

# THE DEVELOPMENT OF TURKISH NEPHROLOGY FROM PAST TO PRESENT



**Prof. Ayla San, MD**  
President of Anatolian Kidney Foundation  
& Ufuk University Medical School Department of Nephrology



## INTRODUCTION AND AIMS

To introduce the history of Nephrology with scientific data.

## METHODS

Collecting historical data on Nephrology up to present.

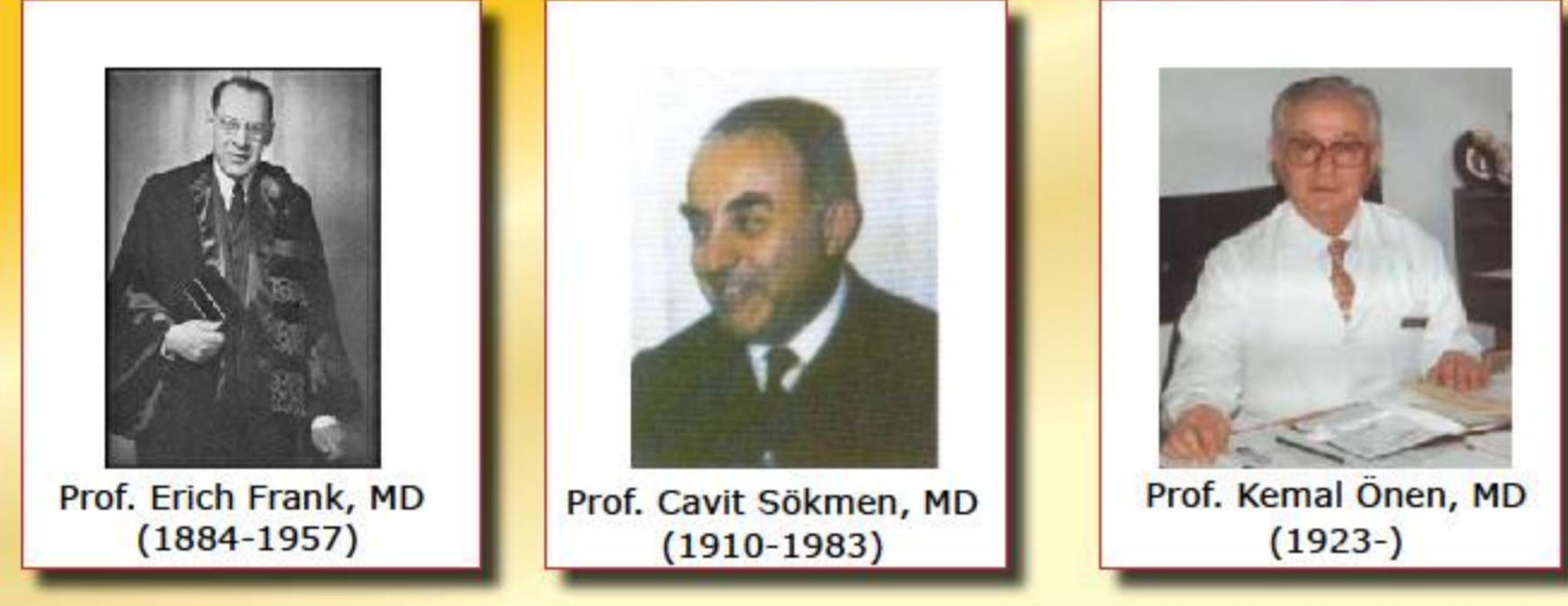
## RESULTS

Anatolia, which has hosted numerous cultures throughout history, has also witnessed the birth of several sciences, one of the most important of which was medicine. Turkish Medicine until the 18<sup>th</sup> Century advanced together with Arabic-Islamic medicine, which did not differ from Western medicine until the 16<sup>th</sup> Century.

Modern medical school was established in Istanbul on 14th March 1827. With the opening of the Medical Faculty and the appointment Prof Dr. A. Bernard in 1839, there was more interest in Western medicine. The first medical journal, *Vekayi-i Tibbiye*, was published by Mekteb-i Şahane in 1849. The period between 1909- 1933 is called the Darülfunun Period. Between 1933-1946 is the period of university reform, and modern Medicine is considered to have started in 1946. The university reform involved the immigration of scientists from the Germany of Hitler in 1933 to Turkey, and Mekteb-i Tibbiye-i Adliye-i Şahane was integrated into Istanbul University. In 1945, Ankara University Medical Faculty opened, which has remained up to the present day.

The views of Atatürk, the founder of the Turkish Republic and the first president of Turkey regarding health, played a very important role during the so-called transformation period. The new era paved the way for the awareness of good health as a social phenomenon. After the foundation of the new Turkish state, health services were overtaken by the government and Ministry of Health was established. It can be said that Erich Frank (1884-1957) was the pioneer and inspirer of Turkish nephrologists. In 1933, coming to Turkey at Atatürk's invitation, he started working in Istanbul University's Department of Internal Medicine. For 23 years, he contributed to the training of contemporary physicians and the first generation of nephrologists, and he pioneered the establishment of the discipline of Nephrology in Turkey. In addition, Frank contributed several articles on kidney function and disease to the Istanbul Contribution to Clinical Science, a medical journal that were detailed reviews of the literature. Importantly, he wrote the first Turkish textbook on the kidney and its diseases, titled *Dahili Bobrek Hastalıkları Kliniği* (Medical Kidney Diseases Clinics), which was published in 1941 by Istanbul University. This 277-page book was divided into 9 chapters and was a state-of-the-art text on kidney function and disease.

### The Pioneers of Turkish Nephrology



Another pioneer in Internal Medicine and Nephrology was Cavit Sokmen with his book *Internal Renal Diseases* published in 1951.

Prof. Kemal Onen (1923-) is another pioneer of Nephrology, who first organized the International Nephrology Symposium in the form of seminars, after 1965. He also chaired the European Dialysis and Transplant Association and European Dialysis and Transplant Nurses Association congresses successfully in Istanbul in 1978.

Turkish Nephrology dates back to 1940s. And it has been through great endeavor and development that we have reached year 2000. The small movements, which started in 1950s in the historical development of Nephrology in our country, increased in 1960s, and were accelerated through 1970s. Initially, it enjoyed a rather slow progress since it was fed by only personal efforts and endeavors, and yet it made progress in 1980s due to the establishment of hemodialysis centers, and finally it managed in 1990s to live up to world standards. And in more recent years, increase in the number of dialysis centers reached considerable extent.

According to the recent research I have done, it is clearly seen that Nephrology and Urology started together and that Vural Solok M.D., wrote Turkish Urology and Nephrology Bibliography (1849-1968), which I find very useful.

Prof. Gürbüz Barlas, MD completed his Urology specialization in Cleveland Clinic in the USA. He assisted Prof. Dr. Kollf, the inventor of artificial kidney, for one year, (1959-1960). Prof. İhsan Dogramaci, who was trying to establish The Department of Nephrology in the early 1960 and encouraged Umit Saatçi to found and improve Pediatric Nephrology in modern sense after 1972 in Hacettepe University. Other pioneers of Pediatric Nephrology were Faik Tanman, who established the Pediatric Nephrology Clinic in Istanbul Medical Faculty The first pediatric nephrology specialization abroad was N. Tümer, 1975. The recognition of Pediatric Nephrology as a section in Department of Internal Medicine was in 1983.

Peritoneal Dialysis Practices started in 1950s and Chronical Ambulatory Peritoneal Dialysis started in 1981. Home hemodialysis started in Turkey in 2006. There are 325 patients in 2015.

- The first National Congress in Turkey was held in Uluğ University in 1980. The Second National Congress on Innovation in Nephrology on 4-7 September, 1985 by Ayla San at Atatürk University.
- Turkish Society of Nephrology established in 1970, organized 30 congresses.
- Turkish Society of Hypertension and Renal Diseases is currently organizing their 16th Congress.
- Anatolian Kidney Foundation works on conventional topics where help is necessary. For example 6 Quality in Dialysis Congresses, 3 Kidney and Nutrition, 1 Intensive Care and Kidney Disease Congresses were organized by Anatolian Kidney Foundation.
- ERA-EDTA Congress was first organized by Kemal Önen (EDTA-EDTNA Congress) on June 4-7, 1978, the second one on June 4-7, 2005 and the last one on May 18-21, 2013 in İstanbul.
- IFKF meeting was first organized on 5-10 September, 2000 in Cappadocia and the second one on 17-20 May 2009 in İstanbul.

## TURKISH HISTORY OF NEPHROLOGY

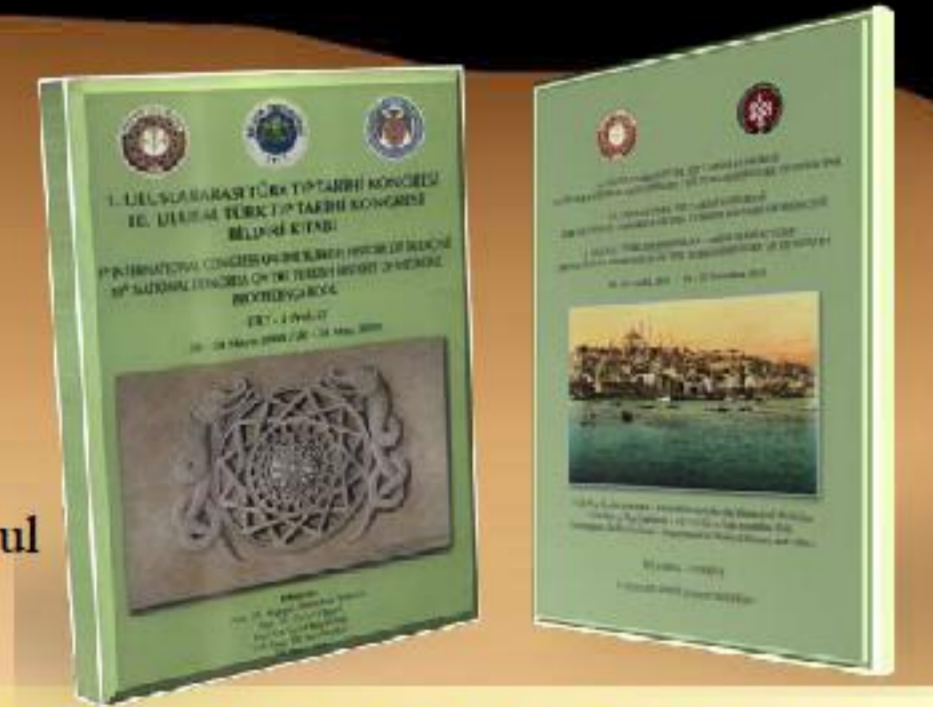
There were nearly no documents about the Turkish History of Nephrology until 1995. For 7 years, by contacting other universities, institutions and Ministry of Health and by writing letters, telephoning and faxing, I collected information on Nephrology (No e-mails at that time).

I edited and published "Dialysis in Turkey: Past and Present" (1998), "Dialysis and Transplantation in Turkey" (2000), "Turkish History of Nephrology" (2002), "Turkish History of Nephrology- A Summary" (2003).



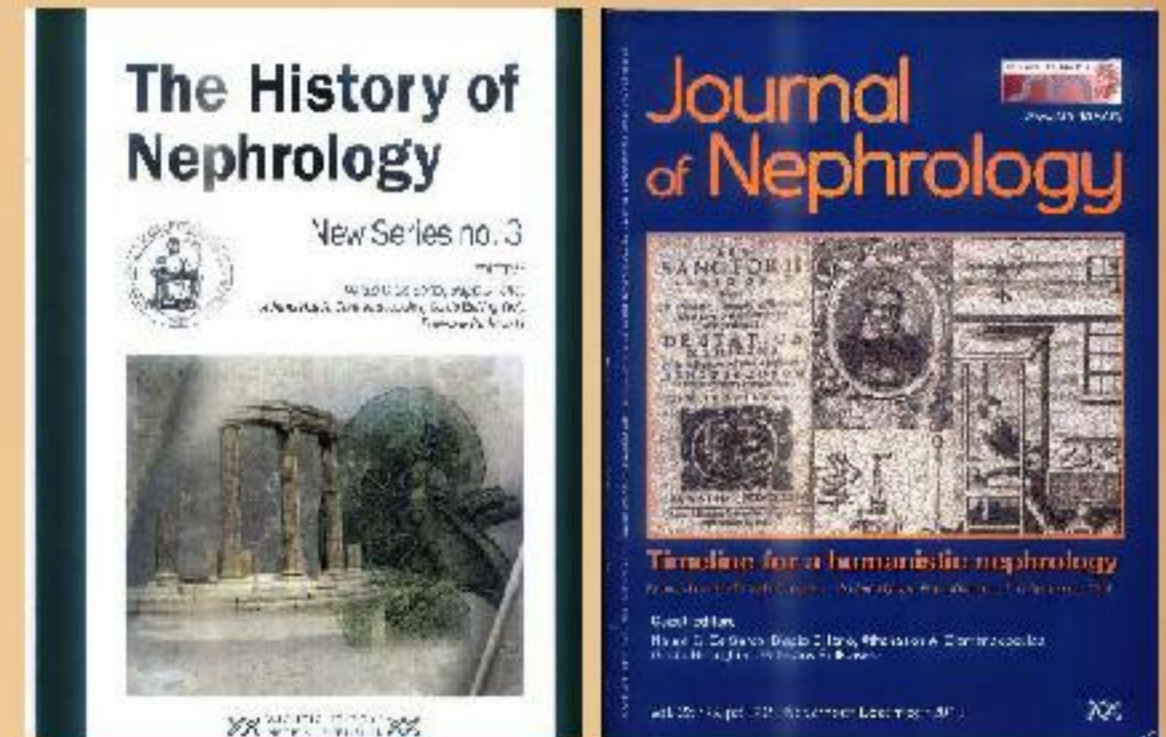
Turkish History of Nephrology was updated and presented by Prof. Dr. Ayla San for the national and international congresses on The Turkish History of Medicine in 2008 and 2012.

- 1st International Congress on the Turkish History of Medicine, 10th National Congress on the Turkish History of Medicine 20-24 May, 2008 Konya
- 2nd International Congress on the Turkish History of Medicine, 12th National Congress on the Turkish History of Medicine 10-13 December, 2012 İstanbul



## INTERNATIONAL PROMOTIONS ON TURKISH HISTORY OF NEPHROLOGY

- 1<sup>st</sup> and 2<sup>nd</sup> International Congress on the Turkish History of Medicine Turkish History of Medicine 10<sup>th</sup> and 12<sup>th</sup> National Congress on the THM, 2008 Konya, 2012 İstanbul.
- 5<sup>th</sup> International Uremic Research and Toxicity Congress and 7<sup>th</sup> Baltic "Nephrology Meeting, 2007, Poland (Turkish History of Nephrology Poster).
- 13<sup>th</sup> IFKF Annual Meeting in Hungary, 2012, San Ayla, Turkish History of RTx (Poster).
- The 8<sup>th</sup> meeting of International Association of History of Nephrology (IAHN) held in 2013 in Greece. I participated with the speech on "Nephrological Knowledge in Turkey during the 18<sup>th</sup>, 19<sup>th</sup> and early 20<sup>th</sup> Centuries", published in journal of Nephrology, later History of Nephrology.



## THE FIRST NEPHROLOGICAL NEWSPAPER "RENALİZ"



- Our foundation, started to issue a newspaper, "Renaliz", every four months for nephrological news. It is the first Nephrological newspaper in Turkey, Renaliz analyzes every subject in Historical Nephrology in a detailed fashion. The 54<sup>th</sup> issue is prepared.

### Applied Methods of Treatment in Chronic Renal Failure Patients in Our Country in 2014 (Data Source: Republic of Turkey Ministry of Health)

Name of Institution	Total Patient	Hemodialysis		Peritoneal Dialysis		Transplantation	
		Number	%	Number	%	Number	%
Ministry of Health	16.428	14.504	23,25	1.696	2,72	228	0,37
University	5.879	3.234	5,18	1.570	2,52	1.075	1,72
Private	40.074	38.152	61,16	301	0,48	1.621	2,60
Grand Total	62.381	55.890	89,59	3.567	5,72	2.924	4,69

### Public and Private Hemodialysis Centers in Turkey (Data Source: Republic of Turkey Ministry of Health)

Name of Institution	Center		Device		Number of Patients	
	Number	%	Number	%	Number	%
Ministry of Health	441	51,82	4.959	30,87	14.504	25,95
University	61	7,17	1.179	7,34	3.234	5,79
Private	349	41,01	9.926	61,79	38.152	68,26
Total	851	100	16.064	100	55.890	100

## Renal Transplantation in Our Country

- The first transplantation from alive donor started in Turkey in 1968 at Istanbul University Faculty of Medicine. The first case lived for 5 hours
- Second case lived for 27 days. The patient passed away due to GI hemorrhage and infection.
- The first Renal Transplantation Publication in Turkey: İstanbul University İstanbul Medical Faculty, 1<sup>st</sup> Internal Diseases and Surgery Clinic, Journal of Turkish Medical Society, 1968, page 648-659. Our first studies in the field of kidney transplantation (in relation to two cases). Necdet Koçak, et al.
- The first Successful Renal Transplantation in Turkey: The first successful renal transplantation was performed by Prof. Dr. M. Haberal at Hacettepe University Medical Faculty (November 3, 1975).

The number of transplantations in Turkey is 28.233 between 1975 and 05th May 2015.

## CONCLUSIONS

Turkey has caught up with the international quality in Nephrology since 2000. There are 94 medical faculties in Turkey. 74 of them include Adult Nephrology Department, 44 of them include Pediatric Nephrology. Department. The number of nephrologists is approximately 530 in our country.

In brief, Turkish Nephrology has flourished and become efficient internationally. Its improvement is our biggest wish.

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