Strive for kidney health for everyone during COVID-19; the possible theme for the world kidney day 2021

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ABSTRACT

Increasing awareness regarding CKD and self-care during COVID-19 pandemic has become the most important aspect for the nephrologists. Hence it is appropriate that the theme of the forthcoming World Kidney Day on 11 March 2021 should be “Strive for kidney health for everyone during COVID-19”

Keywords: Chronic kidney disease, COVID-19, World Kidney Day, Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), Collapsing glomerulopathy, End-stage renal disease, Hemodialysis, Renal failure

Implication for health policy/practice/research/medical education:
Proteinuria, hematuria, and acute kidney injury are some of the clinical manifestations of renal failure in COVID-19 patients. Additionally, collapsing glomerulopathy with de novo nephrotic syndrome with acute renal impairment in COVID-19 patients has been described and recently been linked with APOL1 (apolipoprotein L1) in African American patients.


Introduction

Since 2006, World Kidney Day (WKD) is observed on the second Thursday of March each year in more than 150 countries around the world. WKD provides an opportunity to raise concerns about kidney disease and its impact on public health worldwide. Kidney failure is one of the major global public health problems and the number of individuals with chronic kidney disease (CKD) is increasing every year (1,2). The growing global prevalence of CKD and high economic burden it imposes on the healthcare systems is making it a global health concern by all healthcare administrators (3). CKD and progressive kidney failure are associated with major adverse health consequences, including cardiovascular disease and death (4,5). Despite many efforts to prevent ESRD (end-stage renal disease), the number of these patients is increasing worldwide (6). ESRD treatment options such as hemodialysis and kidney transplantation, adversely affect the life expectancy and social life of the patient leading to impaired quality of life (7,8). Patients undergoing hemodialysis have higher levels of inflammation and oxidative stress, which are the main risk factors for cardiovascular mortality in these patients (9,10). Although a lot of people around the world suffer from CKD, many do not have necessary information about their disease. Hence it is necessary to take effective measures to promote the knowledge about CKD and its burden on overall health status of an individual.

Methods

International databases including Google Scholar, Web of Science, Scopus, EBSCO and PubMed were considered...
The unprotectd especially have been linked to severe signs of major CKD comorbidities makes this population extremely vulnerable to severe impact of this disease. Early detection of CKD and prevention of disease progression is the first vital step in the management of kidney related problems. As CKD has become a global health hazard and the risk of severe COVID-19 is three times greater in patients with CKD than in patients without CKD, a comprehensive program for the prevention, control, care, treatment and awareness of the patients with kidney diseases is necessary. In the absence of any comprehensive effective treatment protocol for the novel SARS-CoV-2, the health literacy of the individuals with CKD should be increased to encourage the patients with kidney disease to strictly adhere to the prevention protocols and to observe a healthy lifestyle.

The devastating physical and psychological effects of this virus, as well as the consequences of quarantine measures, have a profound effect on patients with kidney disease. All activities and training aimed at increasing patients' awareness should focus on preventive behaviors, recognition of risk factors and knowledge of how to live in coronavirus pandemic for patients with kidney disease. Special self-care is effective in delaying advancement of kidney disease, reducing mortality and costs, and increasing the quality of life of these patients (25). Lack of equal access to adequate health facilities and high costs of care and treatment have led to concentration on the concept of self-care (26). Self-care activities reduce disease symptoms, complications, as well as the number of readmissions and lead to faster recovery in patients with a wide range of conditions (27). Lack of knowledge of self-care is one of the reasons for the patient's readmission and frequent referrals to health care centers (28). The self-care and active participation in self-care programs for chronic diseases, including CKD, and COVID-19 empower patients and lead to increased happiness and morale, as well as reduced psychological stress. In hemodialysis patients, self-care programs increase the use of appropriate coping mechanisms and build self-confidence to avoid feelings of hopelessness, and depression (29).

The fastest and most effective way to achieve social justice is to provide people with universal access to education in all aspects. Training is an important part of any educational program which is seen as one of the main responsibilities of health professionals, including physicians, nurses, and other providers. In dialysis patients, training is associated with improving nutritional status, which in turn is associated with reduced side effects of the
disease and even mortality (26). As patients with diabetes and hypertension are at higher risk for kidney disease, they may need to have regular kidney function testing to detect early-stage kidney failure. In addition, patients with CKD are at higher risk for SARS-CoV-2 infection and requiring regular follow-ups and testing even after following quarantine and social distancing limitations. Long term sedentary lifestyle is associated with many physical and mental disorders including kidney disease, and it is important to follow good nutritional principles and maintain adequate physical activity during home quarantine (30).

Training for self-care should be employed and adequate kidney health screening and monitoring of renal health by healthcare professionals should be continued with greater power than ever under the COVID-19 pandemic. Regular care for chronic diseases, including CKD, should not be interrupted by the pandemic.

Conclusion
Increasing awareness regarding CKD and self-care during COVID-19 pandemic has become the most important aspect for the nephrologists. Hence it is appropriate that the theme of the forthcoming World Kidney Day on 11 March 2021 should be “Strive for kidney health for everyone during COVID-19”.

Authors’ contribution
EAD, EM and AHD prepared the primary draft. AP edited the paper. MK, LBVKVS, MK and BR conducted further edits. All authors read and approved the final paper.

Conflicts of interest
The authors declared no competing interests.

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