

SPECIAL ANNOUNCEMENT

World Kidney Day: An Idea Whose Time Has Come

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Developed by the International Federation of Kidney Foundations (IFKF) and the International Society of Nephrology (ISN), Committee for World Kidney Day.

The world needs a kidney day to draw global attention to the increasing global pandemic of kidney and associated cardiovascular disease. Therefore, the International Society of Nephrology (ISN) and the International Federation of Kidney Foundations (IFKF) jointly are proposing that a World Kidney Day be established on the second Thursday in March each year. It will be launched on Thursday, March 9, 2006, and fully inaugurated on Thursday, March 8, 2007. The aim is to broadcast the message about kidney disease to government health officials, general physicians, allied health professionals, individuals, and families.

Worldwide, most individuals with chronic kidney disease or hypertension are not diagnosed until long after the illness has developed. Moreover, when they are diagnosed, they too often are treated suboptimally or not at all. In most parts of the world, once end-stage kidney failure occurs, patients do not have access to maintenance hemodialysis treatment or kidney transplantation and simply die.

For these reasons, it is time to speak up and to speak clearly, because the extent and severity of kidney disease has not been appreciated for a long time. Moreover, the availability of easy methods for early detection and the proven benefits of preventive therapy are not widely known. A day when attention to kidney disease is brought to the world's population is timely. It could also serve as a day to express appreciation for the billions of dollars of support for a disease that currently requires high-technology treatment.

Kidney disease is a significant interactive disease in patients with diabetes, hypertension, and cardiovascular disease with major morbidity and mortality consequences and high costs to the healthcare system. Moreover, patients with chronic kidney disease have a marked increase in risk for developing cardiovascular disease. However, as kidney disease is easy to detect with simple, routinely available tests (serum creatinine

and urine albumin), both chronic kidney disease and the potential associated cardiovascular complications can be prevented and effectively treated with intensive blood pressure control, glucose control in diabetic patients, lipid-lowering medications, and the use of kidney-protective medications such as angiotensin-converting enzyme inhibitors or angiotensin receptor blockers. Prevention and slowing the progression of chronic kidney disease are the only rational public health approaches to addressing the ever-increasing numbers of patients with end-stage renal disease and reducing the associated cardiovascular risk in these patients.

The decision makers of public health and biomedical science view kidney disease as infrequent and costly. However, newer information and scientific evidence have given persuasive proof that there is more kidney disease than had been thought. Developed countries worldwide treat more than 1,000,000 individuals yearly, and as many as 250,000 new cases each year.¹ In the United States and The Netherlands, it is estimated that 6.5% to 10% of the general population suffer from some degree of kidney disease and are therefore at increased risk of preventable cardiovascular disease and renal failure. Kidney disease is increasing rapidly in the developing world, along with the prevalence of diabetes and hypertension. However, since dialysis costs can average \$65,000 per year and transplantation can cost up to \$40,000, neither is available to the vast majority of people living outside the developed world.

Some emerging evidence points out that end-stage renal disease rates are slowing and, in fact, decreasing in certain populations. These trends are consistent with increased use of angiotensin-converting enzyme inhibitors and angiotensin receptor blockers and with better blood pressure control and better control of the blood sugar in diabetic patients. Yet, worldwide there is a pandemic of type II diabetes and associated metabolic syndrome, so there continues to be substantial

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room for improvement. The number of patients with type II diabetes worldwide will increase from 154 to 360 million by 2030, with at least 40% of these patients developing chronic kidney disease with its associated increased cardiovascular risk, and more than 10% developing end-stage renal disease unless aggressive measures of early detection and intervention programs are initiated. Intensified efforts should yield further reductions in end-stage renal disease rates, at least in the short run, with more data needed to determine if decreases are sustainable.²

The public health mandate is clear for governments: detection and prevention are the most cost-effective methods to address chronic kidney disease and its impact on diabetes and cardiovascular disease. Targets have been defined for blood pressure. Early referral to nephrologists for more complete assessment of interventions, as well as other preventive care measures including influenza vaccinations and pneumococcal vaccinations, are needed to reduce hospitalization rates for infectious complications that are four times higher in patients suffering from chronic kidney disease.³ Detection efforts center on accurate measurements of serum creatinine and albumin in the urine in the estimating equation to assess the level of kidney disease.⁴ Strategies to standardize these measurements should become a global priority.

Patients who start dialysis or receive kidney transplants experience the most direct consequences of kidney disease; early detection and intervention could have saved the ravages of kidney failure. Because of genetic linkages between diabetes and hypertension, the leading causes of kidney failure, kidney disease runs in families. Genetic diseases, such as polycystic kidney disease among others, and genetic abnormalities also run in families. In some developing countries malaria, human immunodeficiency virus/acquired immunodeficiency syndrome, tuberculosis, and childhood infections such as diarrheal diseases are significant causes of kidney disease. Awareness about how to deal with acute renal failure, which is reversible, could reduce both unnecessary mortality and morbidity. In some countries there is a lack of basic knowledge about diagnosing and treating kidney stones. A World Kidney Day could play an important role in educating physicians and the public about all these issues.

Several international medical organizations have established effective special days to draw attention to specific diseases. The primary purposes of these days are to bring the specific disease to the forefront as an issue for personal/family health and to provide information about early symptoms and the simple clinical and laboratory tests available for diagnosis. ISN and IFKF have decided it is time for our organizations to follow suit by establishing a World Kidney Day—one additional instrument to help achieve better understanding of kidney disease. The hope is to enlist every national kidney society and every local kidney foundation worldwide to join with us. We believe World Kidney Day will be recognized by world bodies as other special days have been.

Media attention, interviews with affected patients, community awareness programs, and professional education efforts all create awareness that affect public attitudes and behaviors toward prevention and early treatment of the specific disease being profiled. Kidney disease, with its devastating consequences when left untreated, is one that would benefit from this type of public exposure.

An initial World Kidney Day on March 9, 2006, will prepare the way for a full inauguration on March 8, 2007. It will be vital that all nephrologists become involved. It is our hope that World Kidney Day will be important not only to North America and Europe, but also in all developing countries, in places as diverse as Myanmar, Yemen, Angola, and Bolivia. The challenge is great, but the promise is even greater: that by working together we can achieve a major reduction in the global burden of kidney and cardiovascular disease. We must act, and act now.

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