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Janusz Ostrowski^{1, 3}, Bolesław Rutkowski^{2, 3}

¹Department of History of Medicine, Centre of Postgraduate Medical Education, Warsaw, Poland ²Department of Nephrology, Transplantology and Internal Medicine, Medical University of Gdansk, Poland ³History Section of the Polish Society of Nephrology

Honorary Members of the Polish Society of Nephrology. Part XXXIII — Professor Joel D. Kopple

Abstract

We are pleased to present the 33rd issue in the series on the honorary members of the Polish Society of Nephrology regularly and from the very beginning published in "Forum Nefrologiczne". In the previous article that closed 2020, we depicted the outstanding Polish biochemist, the creator of the Gdańsk school of clinical biology, the internationally renowned Professor Stefan Angielski. For years, he cooperated with the Gdańsk Centre of Nephrology and with numerous European and American cuttingedge institutions in the field. This time, we take the opportunity to present the American medical doctor and researcher, Professor Joel Kopple. He is a widely recognised expert and authority in nephrology and public health. His scientific interest mostly nests in nutrition in renal insufficiency, conservative treatment, and dialysis treatment both in its haemo- and peritoneal variation.

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For the ninth year we continue to publish in "Forum Nefrologiczne" a series of articles titled The Honorary Members of the Polish Society of Nephrology (PSN). This article is the 33rd part of the series, and hence we are approaching half of the honorary members who were given this title. In the latest issue from the previous year, the profile of Professor Stefan Angielski was presented. Professor Angielski had enormous scientific, organizational and didactic achievements, which have been appreciated by nephrologists worldwide, even though Professor focused on basic science i.e., clinical biochemistry. The chief character of this article is Professor Joel D. Kopple, who was born in Chicago, USA, and is a distinguished representative of global clinical nephrology. His main interests include eating disorders and protein metabolism in renal failure. He is also active in public health and has important achievements in this field.

Joel D. Kopple was born on March 26th, 1938, in Chicago, Illinois, USA, as the third out of seven children of Evelyn and Luis Abra-

ham Kopple. Joel Kopple's father was a family physician, and his mother was a housewife. Early in his youth he showed his voluntaristic way of being, which accompanied him through the rest of his life. After three years in Boy Scouts of America, he received the highest rank of Eagle Scout for earning 21 merit badges. He was also an active member of the Jewish religious organization and displayed a love for philosophy. In his school years, he actively participated in physical education. In 1958, he began studying medicine at the University of Illinois. In the fourth year of his studies, he was elected an honorary member of the medical fraternity Alpha Omega Alpha. Thus far, more than 50 members have been awarded the Nobel Prize. In 1962, Joel D. Kopple was granted his medical license, and for the next five years he was undergoing speciality training in internal medicine at the University of Illinois, Chicago, and Department of Internal Medicine, Wadsworth Medical Centre, and later in nephrology in Division of Nephrology, Wadsworth Medical Centre. Prof. Kopple was

Address for correspondence:

dr hab. Janusz Ostrowski, prof. CMKP Centrum Medyczne Kształcenia Podyplomowego Zakład Historii Medycyny ul. Kleczewska 61/63, 01–826 Warszawa tel.: 22 560 11 53 e-mail: janusz.ostrowski@cmkp.edu.pl





Figure 1. Professor Joel D. Kopple (by courtesy of Prof. J. Kopple)



given a specialist title in internal medicine, nephrology, clinical nutrition, hypertension, and public health. Since he moved to the Medical School at the University of California, Los Angeles (UCLA) in 1963, where he held numerous important functions and positions. In 1978, he was assigned professor of medicine and public health, and in 1982 he became the head of the Division of Nephrology and Hypertension at Harbor-UCLA Medical Centre, Torrance (Fig. 1, 2) [2, 3].

The academic interests of Professor Kopple focused on protein and amino acid metabolism in health and disease, eating and metabolic disorders in acute and chronic kidney disease, vitamin and mineral metabolism, as well as function and importance of the insulin-like growth factor. He met the above-listed conditions as early as during his studies and foundational training. The first case was a patient with heart failure secondary to valvular disease treated surgically, who presented signs of cardiac cachexia; during his internal medicine training, he met patients with chronic diseases showing hypercatabolism. It was then when he saw that nutritional therapy should be an integral part of holistic treatment. At the age of 30, he challenged the opinions of three of 'the greats' at the time in terms of managing chronic kidney disease with a low-protein diet. The greats included Prof. Carmello Giordano, Prof. Sergio Giova-

Figure 2. Professor Joel D. Kopple (from the collection by Katarina Derzsiova, B. Eng.)

netti and Prof. Geoffrey Berlyne. They recommended 20 g of protein daily. Then, Kopple conducted a randomised controlled trial together with his mentor, Milton Rubini, and other co-workers, and they established that a diet containing 40 g of protein brings similar benefits in terms of slowing down the progression of chronic kidney disease, however, it can prevent malnutrition in those patients [4]. The choice of interests was not random for Professor Kopple. It is worth mentioning that the year 1938 when Professor was born was abundant in incredible discoveries in nutrition and metabolism. A couple of facts should be highlighted here. In 1938, Richard Kuhn was given Nobel Prize in chemistry for his research on vitamins, Paul Kaner synthesized vitamin E, Conrad Elvehjem isolated nicotinic acid and considered it a factor preventing pellagra, Hugh Butt introduced vitamin K in the therapy of coagulation disorders, and Albert Snell documented symptoms of riboflavin deficiency. Also, the important role in this field of the Polish biochemist Kazimierz Funk should be mentioned (Fig. 3) [5].

Professor Kopple is the author or co-author of around 600 articles published in prestigious reviewed medical journals, the author of many chapters in textbooks and the editor

The academic interests of Professor Kopple focused on protein and amino acid metabolism in health and disease <</p>

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DIETARY MANAGEMENT OF END-STAGE UREMIA*

MILTON E. RUBINI AND JOEL D. KOPPLE[†]

Departments of Medicine Wadsworth Veterans Administration Center University of California at Los Angeles Los Angeles, Calif.

THE last 10 years have greatly altered the prognosis of the patient with end-stage uremia. It is in this period that chronic hemodialysis and renal homotransplantation have been demonstrated to offer a practical means of salvage of uremic patients otherwise facing an immediately hopeless prognosis. Unfortunately the number of patients that can be offered such treatment is still small. A third contemporary development, improved dietary management of uremia, has received less attention but offers important benefits to the large numbers of uremics that for medical or logistical reasons cannot be handled by either of the more dramatic definitive therapies. Dietary management offers a new dimension of the therapeutic approach to the complex of interrelated symptoms that we call uremia. The essence of this dietary program is to restrict protein intake while allowing adequate quantities of total calories and essential amino acids to maintain nitrogen equilibrium. Wasteful catabolism of tissue protein to toxic nitrogenous metabolites, which in some way aggravates the uremic state, is diminished. It is the purpose of this discussion to review briefly the general principles of dietary management and, especially, the application of such specialized diets in the management of uremia.

The basic tenets in any dietary regimen in uremia are to maintain at maximum the residual renal function and to keep homeostatic stresses within the ability of renal response. The severely damaged kidney cannot adjust output to wide ranges in intake.1.4 Thus if adequate fluid is withheld, the inability to concentrate limits the conservation of

Bethesda, Md.

Bull. N. Y. Acad. Med.

Figure 3. Photocopy of the article Dietary management of end-stage uraemia in Bull. N. Y. Acad. Med, 1970

of many congress materials. Probably the most famous book he co-authored is the Nutritional Management of Renal Diseases (Fig. 4). In the 4th edition, Professor Andrzej Więcek and Professor Marcin Adamczak are the authors of one chapter of this valuable position titled Carbohydrate Metabolism in Kidney Disease and Kidney Failure.

Professor was a member of scientific boards to many prestigious journals, including "Nephron", "Mineral and Electrolyte Metab-

olism", "American Journal of Nephrology", "Seminars in Dialysis", "Journal of Renal Nutrition", "Clinical Journal of the American Society of Nephrology", "Current Opinion in Clinical Nutrition", Slovakian "Aktuality v Nefrologii", or Polish "Nefrologia i Dializoterapia Polska". For many years, he was and still is a reviewer in many of those journals.

Professor Joel D. Kopple is a member of many scientific associations, including the American Society of Nephrology, American

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Figure 4. Photocopy of the cover of Nutritional Management of Renal Diseases

1994-09-26 Prof.Dr J. Kopple M.D. Division of Nephrology and Hypertension Harbor-UCLA, Medical Center 1000 W. Carson Street **TORRANCE, CA 90509**

Dear Joel,

It is a great pleasure to inform you, that the General Assembly of the Polish Society of Nephrology elected you as a honorary member of our Society. Please accept my warmest congratulations. The diploma of honorary membership will be conferred to you on November 18th at the opening ceremony of the Symposium on "Advances in Nephrology" in Szczyrk.

Looking forward to meet you soon I remain with personal regards

Sincerely Yours

Prof.dr F.Kokot

Figure 5. Photocopy of the letter by Professor Franciszek Kokot, President of PSN, informing Professor Joel Kopple that he had been given the title of the honorary member (PSN archive)

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Federation for Clinical Research, International Society of Nephrology, American Institute of Nutrition, American Society for Clinical Nutrition, American Society for Artificial Internal Organs, American Society for Clinical Investigation, American Society for Renal Biochemistry and Metabolism, International Society for Renal Nutrition and Metabolism, Association of American Physicians, International Federation of Kidney Foundations (IFKF) and many more. In 2003, he made a proposal to the president of IFKF to organize an annual World Kidney Day (WKD). After 2 years of preparations, in March 2006 organizations of WKD began globally. In Poland, WKD is organized by Professor Ryszard Gellert.

For his outstanding scientific achievements, Professor Joel Kopple was awarded many titles. He was awarded the fellow of the American Society for Nutrition and the American Society of Nephrology. He received many awards such as the Davida Hume Award by the National Kidney Foundation, Robert Herman and Elmer Verner McCollum Award by the American Society of Nutrition, Belding Scribner Award by the American Society of Nephrology, Louis Pasteur Award by the University of Strassbourg, Sandora Korany Award by the Hungarian Society of Nephrology, Thomas Addis medals by the International Society of Renal Nutrition and Metabolism, and Marcello Malpighi Award by the University of Messina, Italy. He was also awarded an honorary membership of Nephrological Societies: Czech, Slovak, Italian and Polish (Fig. 5).

Not only did Professor receive many awards, but also the Joel D. Kopple Award has been created by the National Kidney Foundation. It is an individual award given annually for an extraordinary contribution in the field of nutrition in kidney diseases, as well as by the International Federation of Kidney Foundations awarded to individuals or teams for their contribution to the health and well-being of patients at risk or with diagnosed renal failure.

Professor Kopple's contribution to the development of global nephrology is immense because of his own personal academic achievements as well as help and research inspiration which he shared with numerous nephrologists worldwide including those from Poland. Professor Joel Kopple and his wife Madelynn have four children and fifteen grandchildren (Fig. 6).



Figure 6. Professor Joel D. Kopple talking to another Honorary Member of PSN, Professor Miroslav Mydlik (from the collection of Katarina Derzsiova)

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