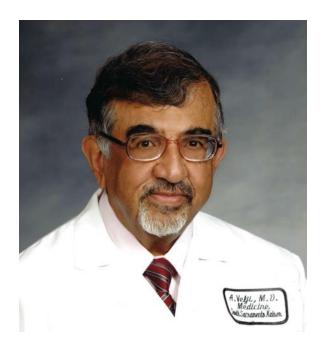
The Gold of Sacramento Valley: Experienced Physicians and their Nuggets of Advice

By Shay Nair Sharma

About the author: Shay Nair Sharma studies Human Biology at Stanford University (graduated from Franklin High School, Elk Grove, CA). He has a fascination in medical history and a passion for sharing the contributions, experiences, and stories of physicians by passing on lessons learned after a lifetime career of service.

Welcome to this educational, informative, and entertaining article series highlighting nuggets of advice from my conversations with retired Sacramento Valley physicians. This is also an opportunity to highlight and thank the healthcare heroes, of different specialties, for their service and contributions to the people of Sacramento Valley.

Dr. Anvar Velji is our featured physician. Upon graduating from The Royal College of Surgeons in Ireland, he completed his Internal Medicine residency at Yale New-Haven Hospital, Yale School of Medicine. He completed Infectious Disease fellowships at the University of Alberta Hospital and at the University of California Davis Medical Center. He practiced medicine for 35 years – 2 in Canada, and 33 at Kaiser Permanente in Sacramento, 30 of which as the Chief of Infectious Disease. He co-founded the Global Health Education Consortium, now the Consortium of Universities for Global Health headquartered in Washington DC.



Tell us about growing up:

I was born in a small village of Kapsabet, Kenya after the end of the second world war. My paternal grandfather had a small shop which he had established. He was 10 years old when he emigrated from India. It is not clear whether he had landed by a steamer or a *dhow* at the coastal town of Mombasa. At first, he stayed with some relatives in Nairobi and then he, along with some of his colleagues, rode on mules to come to Kapsabet. Both Kenya and India were British Colonies at that time. The only lamps in the house were kerosene ones and candles. There was no electricity or running water. Pit toilets were outdoors. Health care was sparse to nonexistent. There were no schools. I will pick up the story when at age five, I was sent to a school in Bukoba, in Tanganyika (now Tanzania), where my maternal grandmother lived. I attended a Government School where all teaching was in Gujarati, our mother tongue. I consider this fortuitous since I can read and speak it fluently and allows me to speak to my patients in their language. Subsequently I picked up Hindi and some Urdu especially by reading Gujarati news, listening to Kawali, and by watching Bollywood movies three times a year, when I was a teenager. Swahili (Kiswahili) was

spoken widely by all, especially in the coastal regions of East Africa and parts of the interior populations. At age eight, my parents thought it was high time for me to go to Mombasa, where my paternal aunt and uncle lived. I was enrolled at the Aga Khan High School which had a very high caliber of teaching and learning. The headmaster Mr. Corkery was from Ireland and had a great insight in hiring excellent world class teachers. This was challenging to someone who had never spoken English. Eight years later, during Form Four (end of secondary school), we had to take the Cambridge High School Exam and pass to go to do A levels – also set by University of Cambridge. There were eight subjects including English Language, English Literature, French, History, Geography, Physics, Chemistry and Biology. Two years later, after starting what is called A-Level (Form five and six), I was accepted to the only medical school I applied - The Royal College of Surgeons in Ireland, in Dublin. My gratitude will be lifelong to all my relatives and teachers, who sacrificed so much to ensure we had the best possible education

How did you get interested in medicine and what influenced your choice of specialty?

My parents and my paternal grandmother always encouraged me to go into medicine. There was no reliable healthcare in Kapsabet -- then a little village in Kenya, the place of my birth. My brother and I had asthma and whenever it got exacerbated, my father, in the middle of the night, had to go to a physician who lived about forty-five miles away. On the unpaved road and during the rainy season that road, with its many potholes, became dangerous to drive. When I was 10 years old, my one-year-old brother died of diphtheria. No vaccines were available. Hence medicine as a career was an easy choice.

Looking back, what would you have done differently?

Looking back, I have had no regrets and would do the same even if I were to look back to when I was 20 years old.

Is there one medical patient or story that had a major effect on you?

As a newly minted Intern in New Haven, I was the only Medicine Intern on call in Saint Raphael Hospital (now Yale New Haven Hospital) and a code was called in the ER. I assisted with the code. The patient was a 52-year-old male admitted to the ER with cardiac arrest. The code was unsuccessful - and the resident pronounced his death. The monitor showed a straight line. No spontaneous respiration was noted. Intravenous lines and oxygen were removed. I approached the ER resident and asked if I could practice intubation since I had not been instructed on how to intubate a patient. He agreed and he and the nurse left. As I inserted the endotracheal tube I was surprised as the patient who was pronounced dead about ten minutes ago started breathing spontaneously...and I called a cardiac arrest – everybody reappeared and the monitor now showed a regular cardiac rhythm with occasional premature contractions. Soon he was wheeled up to the cardiac unit and discharged two days later. He had no evidence of ischemia or infarction. He had mentioned that this had happened once before. In any case this man likely had "Lazarus Syndrome" or autoresuscitation after a cardiopulmonary resuscitation. Lazarus according to the New Testament was raised from the dead by Jesus. Much research has been done since about this condition.

As a physician I keep going back to the Anatomy lab in Dublin and can vividly picture all the bodies that we were present in the dissecting room. I recall the lifeless bodies and the above incident of the patient who came back from the dead. What is life and what is death? What am I? Who am I? What is the purpose of my being in this world? I asked these questions to myself repeatedly and still do.

Writing of Death Certificates also brings the question on about the fourth line – Final cause of death. The sequence goes something like this as a chain of events: cardiac arrest due to arrythmia, due to ischemia, due to myocardial infarction, due to arteriosclerosis. I am sure those of us who also have philosophical, spiritual background think that either the spirit or soul departing this body as the final cause. Now you see my conundrum and perhaps yours!

What would you say are the major values or principles that you live by?

For simplicity, *principles* are hallmarks of wisdom, by which one leads one's life or in other words, one's philosophy of life and living. Principles enrich one's inner being – or one's core. Here I include benchmarks of fairness including equity, equality, democratic values, justice, and spirituality. These are discussed in my chapter on Global Health ethics.

Values on the other hand are qualities such as: empathy, compassion, humility, honesty, caring, sense of duty, moral integrity, excellence, and professionalism.

I juxtapose the beautiful saying of the current Dalai Lama to demonstrate the intricate relationship of spirituality to values and principles:

"Spirituality I take to be concerned with those qualities of the human spirit – such as love and compassion, patience, tolerance, forgiveness, contentment, a sense of responsibility, a sense of harmony –which bring happiness to both self and others." – Dalai Lama

How has the field of medicine changed over your career?

This question ties with how I have changed and matured like we all do with the challenges and knowledge we acquire and the disappointments

we face. For over four decades I have practiced Internal Medicine and Infectious Disease as a specialty and had a lot of involvement in academic medicine and creating organizations that did not exist to address the changing focus of medicine and health care. Global Health, One Health, and Planetary Health are where I have noticed the most change in the attitude and interest of students and faculty nationally who we have guided over that time frame. The practice of Infectious Disease was always interesting and challenging with new viruses, bacteria, fungi, or the diseases they caused being discovered. There were Travel Medicine and Public Health issues and challenges of great import. I have been fortunate to have grown up in East Africa. This gives me an advantage of having experienced firsthand the inadequacy of health care which is still very persistent in the whole continent, with only some oasis of expertise with western standards. However, equity, equality, quality, and access of care is deficient in many Western countries, including the US, where populations are marginalized. Healthcare is a human right enshrined in the UN Charter. Today in Africa, despite the Covid-19 Pandemic and recurrence of Ebola and Monkeypox, there is a dearth of vaccines, testing facilities, labs, and therapeutics available in the US and other Western nations. As one of the leaders in global health, I have followed issues of inequity globally for about three decades and have witnessed the rise of chronic conditions and worsening of health for women, children, and marginalized and displaced populations all over the world.

After retiring from Kaiser Permanente, I was founding faculty and Associate Dean of Global and Public Health at two new medical schools in California – California Northstate College of Medicine in Elk Grove and the University of Science and Medicine in Colton – to open up more slots to women and minorities, including those living in the Inland Empire in Southern California. We created a new medical curriculum for the CUSM called "The Global"

Active Curriculum." This was offered for free to all new medical schools especially in Africa. This is in keeping with our mission and vision statement and being *socially accountable*, as a medical school and university, to our constituents.

Where do you see the future of medicine?

I see the future of medicine and health care in global and local terms, through multiple lenses. The following quote was coined to direct our future efforts to Global Health and Health For All (when I speak of Global Health, I include One health and Planetary Health):

"The world is our educational oyster, and therein lies the pearl of global health...it is our privilege to be healers to the world." – Anvar Velji (2014)

As far as I can see, the future of medicine will always be bright and exciting, with bumps along the way. Medicine remains at the center of science and humanities. Human curiosity is endless and it converges at several interphases. For instance, research in biology, chemistry, and physics at nano levels, are involved in solving the old age conundrums of how life began some say our origin was in the "primordial soup." On the other hand, medicine's roots are deeply embedded in humanities including the four ancient Greek schools of philosophy, and metaphysics. And in the East, Taoism and Vedantic schools. Later in the Middle ages, we see physicians like Avicenna, referred to as the Prince of Medicine; Ibn Tufayl, who hailed from Andalusia; and Maimonides, who were all polyglots interested in Science and Humanities as well as medicine.

Excellence of physicians lies in a broad education including humanities and spirituality. And now, pandemics and concurrent climate change have created massive challenges for all healthcare workers. Climate change related illnesses are already challenging the medical field. Massive climate migration adds to these challenges. These are related also to results of

climate change causing rivers to dry up and desertification of former fertile lands. Rising sea levels are threatening several countries including the United States. Chronic conditions such as diabetes, hypertension, heart disease, chronic lung diseases, strokes are here to stay. We can add "Long Covid" and repeated bouts of covid reinfection with different variants. Health of women and children in "Low Middle-Income Countries" and in "High Income Countries" continue to worsen because of poor distribution and lack of medicines, vaccines, basic food, and shelter. Medicine, nursing, and its allied fields, thus have a new role in a very challenging new world with dwindling resources, ongoing wars and conflicts, political instability, authoritarianism, and ascendency of "fake news," sexism, ageism, and racism. These challenges have given us new opportunities, such as research in molecular biology and gene editing with sequencing that have opened new avenues in medicine.







Dr Velji presenting the annual Drs. Anvar and Pari Velji Award to a Stanford student, Dr. YW. Woldeamanuel (center) with CUGH officers in Washington DC, 2016



Summit Convenes Global Health Leaders, Kampala, Uganda, 2009



Dr Velji with the former Prima Dama of Honduras, Mary Flake Flores, the recipient of the GHEC Award for her services to her people following Hurricane Mitch, 1998

How have you dealt with stressful times during your life?

In other words, can serenity and joy be cultivated in the midst of a life full of crises? First, we need to deconstruct the idea of general wellbeing into three parts: emotional, physical, and mental. Stress has a bearing on all three

aspects. Each person will handle stress differently depending on their views on culture, faith, and spirituality. I have relied on personal resilience, goodwill and cooperation with others both in and out the working environment, and respect and love for humanity and the environment. Think of and know nature intimately, not as stewards, but as an intimate part of you as we are all born and die within it. Stresses can appear individually or as a bolus. For example, the external stressors that all of us are facing recently are related to a combination of infectious disease, which has taken a high toll globally in the number of lives, disruption of families, and causing mass poverty exacerbation, disruption of education, economies, and political chaos. Add climate change, which limits set in the early 90's have long been passed, and we have a doomsday scenario. In my close to five decades in practice as an internist, a subspecialist in Infectious Disease, an academician, and a leader in global health, I have had to devise several ways to shield myself and my family from the onslaught of crises which will not disappear any time soon. Since stress is always with us, I have cultivated and relied on asking questions to myself. I call this the "Real-Self." Some call it the soul or spirit, or the heart-mind. It differs from the I-self (ego), the term we use post birth, that leaves us after death. Others call this method contemplation of one's inner self. This practice is widespread within Buddhism, Taoism, Zen, Vedanta, Yoga, Islamic spirituality (especially Sufis and Shia Ismailis), and some Christian denominations and indigenous practices. Biofeedback uses some of the principles and applies it to medicine. I have found that making a deep connection with nature, which we are part of, and the cosmos, since we are stardust as well, is of immense help as a stress reliever but also for connecting oneself to something higher than oneself. Be in the now. Look and marvel at the cosmos; watch and track a butterfly or a bee as they pollinate in your yard or garden; take a deep breath and smell the Jasmine, a rose, or a citrus flower; be in awe and wonder; marvel at the gorgeous

sunrise and sunsets, rivers, lakes, waterfalls, snow covered mountains; admire the complexity of a human, or an ant as a very complex machine, or a colony of ants that help and feed each other. Beauty is everywhere and it brings us to another level, away from our mundane stress-providing lives. Remember that medicine's roots were and still are within ancient wisdom and perennial philosophy. Pierre Hadot (eminent French Philosopher) traces the roots of Greek Medicine to the Greek schools of Antiquity and speaks of "spiritual exercises" in exploring the inner world within humans. However, medicine's roots are also in the Golden Age of Islamic Medicine (including Muslim, Christian, and Jewish physicians, philosophers, and herbalists/pharmacists) who lived and worked in the vast cosmopolitan Islamic Empires before the Age of enlightenment in the West. We still have to dig deep into Chinese medicines and practices, and Yoga and Ayurveda, which have contributed to understanding our body and mind. In the early 1990, I was invited by Dr. Gary Schoolnik (then head of Geographic Medicine at Stanford and brilliant researcher) and the Student's Humanities Group to give two lectures. The first one, "Sufism, Psychology, and Medicine," discussed Sufi and Ismaili spirituality, psychology, and herbal medicines used in several Muslim countries by those who could not afford prescription medicines or visit practitioners. The other one, "Acupuncture: Qi and Yin-Yang Applied to Modern Medical Practice," with Dr Harvey Cain, discussed Tao and acupuncture. Many years later I gave a talk to second year medical students also at Stanford on Diversity and Inclusion. Much has changed at Stanford since then.

We would all agree with Mahatma Gandhi with the quote below on stress reduction and clear thinking, and awareness:

> "In the attitude of silence the soul finds the path in a clearer light, and what is elusive and deceptive resolves itself into

crystal clearness. Our life is a long and arduous quest after Truth." – Mahatma Gandhi



Pari and Anvar dressed up for a wedding 2020

Who was a mentor that had the most influence on you?

My lifelong mentor: His Highness Prince Karim Aga Khan. I have learnt from his wisdom and experience as to how to balance the two sides of my life – the worldly and spiritual. He has introduced me to pluralism, cosmopolitanism and ethics, culture and civil society, integrity and social justice, global development in education, societal good beyond borders, race, class, cultures, and politics. He has bridged all societies and cultures and transcended differences with great ease.

Prime minister Justin Trudeau calls him "uncle", and Queen Elizabeth and Prince Charles celebrated his Diamond Jubilee two years ago at Windsor Castle. The President of Portugal Marcelo Rebelo de Sousa honored him with the Airforce flying his colors in the sky over Lisbon. He has received at least twenty honorary degrees

as of 2018, and countless other high honors. We emulate, consciously or unconsciously, the best in our mentors and remember them throughout our lifetime without constantly being in close physical proximity.



Dr. Velji presenting a momento to his mentor, His Highness the Aga Khan, at the inauguration of The Aga Khan University, Karachi, Pakistan



His Highness The Aga Khan with leaders of Mali, discussing architecture, 2003

Favorite travel and vacation

I believe the purpose of travel is to acquire firsthand knowledge of different cultures to experience the beauty and fragility of humanity, and better understand our roles as healers and preservers of nature and its health. My "vacations" include travels to Cuba, Costa Rica, Honduras, Guatemala, and Mexico for global health visits to health clinics, and programs

where students and faculty from several Canadian and American Universities were involved. We set up the Global Health Education Consortium, (now Consortium of Universities for Global Health headquartered in Washington D.C.), an annual Conference meeting, to share our expertise with host countries and learn from them. I am one of the founders of both institutions.

Then there are the natural places by the oceans, large rivers, mountains, rift valleys, waterfalls, volcanoes, and geysers. I have enjoyed Iceland, Patagonia, Andes, Rockies, the five national Parks of Southern Utah, Yellowstone, Canadian Rockies, the Grand Canyon, Yosemite, and Hawaii. Highlights include the magnificent Iguazu Falls between Argentina and Brazil and the flamingoes dotting the Lakes Nakuru and Naivasha. I have had a deep fascination for volcanoes ever since I drove through the Mount St. Helen eruption in 2010 with my wife Pari and son Jamel, who was only a year old during the eruption.

In China, we visited a Panda newborn nursery. I was mesmerized and thrilled by the antics of the grown up and baby pandas chewing on bamboo and being aware of the audience. In Tibet the highlight was seeing all the Buddhist pilgrims who had traveled long distances on foot – some dragging themselves on their chest and abdomen, to reach the holy sites in Lhasa. We also visited these shrines and paid homage to the Buddha. The pilgrimage also consisted in visiting the Potala Palace, the former residence of the Dalai Lama; one has to climb about 432 steps, to the top of the palace, roughly 14,370 feet from sea level.

In India, the famous Ganges River provided a stunning setting with the sunrise and a gentle boat ride near the *Ghats*, where many early rising Hindu and Buddhist women and men prayed, while standing in the water with their hands held together and bowing towards the sun. This was a very different experience than at

Fatima, the famous site for pilgrimage in Portugal.

One very memorable trip was an unexpected detour from relatively calm waters. In the middle of the night, we were caught in the notorious, extremely rough seas of the Drake Passage, long known to be the graveyard of sailors. The Chilean navy requested that our small tour ship Stella Australis, made for calm waters, help rescue a sailor whose vessel had capsized as he was trying to race through the Drake Passage. From my cabin window, at 3am, I could see a helpless lone sailor hanging onto an overturned racing catamaran. Just in time the Chilean navy helicopter appeared over the catamaran and started rescuing the worn out sailor. Inadvertently, our trip then involved going around the Cape Horn. We all survived and the next day the Captain celebrated our safe arrival in calm waters. We were given certificates with our individual names indicating that we had been part of a rescue mission – in a boat that had never sailed that far south into the Drake passage, where the very wild Atlantic and Pacific oceans meet, a once in a lifetime experience in most people's lives.

On the way back from a global conference on Social Accountability of Medical Schools, in which I was a delegate, that was held in East London, South Africa, I stopped over in Cape Town. A dream I nurtured since High School in Mombasa was to someday visit Table Mountain. It turned out to be a beautiful adventure. Being on the flat top of a very high mountain overlooking the Atlantic Ocean gave extensive views of the Cape Peninsula. One sight caught my eye – Robben Island, the small rocky barren island where the notorious prison that held Nelson Mandela was. The next day I visited the prison room which was 7-by-9-feet and as Mandela put it, his head would scratch the roof in places. There were bars on the small window. However, we all know the rest of that story.

One striking quote that I saw painted on the side of a bus on Robben Island:

"The Journey is not long if it leads to freedom." – Nelson Mandela



Anvar and Pari at Cape Horn, 2017



Pari and Anvar, Moroccan Sahara taking a break, riding camels, 2018



Anvar and Pari, Yves St. Laurent, Mansion and Garden in Morocco, 2018



Anvar and Pari in Torres Del Paine, Patagonia, 2017

Favorite Books and explanation for my choice:

Philosophical and foundational questions that all humans ask sooner or later:

- "On Human Nature," "Human Existence," and "The Social Conquest of Earth" Edward Wilson
- "Philosophy as a way of Life" and "Plotinus or the Simplicity of Vision" Pierre Hadot
 - The original philosophy had more to do with the practical art of good living and exploring our relationship with each other, nature, the cosmos, and our inner, higher self.
- "The Inner Citadel: The Meditations of Marcus Aurelius" Pierre Hadot
 - (Timeless wisdom: "What brings perfection to one's way of

life is to spend each day as if it were the last, without agitation, without indolence, and without role-playing." page 186-187

Ecological visionaries, environmentalist, naturalists, philosophers of nature and Planetary Health:

- "The Invention of Nature: Alexander Von Humboldt's New World" Andrea Wulf
 - Von Humboldt (1769-1859)
 predicted human induced
 climate change; his ideas gave a
 foundation to the current
 modern environmentalism and
 also influenced Darwin,
 Wordsworth, Goethe, Muir,
 Thoreau, Simon Bolivar, and
 Jefferson among many others.
- "John Muir's Spiritual Writings" Tim Flinders
 - John Muir (1848-1914) was responsible for working with President Roosevelt to set aside land for the National Parks that we enjoy in the US today.
- "Your Brain on Nature: The Science of Nature's Influence on Your Health, Happiness, and Vitality" Eva Selhub MD and Alan Logan ND, a Naturopathic Doctor
 - Both experts concur with the wide variety of benefits from nature some of which I outlined previously.
- "Reason for Hope. A Spiritual Journey."
 Jane Goodall and Phillip Berman
 - She speaks of inexpressible touching of the inner self and the higher self mostly in Africa within the realms of nature.
- "The Dance of Life" Magdalena Zernicka-Goetz and Roger Highfield
 - Focuses on the miracle of life which as medical students and physicians we have experienced

many times, but we have not paused to observe it closely and question ourselves deeply about the meaning of life and its preciousness. "We began with genesis...the moment that sperm encounters egg. The latter is no ordinary cell but one that brims with potential, one that is uniquely equipped to create a new life. This is also the cell that can grow and divide to make history, record it, and change it too." page 57)

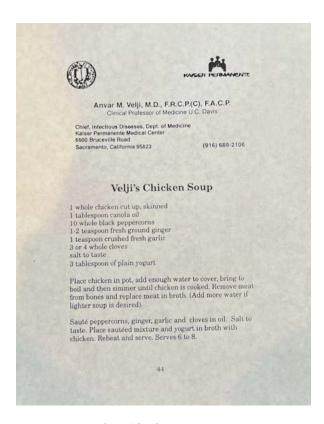
Technological and ethical challenges that humanity has not faced until now:

- "How to Grow A Human: Adventures in Who We Are and How We are Made" Phillip Ball
 - Inside Flap: "If a skin cell can be used to make mini-brains, imagine what else you can build from our cells – maybe a whole human?" There is a large section that discusses historical issues with eugenics and other ethical issues including racism.
- "The Synthetic Age: Out designing, Evolution, Resurrecting Species and Reengineering Our World" Christopher Preston
 - This is self-explanatory with moral and ethical questions for the now and future of medicine and humanity.
- "The Age of Spiritual Machines" Ray Kurzweil
 - Author also wrote "The Age of Intelligent Machines." What will happen to our civilization and to the human race as a result of computers which will exceed human intelligence? A terrifying thought and scenario.

Star Wars and **The Matrix**. There are deep philosophies embedded in both these science fiction movies.

Favorite foods

- Dr. Velji's Chicken Soup
 - This has always been a family recipe for generations. I use it to warm the soul during colds and flu. I gave out pamphlets at my clinic for years and it found itself in a local cookbook with my permission.
- Kenyan Swahili Coast Dishes
 - From "Mandazi and bharazi" to the more intricate dishes like chicken, lamb, beef, goat, fresh fish, or vegetable curries.
- Biryani, pilau, karahi chicken and lamb, dal
- Chinese, Mexican, Korean, Japanese,
 Vietnamese, and Thai food too many
 to name



Favorite movies

Dr. Velji's Chicken Soup Recipe



Framed Letter from Mother Teresa to Dr. Velji