



## World Kidney Day 2013; acute renal injury; a global health warning

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**W**orld Kidney Day (WKD) is held each year in March to raise attentiveness of the importance of the kidneys to overall health and to reduce the frequency and impact of renal disease and its associated health problems global. This day is a joint initiative of the International Society of Nephrology and the International Federation of Kidney Foundations. The 8th WKD on March 14, 2013, will be celebrated. WKD in 2013 is focusing on acute kidney injury (AKI) with the theme; acute kidney injury; stop kidney attack.

It is evident that, diabetes, high blood pressure and heart disease are the most common causes of chronic renal failure in developed and developing countries (1,2). The prevalence of renal disease is increasing dramatically and the cost of treating this growing epidemic represents an enormous burden on healthcare systems throughout the world (1-3). Acute renal failure is characterized by sudden decrease in kidney function by decrease in glomerular filtration rate, accompanied by accumulation of nitrogenous waste products and the incapability to maintain fluid and electrolyte homeostasis, which usually followed by decrease in urine output and some specific clinical presentations, that is highly linked to increased early and long term morbidity and mortality of patients (1-5). WKD sought to raise awareness of the importance of the kidneys to the overall health of the population and to reduce the frequency and impact of renal disease and its associated health problems throughout the world. Acute renal failure is increasingly prevalent in developing and developed countries and is accompanied by severe morbidity and mortality. Most etiologies of acute renal failure can be prevented by interventions at the individual, community, regional and in-hospital levels. Kidney disease is common, insidious and treatable (2-7). Hence, effective assesses should consist community-wide efforts to increase an alertness of the devastating effects of acute renal failure and provide guidance on preventive strategies, and also fast recognition and management.

### ■ Implication for health policy/practice/research/medical education

In 2013 World Kidney Day will focus on acute kidney injury as a global health warning. In this year, the World Kidney Day committee aimed to alert the worldwide increase in acute kidney injury.

Strengths should be focused on minimizing causes of acute renal failure, increasing attentiveness of the importance of serial measurements of serum creatinine in high-risk patients, and documenting urine volume in acutely ill patients to achieve early diagnosis. In fact, there is as yet no definitive position for alternative biomarkers (3-8). Protocols demand to be developed to systematically manage prerenal situations and specific infections. More accurate data about the true incidence and clinical impact of acute renal failure will help to grow the importance of the disease in the community, and increase awareness of acute renal failure by governments, the public, general and family physicians and other healthcare professionals to help prevent the disease (1-8). Prevention is the key to avoid the heavy burden of mortality and morbidity associated with acute renal failure. However, there is a risk of the development of chronic kidney disease subsequently. While, the incidence of acute renal failure has been rising over time, alongside, the prevalence of chronic kidney disease has also been increasing. Since, acute renal failure has long been considered of as a completely reversible disease, however, over the past several years, various data from experimental animals and humans have been published and insisted that, acute renal failure more than likely leads to permanent kidney damage as chronic kidney failure (5-9). On the other hand, the proportion of patients existing after acute renal failure has also been increasing over time. Thus, if acute renal failure really increase the risk for chronic kidney failure, then it could suggest significant public health concerns with regard to

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the proportion of persons developing incident chronic kidney failure, end-stage kidney disease (2-8). Hence, despite the fact that acute renal failure is typically reversible in nature, conversely there may be subclinical renal injury, that persists and mediates this problem. Therefore, an international health strategy is essential to reduce the huge growing load of acute renal failure and its complications (4-9). In fact attempts should be focused on preventing acute renal failure alongside by early detection and treatment, and enough follow up to reduce the mortality and the long term incidence of post – acute renal failure, chronic kidney insufficiency.

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All authors wrote the paper equally.

#### Ethical considerations

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