

**MEMORIAL****Professor Issa Navab: A Life Well Spent**Amirhossein Tavallaei, MD<sup>1</sup>, Sina Shahabi, MD<sup>1</sup>, Mohammad Hossein Nabian, MD<sup>2</sup>; Mohammad Naghi Tahmasebi, MD<sup>3</sup>*Research performed at the Tehran University of Medical Sciences (TUMS), Department of Orthopedics, Shariati Hospital, Tehran, Iran**Received: 07 May 2021**Accepted: 26 October 2021***Abstract**

Professor Issa Navab Shaykh al-Islam (1938-2018) was one of the first orthopedic surgeons in Iran. He studied general medicine, specialty, and subspecialty in France and returned to Iran after completing his education. Following that, he earned a degree in regenerative orthopedics and traumatology from France and was one of the youngest physicians to become a full professor in France at the age of 32. One of his most valuable services was the voluntary treatment of war-injured during the imposed war between Iran and Iraq. Moreover, he helped many students to continue their education in France. He can and should be a role model for upcoming generations.

**Level of evidence:** V**Keywords:** Biography, History of orthopedics in Iran, Issa Navab, Shaykh al-Islam Navab**Synopsis**

Professor Issa Navab was an unordinary surgeon who will keep inspiring colleagues and compatriots (1). He promoted the ideal of medical staff and unconditionally devoted to patients, who would consequentially invest full trust and respect to those, who have dedicated their lives to heal and help as much as possible. Once, when Dr. Navab was in a conference with an international delegation, he heard a commotion in the lobby of his hospital; a mother had brought in her son after a biking accident. She had asked for Professor Navab and had been told that he was unavailable at the moment since he was in the conference room with European colleagues. She protested so loudly that Professor Navab came out to the lobby. Without hesitation, he started pushing the gurney with the young patient himself and went on to surgery immediately.

This personal care came from a pioneer whose contributions improved the field of orthopedic science not only in Iran but internationally, notably with his innovative treatments of war victims. He formed and guided many younger orthopedic surgeons whom he considered his friends. His compassionate approach, as a professor with his students, and as a physician with his patients, set new standards and stands as a model for

generations to come. A visionary, he was willing to take extreme chances either in the confine of a surgery room, courageously caring for patients with specific high-risk factors or with the implementation of high-tech projects. He directed the local production of orthopedic implants and prostheses from inception.

Although appreciated and recognized internationally, he decided to dedicate himself to his country. Deeply patriotic, he served Iran for decades. From 1980 to 1988, during the Iran-Iraq war, Professor Navab continued to work; however, harsh the living conditions could be. He kept honoring his obligations to his patients, even when the capital was bombed almost daily. As his wife explained: "...There was a severe shortage of surgeons at the time. So, even though not a hero, my husband kept working because of his pure patriotism which led him to choose the welfare of his country rather than his own safety and comfort".

Professor Navab spent hours treating and saving the lives of wounded soldiers evacuated from war zones. During the peak of the fighting, he was posted at Andimeshk, a city in Khuzestan province, near a dangerous war zone [Figure1]. For weeks and without any discrimination, he treated civilians, wounded Iranian soldiers, as well

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Figure 1. Professor Navab in military service in Tehran (standing in the middle).

as Iraqi prisoners. When his staff expressed surprise or even disapproval at the medical care for the enemy, he would recite the Hippocratic Oath he had taken years ago as a young physician. All patients must be treated equally. In a surgery room, friends are saved, but so are temporary enemies as well. In his spare time, he trained local physicians and tried to improve the comfort of the rudimentary clinic. He himself installed screens on windows to keep mosquitos and other flying pests outside!

Despite decades of dedication, as well as stress and heavy expectations, Professor Navab remained throughout his career, the same caring surgeon that he was at the beginning of his career. He was always warm, polite, considerate of his patients' feelings, courteous, and friendly in his behavior. His patients remember him as much for his exceptional gentleness and kind humor as for his medical expertise. He was a friendly figure in their lives. He was an ordinary man who led a remarkable and meaningful life. His legacy in the context of the Iranian orthopedic field will be everlasting [Figure1].

### His Life

Professor Navab was born in Tehran on June 21, 1938. He remembered his happy childhood fondly and was an enthusiastic boy scout. In 1956, already fluent in French, he graduated from Razi High School, a private school created by an agreement between a French non-profit organization and the Iranian government for promoting education.

Shortly after, in 1957, he traveled to France where he was registered as a student at the Medical University of Paris, the most prestigious medical university in the country at the time [Figure 2]. With extreme enthusiasm and hard work, he graduated with honors and successfully received a Diploma of General Medicine (1964), a Diploma of General Surgery (1968, the major of his promotion), and a Diploma of Pediatric Orthopedic Surgery (1970).

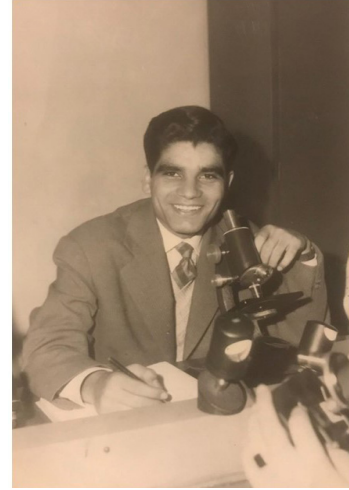


Figure 2. Professor Navab studying in France.

As a student, he was greatly influenced by many great scholars, such as Professor Olivier, Professor Merle d'Aubigne, and Professor Jude, early pioneers and internationally-known innovators who revolutionized the orthopedic field with new techniques. Their complete dedication to their art and their patients, and their selfless approach to their vocations left a life-long impression on Professor Navab. The kindness and empathy that his mentor, Professor Bonvalet, offered daily to both students and patients, set an example he would emulate all his life. In 1972, at the young age of 34, he won the title of Professor, held the chair of Professor Egerje, and pursued diplomas in orthopedic traumatology and rehabilitation. Despite so many joyful years spent in France and the promise of a beaming career ahead of him, Professor Navab decided it was time to return to his country, where a general shortage of orthopedic surgeons made his expertise much needed [Figure 3]. As his spouse, Ginette Boutin Navab said: "... We both knew from the beginning of our relationship that he would go back home. There was always an Iranian flag on his desk!"

Right away, Professor Navab started working at Imam Khomeini Hospital (then known as the Thousand-Bed Hospital), a hospital affiliated with Tehran University Medical School, Tehran, Iran. He also went on to collaborate with many other hospitals, such as Gendarmerie Hospital, Shir Va Khurshid Hospital, and Haft-e- Tir Hospital. He had a particular fondness for Sharam Hospital (today known as Sajad Hospital) where he worked as a surgeon and as a board director. Early on, he also opened an office for which the waiting room would be overflowed with patients for half a century. Concurrently, starting in 1973, he became the head of the orthopedic department of Dariush Hospital (today known as Shariati Hospital), a public hospital and university center. There, for over 42 years, he would have a key role in the treatment of patients and the training of medical students, interns, and residents (2). During the Iran-Iraq war, he worked with the Khatam al-Anbia Hospital and the Sasan Hospital,



Figure 3. Iranian newspaper announcement regarding the return of Professor Navab from France to Iran.

specifically to treat war victims. He also collaborated with the United Nations Commissariat to improve the treatment of Afghan refugees. Tireless, he published two specialized books and dozens of publications for national and international journals. He was a frequent and respected keynote speaker at conferences and in 2001 and 2002, he was in charge of the Iranian Orthopedic Association, where he participated in many research projects with medical residents and students (3-8). For years, Professor Navab was responsible for the exchange program between Iran and France, organizing multiple orthopedic fellowships in fields, such as hand surgery, knee surgery, pediatrics orthopedics, or spine surgery. Many students had access to scholarships during their time abroad and were able to fine-tune their education and become familiar with various techniques and mindsets in the field. Professor Navab was directly responsible for improving the education of generations of orthopedic surgeons. Studying abroad can be mentally, emotionally, and financially taxing for young residents. Learning a new language can be difficult, and cultural differences can result in homesickness. Professor Navab was always personally involved with his students and always extended his kind support and friendship to them. He was also an example to follow when it was time to return to Iran after graduation.

In 1999, he was awarded by the French Government the "Ordre National du Merite", to honor his distinguished career and his tireless efforts to maintain dynamic educational exchanges between the two countries [Figure 4]. The French ambassador at the time presented him with the medal at the French Embassy in Tehran, where Professor Navab was surrounded by friends and family [Figure 5]. Professor Navab was a member of many associations, such as the French Association of General Surgeons (*Societe Francaise des Chirurgiens Generaux*), the French Association of Orthopedic Surgeons (*Association Francaise des Chirurgiens Orthopedistes*),



Figure 4. "Ordre National du Merite" issued for Professor Navab in 1999.

the French Association of Pediatric Orthopedic Surgeons (*Societe Francaise d'Orthopedie Pediatrique*), and the International Association of Pediatric Orthopedists. Collaborating with those associations, Professor Navab played a pivotal role in the international exchanges of young physicians who would undergo specialized training.

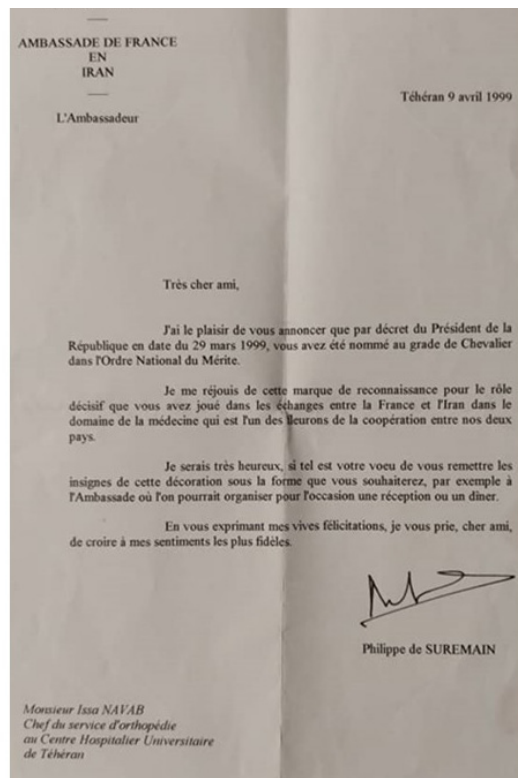


Figure 5. Letter of the French Ambassador to Professor Navab thanking him for his tireless efforts in transferring medical students between Iran and France.

A very skilled and experienced professional, Professor Navab enjoyed every aspect of his career, even the long and stressful hours passed in a surgery room with a high-risk patient, such as an elderly or one with underlying pre-conditions. As a close colleague stated: *"...He performed surgeries like a gifted artist plays the piano, with total mastery, joy, and satisfaction"*. He knew the anatomy of the body perfectly well and his intellectual prognostics were remarkable. A perfectionist, he liked to repeat that the prosthesis or plates had to be inserted promptly and properly for "the x-ray of the patient to look elegant!"

Since he was known as a non-interventionist and minimalist surgeon, Professor Navab was often consulted in his office for a second opinion. He always tried his best to spare his patients from physical and psychological pain, as well as financial strains. On the other hand, he strongly believed that if a procedure could be done to improve the quality of life of a person, then the surgeon should take his responsibilities and perform his duties. With open arms, he always welcomed patients who needed complex treatments, such as a bone graft or cancer treatment. Every day, he would visit all his patients personally, verifying, of course, their medical progress, but also taking the time to speak in a friendly and encouraging manner to them. With his transparency, honesty, good stewardship, even humor, his aim was to lift the spirits of his patients and establish bilateral trust. Sincere and caring, he knew to compliment the children, take time to reassure the despondent, and make the sad or worried one smile. Professor Navab strongly believed that although good diagnostic and therapeutic skills are certainly indispensable and intangible, very real qualities of compassion and empathy are just as important in the process of healing. He knew that a warm smile is the universal language of kindness, and that even such a small act can strongly affect the betterment of a patient. He stressed to his students that doctors need to cultivate these characteristics within themselves to become the best practitioners they can be. Humanity has to be at the core of healthcare.

### With Students and Friends

Professor Navab collaborated for 42 years with Tehran University of Medical Sciences and trained dozens of students and residents at Shariati Hospital. He took his role as an educator so seriously that the Board of Directors purposely did not acknowledge his retirement letter for a full six months, to force him to teach a little longer! His students remember his training as very interactive, filled with interesting clinical points and unique surgical techniques. He took the time to nurture and patiently coach young and developing surgeons [Figure 6]. He remembered to smile and compliment. He helped learn both tangible medical skills and the more abstract skills of empathy and compassion [Figure 7]. Throughout his career, he kept learning about new techniques and scientific discoveries and recommended to his students to do the same. In fact, since most medical literature in Iran is British or American, Professor Navab presented his students with the French orthopedic vision. One of his favorite pastimes was reading recently published



Figure 6. Professor Navab in operation room with colleagues and students.

books and discussing their theories with his staff. His close colleague and friend, Professor Bahador Alami Harandi, remembers some very passionate discussions over different surgical techniques. Their opinions differed since Professor Navab had been trained in France and Professor Alami in the United States. Both surgeons modified their respective techniques, and they even performed surgeries together to learn more from one another [Figure 8].

With his colleagues from Shariati Hospital, he established a close partnership between the Orthopedic and the Rheumatology Departments. Monthly meetings allowed students from the two medical fields to share their respective knowledge, directly improving the quality of the treatments of patients.

Professor Navab always supported his students emotionally, spiritually, and sometimes, even financially. He was very generous and willing to help whoever was in need, even if he was not personally familiar with that person (6). He used to say: *"...God has given me plenty; I have to give to others"*. Many remember him fondly, as a polite, pleasant, and well-tempered man, always



Figure 7. Professor Navab in Shariati Hospital hall with other senior faculty.



**Figure 8.** From left to right; Professor Navab, Professor Tahmasbi, Dr. Panjavi, Professor Alami, and Professor Kamrani in Shariati hospital with orthopedic residents and fellowships.

elegantly dressed in his signature suit and bow tie, even when he was himself fighting a long disease. One former resident said: *"...If I was feeling lost or down about personal issues, Professor Navab would stop what he was doing to sit down, talk with me, and give me some much-needed advice. He was more than just a medical mentor to us"*. Professor Navab's strongest conviction was that a doctor should never discriminate based on race, religion, social or financial status, and certainly not on gender. Married to one, he was a feminist. He did much more than persuade the women in his life to thrive and be successful. He actively encouraged young women to pursue a career as orthopedic surgeons, a field traditionally reserved to men. He cared for all his students the same, treated them equally, and made sure the work environment was fair to all. He would get personally involved if a woman was not treated with the respect she deserved. He insisted that some of these young women continue their specialization in France. They are now very accomplished and skilled professionals, the first of many generations to come.

### His High-Tech Vision

Over the years, strong international economic sanctions have taken a serious toll on Iran's economy and people. Prices of orthopedic joints and implants skyrocketed so much that patients could not afford them. In 2001, Professor Navab, with a group of pioneers in the orthopedic field, decided to build the first-ever factory in Iran to manufacture orthopedic plates and prostheses, of premium quality, but within the affordable price range. The factory was built and equipped from scratch in a suburb outside of Tehran, near Karaj. The challenge was enormous and unprecedented. It took courage, resilience, and vision from these founders to gather the technical information, the financial resources, and a way to earn the trust of surgeons to use these locally manufactured products.

In 2005, their efforts were rewarded and the

Company *Doostane Nik Medical Services* was founded. It manufactured knee, hip, and other orthopedic joints and implants. Almost 20 years later, this company has gone beyond the local market and neighboring countries and is marketing its products in Europe and the United Kingdom.

### Loving farewell

On May 21, 2018, Professor Navab passed away in his hometown. Ceremonies were held in various hospitals and centers where he had worked for decades. The attendance was overwhelming. Colleagues, students, family, and friends showed their love to professor Navab on this day, which was a reflection of his behavior in his life. To this day, his absence is deeply felt by many. But what would have certainly touched him the most was the spontaneous grief and genuine sorrow expressed by so many of his patients in the aftermath of his passing. He served them well [Figure 9].



**Figure 9.** Ceremony of Professor Navab after he passed away in 2018.

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