per an individual's needs, to optimize outcomes⁷.

As longevity and antiaging medicine develops in India, and in South Asia, we are inspired by the great minds that worked on these aspects thousands of years ago. We heed their advice on lifestyle management, on moderation in diet, on spirituality, and on environmental health. To this, we add modern monitoring and medication, used in a holistic manner, so as to improve vigor and vitality.

We do need support and sustenance from other stakeholders. Policymakers and planners must anticipate and address the growing needs of an aging population, and devise ways to utilize the productivity of this age group. Payers, such as insurance companies and government organizations, must deem pro-longevity and antiaging modalities as being worthy of reimbursement. The physician fraternity, and the paramedical profession

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should strengthen the longevity and antiaging movement by facilitating discussion and discourse around the topic. Professionals who choose this field should contribute not only in the realm of clinical care, but in academics, training, and research as well⁸. The public, too, should exercise their right to learn and understand the scope and spectrum of longevity and antiaging medicine⁹.

If we work together, in a concerted and collaborative manner, with cohesion and creativity, we should be able to achieve our primary aim - optimization of health during the later years of life.

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