# Women in Ophthalmology

# A walk down the memory lane with Vasundhara Kalevar

"The flashbacks are a great way to give answers to the story." – Sarah Michelle Gellar

While we tried to explore the history of Indian women in ophthalmology, we were extremely lucky to experience the journey through the vivid memories of Dr. Vasundhara Kalevar, the first female corneal surgeon in India. The excitement in her voice, while she elaborated on each and every incident, was contagious and made us feel like we are reliving the times with her. Like the earth revolves around the sun, the life of Dr. Vasundhara Kalevar revolved around the cornea.

Vasundhara Kalevar [Fig. 1] was born on April 15, 1936 in Indore, Madhya Pradesh to Mr. Keshav Rao and Mrs. Shalini Bai. Early in life, her biological mother passed away and she was brought up by her stepmother Mrs. Sanjeevani (preferred to be called as mother by Dr. Kalevar). During the formation of independent Bharat (India), while she lived away from her parents due to her father's postings in the Gwalior court, her mother took a keen interest in her education and remotely monitored her progress. She studied at the Chandrawati Mahila Vidyalaya and obediently followed her mother's advice by taking all her instructions seriously and dutifully. After graduating from Mahatma Gandhi Medical College, Indore in 1960, Dr. Kalevar pursued post-graduation in Ophthalmology.<sup>[1]</sup>



Figure 1: The graceful Dr. Vaundhara Kalevar in 1955

"My father loved me beyond words, and he equally disliked my love for dramatics and stage-plays. He was worried I would miss out on studying in the process. Just to convince him, I once took my parents' photograph and hung it on the wall in one of our plays. After the play ended, I told him that even he was a central part of our play and now he cannot say anything against it. He laughed at my naughty yet innocent approach and continued to encourage my participation in dramatics provided I never compromised on my studies."

Dr. Vasundhara Kalevar believed in being an all-rounder and starting from her under-graduation days till her consultancy days, for nearly two decades, she was part of a dramatics group – "Natyabharti" [Fig. 2]. "Penelope," "The White-Haired Girl," "The Importance of Being Earnest," "Circle," and "Mr. Pim Passes By" were plays adopted in Hindi and/or Marathi and staged in several states in India. She particularly mentioned the Summer-Drama Festival at Talkatora Garden, New Delhi. Dr. Kalevar made sure that Jill did not turn into a dull girl as her active participation in extra-curricular activities kept up her zeal and enthusiasm along with making her vibrant personality shine brighter by the day.

"As a fourth-year student I had decided to become an ophthalmologist. But, my father's wish was for me to be a gynaecologist. During my term as a house surgeon under Prof Rajendra Pal Dhanda, I had the opportunity to meet Dr. Sudha Sutaria, a magnetic personality whose knowledge and grace attracted me towards ophthalmology. I was the only female house surgeon in the department for seven long years and the Head of the Department Prof B. K. Dhir helped me by giving only day duties for my convenience and safety."

It was destiny that she aligned with her lifelong mentor Prof. Dhanda and continued to work with him for 38 years thereafter. [1] Prof. Dhanda started corneal surgery in M Y Hospital, Indore in February, 1960. To continue working in the cornea, Dr. Kalevar refused the promotion from the post of registrar in the cornea to lecturer in ophthalmology in Bhopal. It was a historical and revered mentor-mentee relationship.

The striking respect for preceptors in her life and honor for all her mentors is inspiring. The way she spoke about the first three women in ophthalmology in India – Dr. Sudha Sutaria (as she lovingly calls her "Sudha Tai"), Dr. Sudha Awasthi, and Dr. Hameeda Saiduljafar shows the level of mutual respect she had for their personalities, passion, and hard work.

It was indeed a moment of pride for Dr. Kalevar to be selected as the first Indian ophthalmologist for the Fight for Sight International Fellowship in 1966 at Wilmer Institute, Johns Hopkins Baltimore, sponsored by the National Council to Combat Blindness, New York.<sup>[1,2]</sup>

"I was in Japan when it was informed to Prof Dhanda that my accommodation could not be given and he was unable to reach me due to lack of means of communication. When I reached Baltimore, I was clueless about the foreign land and fearlessly started hunting for places near the campus. I say I was lucky as I met my precious friend - Farida Shah. She not only let me stay with her for 3 days, but also gave me memories for a lifetime. She has been a dear friend for past 60 years and I never missed a chance to reunite with her during the various visit to the USA in last 50 years."

The joy in her voice as she remembered various incidents during her stay reflected her ability to live in the moment and enjoy in every situation. She made the best of her visit abroad. On returning to India, her work on Histopathology of Tropical Cornea under Dr. James R Duke, Dr. Zimmerman, and Dr. Alfred Edward Maumenee helped her get a research grant from the Indian Council of Medical Research.[1] Prof. Dhanda was invited by the Gujarat government to develop a Post-Graduate Institute at Ahemdabad and also a cornea service. He believed in the abilities of Dr. Kalevar and emphasized on her inevitable appointment for the purpose. Thus, along with her ICMR fellow and laboratory assistant, Dr. Kalevar joined the M and J Institute of Ophthalmology as an Assistant Professor from 1967 to 1970.<sup>[2]</sup> On several occasions, Dr. Kalevar presented their work at various national and international conferences [Fig. 3].

She was unstoppable and soon was selected by the National Institutes of Health, Bethesda, the United States of America as a Post-doctoral Fellow under the guidance of Dr. C. H. Dohlman in Boston to work on a project on keratoprosthesis in 1970–1971. She was promoted to the position of Associate Professor (1970 to 1972) and Professor thereafter based on her 9 years of teaching experience. Till 1979, she served as Professor of Ophthalmology, at Eye Bank and Keratoplasty, B J Medical College and Institute of Ophthalmology, Ahmedabad. Delege and Institute of Ophthalmology, Ahmedabad. Sciences (India) in 1980.

"My first and last love was – Cornea. My proudest accomplishment was the mushroom graft double trephine and my happiest place was in the operation theatre while doing a corneal graft with or without the microscope. I equally loved teaching my trainees making sure they worked on their surgical steps with precision. And, I must say that during my international conference visits, my favorite part was shopping for gadgets and surgical instruments."

Through her journey of sharpening her surgical skills and curating the corneal pathology management protocols, she shifted to Indore in 1980 and joined the Choithram Hospital and Research Centre and as a visiting consultant at the Gita Bhawan Eye Hospital. In 1990, she rose to become the Head of the Department at the Choithram Hospital and Research Centre, Indore, and dedicated more than a decade of work at the institute from 1990 to 2002 (till her retirement).<sup>[2]</sup>

Prof. Kalevar's pioneering work includ the following:

- 1. Preservation of the donor's eye to lengthen the endothelial viability by replacing aqueous humor with air
- 2. Hazards in keratoplasty<sup>[3]</sup>
- Preservation and suitability of donor human corneas for keratoplasty<sup>[4]</sup>
- Modified dissection technique for the preservation of donor cornea for lamellar grafts<sup>[5]</sup>
- 5. Establishment of criteria for the usability of donor cornea<sup>[6]</sup>
- 6. Clinico-pathological evaluation and scope of keratoplasty
- 7. Glycoprotein content of tears in normal and dry eye patients.

Along with her clinical dedicated work, she participated actively in Ophthalmological Societies and served as the President of the Madhya Pradesh Ophthalmic Society (1987–1988) and President of the All India Ophthalmological Society (1997–1998).<sup>[2]</sup> Dr. Kalevar was the third lady President of the All India Ophthalmological Society (AIOS) after



**Figure 2:** A glimpse of Dr. Kalevar during a play under "*Natyabharti*" where she hung her parents' picture in the background to prove their active participation in her stage-plays



**Figure 3:** Dr. Kalevar presenting at the Asia-Pacific Academy of Ophthalmology Congress in 1968 in Kuala Lumpur, Singapore with Dr. Katzin

Dr. (Miss) A. B. Laker and Dr. Sudha Sutaria in 1997. [1] She was elected as the Editor of Proceedings of AIOS annual conferences from 1987 to 1992, for two consecutive terms, and she enjoyed her work thoroughly.

She received numerous laurels for her pioneering contributions. To name a few, Oration Gold Medal, Bihar Ophthalmic Society, 1974; Oration Gold Medal, Andhra Pradesh Ophthalmic Society, 1979; Dhanda Award, 1990 (first ever awardee); Wagle Oration Medal, 1992; the Lifetime Achievement Award from AIOS and Life Time Achievement Award from Indore Division of Ophthalmological Society (IDOS) in 2012. [2] Along with Prof. Dhanda, she co-authored a book on Corneal

Surgeries published in Boston by Little, Brown, and Co. and later in India. She gave significant contributions as a co-author to the Textbook of Clinical Ophthalmology and Ophthalmic Practitioners. <sup>[2]</sup> She also published around 66 research articles in various indexed journals. She believed in passing on the knowledge to her residents and fellows. They remember her as a loving and caring perfectionist who cared deeply about honing their skills.

Not only did she cherish the role played by Prof. Dhanda in shaping up her career, but she also thanked the extended world of her mentors like Dr. Duke, Dr. Dolhman, Dr. Zimmerman, Dr. Maumenee, Dr. Walsh, Dr. G. Venkataswamy, Dr. P. Siva Reddy and Dr. S. R. K. Malik whom she worked with, during her career. This mentor-mentee combination and the summation effect of this synergy led to the creation of a super-power, which revolutionized the way corneal pathologies are approached in India and worldwide today. We are proud that India gave the world such a dynamic personality who selflessly dedicated her life to the world of corneal pathologies.

"Art without science is likely to be inaccurate. However, the world is becoming dependent on machines and I would say that as ophthalmic surgeons the importance of your own eyes and fingers should not be forgotten." – Dr. Vasundhara Kalevar

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